Republic of Rwanda

NATIONAL INSTITUTE OF
STATISTICS OF RWANDA

Labour Force Survey
Annual Report 2023

March 2024

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Foreword

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

The government of Rwanda needs updated information for monitoring progress on programs 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 have to be produced.

The National Institute of Statistics of Rwanda introduced the labour force survey (LFS) program since 2016 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 collect data on employment and labour underutilization characteristics of the population on a continuous basis, providing quarterly estimates of the main labour force aggregates. The Rwanda Labour Force survey programme begun in 2016 with an annual sample spread into two rounds to provide bi-annual estimates of main indicators at the National level. From February 2019, the annual sample was spread into four rounds to provide estimates of main labour market indicators on quarterly basis at the National level. This specific report combines data of all four rounds for which the data collection was conducted in 2023, specifically in February, May, August and November, to provide 2023 annual estimates at national and district level where applicable.

NISR congratulates all those who contributed in one way or the other in this exercise. In particular, NISR expresses its gratitude to all survey coordinators, supervisors, interviewers for their commitment in all stages of this survey. NISR is also grateful to respondents who generously gave their valuable time to provide the information that forms the basis of this report.

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 Labour Force Survey to contribute to Rwandans' Economic development.

MURANGWA Yusuf
Director General of NISR

Executive summary

Rwanda redesigned LFS from bi-annual to quarterly basis since February 2019 to provide estimates of labour market indicators and monitor labour market trends on a quarterly basis.

The data collection on the size and characteristics of the labour force, employment, unemployment, and other labour market characteristics of the population was carried out through four quarters of 2023, specifically in February, May, August and November. The survey was also designed to measure different forms of work, in particular, own-use production work and other components of labour underutilization including time-related underemployment and potential labour force in line with the international standards, adopted by the 19th International Conference of Labour Statisticians (ICLS) in 2013. All the key concepts used henceforth in this report (employment, unemployment, time related underemployment, labour underutilization, potential labour force, discouraged job seekers etc.) are defined in annex A of this report. The current report presents the results of the annual report of 2023 LFS obtained by combining all quarters of LFS in 2023 (February, May, August, and November).

The survey covered all persons living in private households, excluding the institutional population permanently residing in places such as hostels, health resorts, correctional establishments etc., as well as persons living at their worksites and in seasonal dwellings. Differently to the previous years, the used sampling frame for 2023 labour force survey was obtained from the recent National population and housing census conducted in 2022. In addition, the rotation scheme was changed from 1-1-1 to 2-2-2 since February 2023. The resulting estimates of the main labour force indicators at the national level from the combined datasets have standard errors of about 0.4 percent.

The survey results are analyzed in this report under twelve headings. The main highlights are described below, and summary labour force indicators are presented at the end of this section.

Labour force, employment, and unemployment

According to the survey results, the working age population (16 years and above) was 8,071,962 of which 4,783,668 persons (59.3 percent) were in the labour force, while 3,288,293 persons were outside the labour force. For those in the labour force, 3,958,817 persons were employed, while 824,851 persons were unemployed. Among those outside the labour force, 1,390,525 persons were engaged wholly or mostly in subsistence foodstuff production, not classified as employment according to the 2013 international standards on statistics of work, employment and labour underutilization.

The annual unemployment rate stood at 17.2 percent, indicating that roughly for 6 persons in the labour force there was one person unemployed. The unemployment rate was higher among females (20.3 percent) than among males (14.5 percent) and higher among youth (20.8 percent) than among adults (14.6 percent). It was high in the rural areas than urban areas (18.0 and 15.8 percent respectively).

Components of labour underutilization

The unemployment rate is not the only component of the unmet needs for employment. Other components include time-related underemployment and potential labour force. In total there were 1,165,285 persons classified as time-related underemployed[1] and 1,340,478 persons classified as potential labour force[2]. The composite measure of labour underutilization was 54.4 percent, which means that more than a half of the extended labour force was either unemployed, time-related underemployed or in the potential labour force (persons outside the labour force who were available for employment but were not seeking employment during the reference period or who were seeking employment during the reference period but were not currently available for work).

Branches of economic activity

Employment under the aggregated broad branches of economic activity is as follows: Agriculture (43.5 percent), services (39.8 percent) and industry (16.7 percent). The share of market Services (Trade; Transportation; Accommodation and food; and Business and administrative services) is 23.9 percent while the one for non-market services (Public administration; Community, social and other services and activities) is 13.8 percent. The share of employment in the industry sector is distributed in construction with 9.8 percent, manufacturing with 5.5 percent and Mining and quarrying; Electricity, gas and water with about 1.5 percent. Under the new international standards, employment in the agriculture sector includes only those who produce agriculture goods intended mainly for sale or barter and those who work for pay in agriculture. Hence 43.4 percent employment in agriculture represents the new definition. The new definition excludes those in substance agriculture.

The full count of workers in the agriculture sector reveals that around 3,508,445 people (43.5 percent) of the working age population were involved in agriculture activity either in subsistence (1,788,368 persons) or market oriented (1,720,078 persons). The proportion of workforce[3] who was mainly engaged in agriculture was 64.4 percent.

Informal sector and informal employment

The results of the survey show that there were about 3,269,809 employed persons in the informal sector, corresponding to about 82.5 percent of total employment and most of them were male. There were in total 3,575,893 persons with informal employment at main job constituting almost 90.3 percent of total employment. The results also show that there were 182,179 persons with informal jobs in formal sector.

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[1] Time-related underemployment, are part of employed people but work less hours and are available and want to work for additional paid hours

[2] The majority of potential labour force are involved in subsistence agriculture

[3] The workforce has been considered as the sum of employed population and those mainly engaged in subsistence agriculture.

Working time

The average and median number of hours usually worked per week at all jobs were 36.4 and 36.0 hours respectively, and the corresponding hours actually worked during the reference week were 31.3 hours for the average and 30 hours for the median. The total volume of employment in terms of actual hours worked at all jobs in the reference week was 121.6 million hours.

Income from employment

The average income from paid employment of employees at the main job was about 68,481RFW per month while the median was 26,000 RWF. The national average hourly cash income from employment of employees at the main job was 545 RWF per hour.

Women and equal opportunities

Women accounted for close to 46.9 percent of the labour force, mostly engaged as crop farm labourers, domestic cleaners and helpers, stall and market salespersons, and shopkeepers. Among employed persons with managerial positions, 39.6 percent were women.

Youth and education

The unemployment rate among young persons (16 to 30 years old) stood at 20.8 percent. The survey showed an increasing pattern of youth unemployment rate in terms of education attained from about 17.3 percent for young people with no educational attainment to 30 percent for youth with secondary education and 22.7 percent among youth who completed university education. Youth unemployment rate among those who completed TVET was 21.7 percent while it was 22.8 percent among those with general education.

Workers with disabilities

About 20.3 percent of the working age persons with disabilities were labour force participants compared to 60.3 percent of labour force participants among those without disability. The unemployment rate among persons with disabilities (18.9 percent) was slightly higher than the one among the person without any disability (17.2 percent). On the other hand, the proportion of person outside the labour force was far higher among the persons with disability than among those without disability (79.6 percent and 39.7 percent respectively).

Rwanda Labour Force Survey 2023: Summary labour force indicators

Working age population 16 years old and over 8,071,962 persons							
Outside the labour force 3,288,293 persons		**Labour force** 4,783,668 persons Labour force participation rate 59.3%					
Subsistence foodstuff producers: 42.3%	Others outside the labour force: 57.7%	**Employed** (All who worked for pay or profit) 3,958,817 persons **Employment to population ratio:** 49%			**Unemployed** (All not employed but seeking and available to work for pay or profit) 824,851 persons **Unemployment rate:17.2%**		
Primary or below: 80.1% Secondary (Lower and Upper): 18.7 % Tertiary: 1.2%		Agriculture excluding subsistence foodstuff production. 43.5 %	Industry 16.7 %	Services 39.8 %	Primary education or below 74.6 %	Secondary education (Lower and upper) 20.7 %	Tertiary education 4.7%
Supplied weekly labour: 121.6 million hours							
Labour underutilization (3,330,615 persons): Unemployed (824,851) + Time-related underemployed (1,165,285) + Potential labour force (1,340,478) Composite measure of labour underutilization (54.4 %)							

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

Comparison of General and Technical and Vocational education Level of attained.

	Employment to population ratio			Unemployment rate		
	General education	TVET	Total	General education	TVET	Total
None		66.3	49.4		12.5	15.7
Primary	46.2	62.8	48	17.9	16.2	17.6
Lower secondary	30.4	60.4	35.2	19.6	19.7	19.7
Upper secondary	50.9	66.2	53.6	23.9	20.3	23.1
University	74.3	84.2	75.2	18.7	16.6	17.2
Young/Adult						
Young (16-30)	37.7	62.6	44.5	22.8	21.7	20.8
Adults (31+)	57.7	65.7	52.5	14.8	13.4	14.8
Total	46.4	64.6	49	18.7	16.7	17.2

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

Trend of Labour force survey Main indicators (Compare 6 years)

Indicators	2018	2019	2020	2021	2022	2023
Labour force participation rate (%)	54.2	53.4	56.4	54	56	59.3
Foodstuff production participation rate (outside LF) (%)	24.4	23.4	24.1	18	16.5	17.2
Proportion of labour force who completed at least secondary school education (%)	16.8	17.4	17.8	17.2	17.1	15.4
Employment to population ratio (%)	46	45.3	46.3	42.6	44.5	49
Percentage of employed population in market-oriented agriculture (%)	39.5	37.4	40.5	47.7	46.8	43.8
Percentage of employed population in industry (%)	18.8	18.7	20.4	17.2	17.3	16.7
Percentage of employed population in services	41.7	43.9	39.1	35.1	35.9	39.8
Number of off-farm main jobs (agriculture excluded) in Thousands	1,902	2,023	-	1,670	1,913	2,238
Informal employment rate (%)	89.8	89.5	-	90.7	91.3	90.3
Proportion of informal employment in non-agriculture employment (%)	83.5	83.5	-	82	84.1	83.3
Median weekly hours actually worked	30	33	33	30	28	30
Median weekly hours usually worked	36	39	36	36	36	36
Supplied labour in hours during the reference week (in millions of hours)	107	106	111	95	107	122
Unemployment rate (%)	15.1	15.2	17.9	21.1	20.5	17.2
Unemployment rate among university graduates (%)	15.7	14.6	15.7	17.5	17.3	14.2
Unemployment rate among secondary school graduates (%)	26.5	23.9	24.9	27.7	32.4	23.1
Unemployment rate among females (%)	17.1	17	20.3	24.1	23.7	20.3
Unemployment rate among males (%)	13.5	13.8	15.9	18.5	17.9	14.5
Unemployment rate among TVET graduates (%)	17.4	15.4	-	20.3	18.9	16.7
Unemployment rate among general education graduates (%)	17.2	16.9	-	23.2	22.9	18.7
Unemployment rate among persons with disability (%)	14.1	14.3	-	21.1	16.4	18.9
Youth unemployment rate (%)	18.7	19.4	22.4	26.5	25.6	20.8
Time related underemployment rate (%)	32	27.1	-	31.2	31.7	29.4
Combined rate of labour underutilization (%)	55	55.7	-	58.9	57.6	54.4
Average monthly salary from paid employment (In Frw)	56,982	57,878	57,306	54,073	58,784	68,481
Average monthly salary in agriculture (In Frw)	20,352	20,384	20,813	21,215	22,532	28,257

Indicators	2018	2019	2020	2021	2022	2023
Average monthly salary in industry (In Frw)	58,509	63,346	61,547	69,787	75,148	88,877
Average monthly salary in services (In Frw)	108,722	103,694	104,749	114,224	122,879	130,699
Proportion of TVET graduates who are employed	58	59.6	-	58.1	63.8	64.6
Proportion of General education graduates who are employed (%)	43.9	43	-	39.7	41.4	46.4
Share of women in non -agricultural paid employment (%)	31.2	32.5	31.8	31.1	31.9	37.7
Share of youth in non-agricultural paid employment (%)	50.5	49.6	49	45.3	44.2	45.9
Manufacturing employment as a proportion of total employment (%)	6.4	6.4	5.8	4.8	5.3	5.5
Proportion of permanent jobs in total paid employment	26.9	30.3	-	19.1	20.6	24.1
Proportion of daily jobs in the total paid employment	59.8	56.3	-	69.8	70.2	65.1

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2018-2023

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Chapter 1: Main labour force indicators

The results of main labour force indicators using combined LFS quarterly rounds conducted in 2023 are presented in Table 1.1 below. According to these results, among around 8,072,000 persons 16 years old and over who were living in private households, about 4,784,000 persons were in the labour force, either employed (3,959,000) or unemployed (825,000). The remainder 3,288,000 persons were outside the labour force including about 1,391,000 persons engaged wholly or mostly in subsistence foodstuff production, not classified as employment according to the 2013 new international standards on statistics of work, employment and labour underutilization.

The national labour force participation rate, that is the percentage of the working age population engaged in the labour force, was 59.3 percent, indicating that they were either working for pay or profit or seeking employment. The male labour force participation rate was 67.3 percent, which is higher than the female's (52.2 percent). At the same time, the labour force participation rate in urban areas (67.2 percent) was higher than the rate in rural areas (55.7 percent).

Table 1. 1: Main labour force indicators, LFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Population 16 years old and over	8,071,962	3,783,020	4,288,942	2,472,784	5,599,178	3,063,360	5,008,601
Labour force	4,783,414	2,546,471	2,236,943	1,662,343	3,121,071	1,672,835	3,110,578
- Employed	3,958,817	2,176,709	1,782,108	1,399,480	2,559,337	1,274,992	2,683,824
- Unemployed	824,597	369,762	454,835	262,863	561,734	397,843	426,754
Outside labour force	3,288,548	1,236,549	2,051,999	810,441	2,478,107	1,390,525	1,898,023
Labour underutilization	3,330,360	1,444,393	1,885,967	845,875	2,484,485	1,746,679	1,583,681
- Unemployed	824,597	369,762	454,835	262,863	561,734	397,843	426,754
- Time-related underemployed	1,165,285	595,034	570,251	282,416	882,869	538,371	626,914
- Potential labour force	1,340,478	479,597	860,881	300,596	1,039,882	810,465	530,013
Labour force participation rate(%)	59.3	67.3	52.2	67.2	55.7	54.6	62.1
Employment-to-population ratio(%)	49.0	57.5	41.6	56.6	45.7	41.6	53.6
Time related underemployment rate(%)	29.4	27.3	32.0	20.2	34.5	42.2	23.4
LU1 - Unemployment rate(%)	17.2	14.5	20.3	15.8	18.0	23.8	13.7
LU2 - Combined rate of unemployment and time-related underemployment(%)	41.6	37.9	45.8	32.8	46.3	56.0	33.9
LU3 - Combined rate of unemployment and potential labour force(%)	35.4	28.1	42.5	28.7	38.5	48.7	26.3
LU4 - Composite measure of labour underutilization(%)	54.4	47.7	60.9	43.1	59.7	70.3	43.5
Youth unemployment rate (16-30 yrs)(%)	20.8	16.9	25.2	19.6	21.5	29.6	17.5
Median monthly earnings at main job	26,000	39,000	26,000	60,000	26,000	26,000	37,500

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

The employment-to-population ratio, 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 ratio was 49.0 percent according to the LFS 2023 results. The employment-to-population ratio was higher among men (57.5 percent) than women (41.6 percent), and higher in urban areas (56.6 percent) than in rural areas 45.7 (percent).

The unemployment rate represents the percentage of the labour force that is unemployed. The rate presented in Table 1.1 as LU1 stood at 17.2 percent, indicating that roughly among six persons in labour force, there was one person unemployed. The female unemployment rate (20.3 percent) was higher than the male rate (14.5 percent) and the unemployment rate was higher in rural areas (18.0 percent) than in urban areas (15.8 percent).

The unemployment rate is not the only indicator of the unmet needs for employment. Other indicators combine time-related underemployment and potential labour force. The potential labour force includes persons who were available for employment but were not seeking employment during the reference period as well as persons who were indeed seeking employment during the reference period but were not currently available for work.

According to the LFS 2023 results, the combined rate of unemployment and time-related underemployment (LU2) was 41.6 percent, more than two times higher than the unemployment rate. The combined rate of unemployment and potential labour force (LU3) was 35.4 percent. The composite measure of labour underutilization (LU4) that combines unemployment, time-related underemployment and potential labour force was 54.4 percent indicating that more than half of the extended labour force was affected by some form of labour underutilization. In general, labour underutilization affected female (60.9 percent) workers more than male workers (47.7 percent), and rural areas (59.7 percent) more than urban areas (43.1 percent).

Labour market situation varies from one part of the country to another. Figure 1.1 shows the main labour force indicators for the five Provinces of Rwanda. More detailed regional data are presented in the Statistical Annex C. It is observed that the labour force participation rate in 2023 was significantly higher than the rate at national level in the City of Kigali (69.9 percent) and Eastern Provicene (61.6 percent); around the national average in the Northern (58.7 percent, while it was below the national average in Western Province (56.5 percent) and in the Southern Province (52.4 percent).

Figure 1. 1: Regional variations of Labour force participation rate, Employment-to-population ratio and Unemployment rate
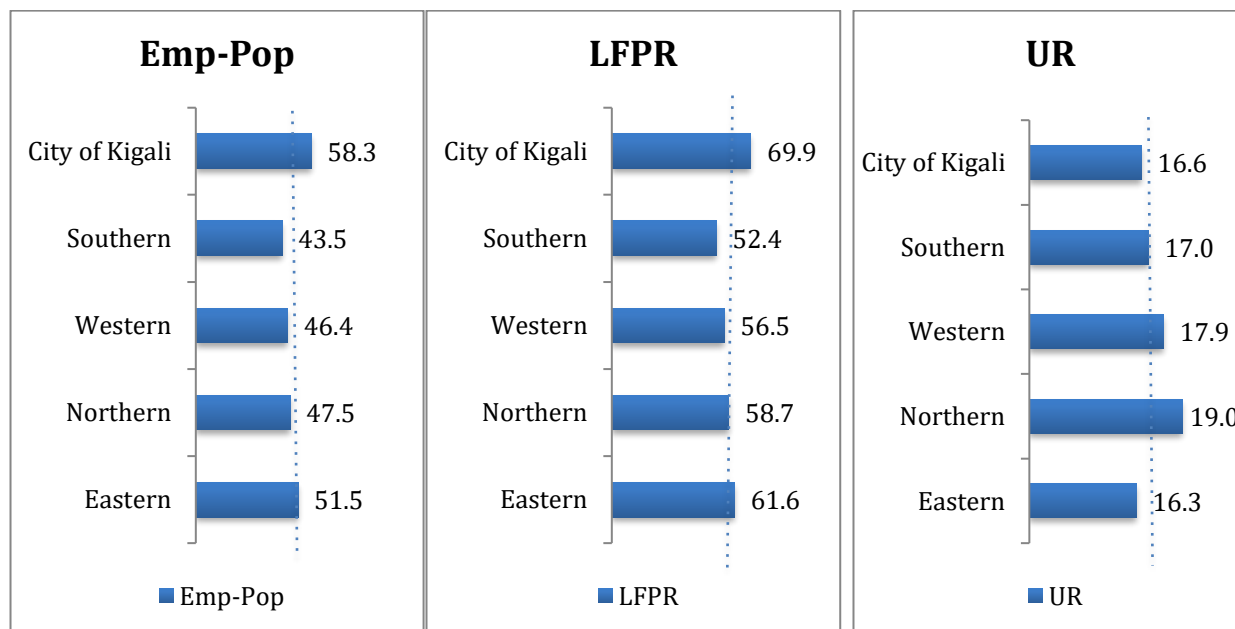
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023
Note: Dotted line represents the national average of corresponding indicator.

A similar pattern is observed with respect to the employment-to-population ratio. The results indicate that the rate was higher than the national average in the City of Kigali and Eastern province (58.3 and 51.5 percents respectively). It is about average in the Northern Province (47.5 percent) and lower than the national average in the Western Province (46.4 percent), and in the Southern Province (43.5 percent).

The unemployment rate shows a different pattern, it was the lowest in the Eastern Province (16.3 percent), followed by the City of Kigali (16.6 percent) and Southern Province (17 percent), and it was above national average in Western province and Northern Province, (17.9 and 19 percents respectively).

Overall, the regional pattern that emerges indicates significantly higher labour market activity in the the City of Kigali in the form of employment. The Southern Province shows the presence of the lowest employment activities and the Eastern province shows the lowest unemployment rate.

Chapter 2: Working age population characteristics and Labour force participation.

2.1. Characteristics of working age population

The population constitutes the human capital of a nation and defines its potential labour supply. From an economic point of view, the working population is a factor of production and its aptitude and skills level contribute to the productivity of the national economy. From a social point of view, different categories of the population form social groups of particular concern and meeting their needs are major challenges faced by public institutions and society at large. Figure 2.1 shows the working age population by its components. In Rwanda, working age population is defined as those who are aged 16 years or above. According to presented results, the population in labour force represents 59.3 percent of the working age population. The remainder of the population is outside labour force (40.7 percent) of which 17.2 percent is in subsistence foodstuff production, 9.0 percent studying only and 17.2 percent as other outside labour force such as elderly people, disabled, discouraged job seekers etc.

Figure 2. 1: Working age population status (16 years and above)
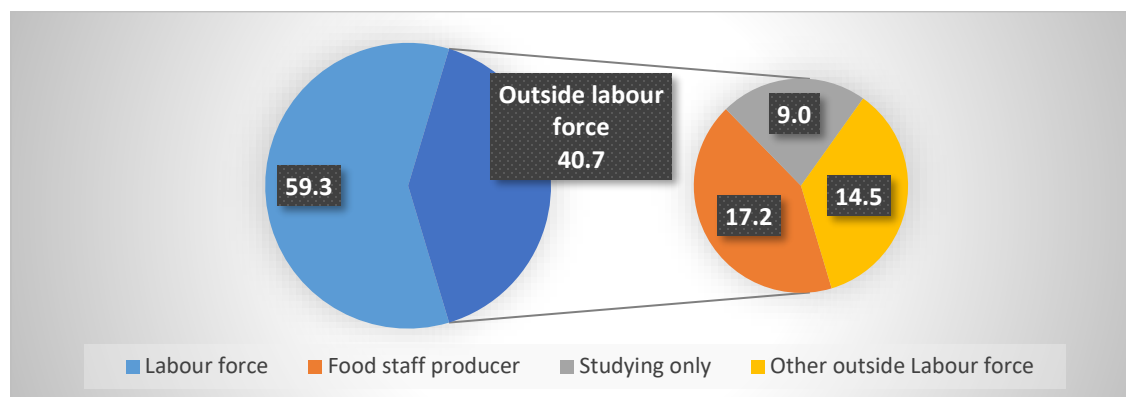
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

2.1. Labour Force participation

The skill level of the labour force may be assessed by the educational attainment of the labour force participants. Figure 2.2 presents the percentage distribution of the labour force by educational attainment. There are a substantial number of people in labour force who have not completed any level of education (46.1 Percent). The share of the labour force in lower and upper secondary education was 6.8 percent and 9.7 percent respectively; while the proportion of the labor force who completed university level was estimated to 5.8 percent.

Figure 2. 2: Percentage distribution of labour force by educational attainment
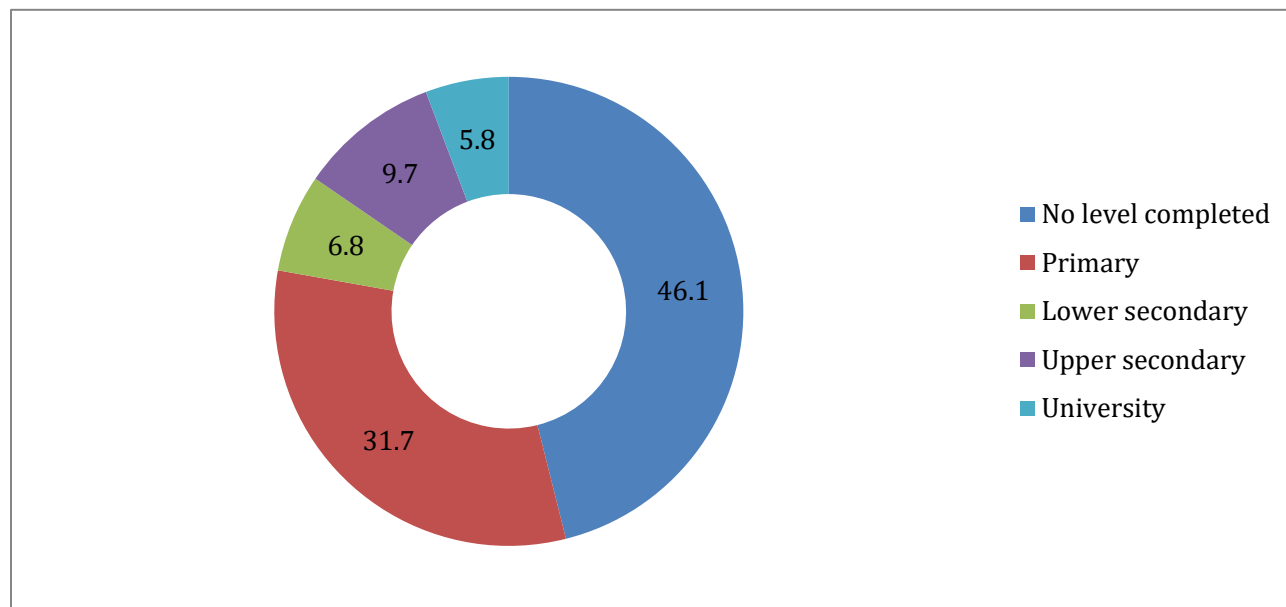
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The proportion of youth in the labour force is higher than the one for adult in three level of education attainment (Primary, Lower secondary and upper secondary). About 35.8 percent of youth in labour force completed Primary education against 28.9 percent among adult and for upper secondary, the proportion of youth is 12.6 percent against 7.7 percent for adults. Dissimilarly, the proportion of youth is lower than the one of adults among those who has not completed any level of education (37.6 percent and 52.0 percent respectively) as well as among university graduates (3.8 percent and 7.1 percent respectively).

Figure 2. 3: Distribution of labour force by education attainment among young and adult population
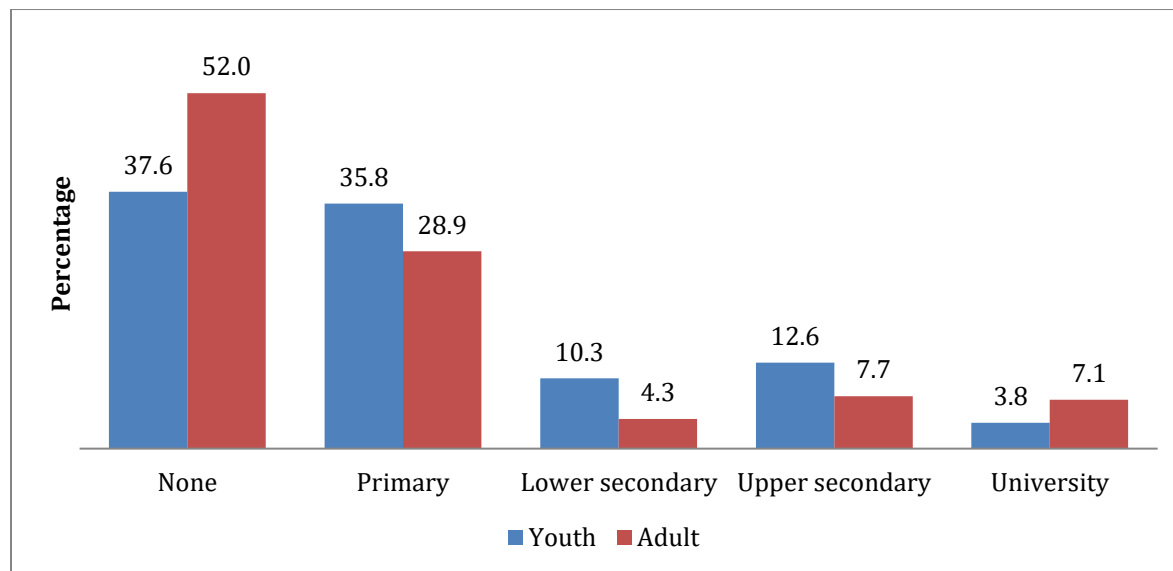
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The labour force participation rate is a measure of the proportion of a country's working-age population that engages actively in the labour market, either being employed or looking for employment; it provides an indication of the size of the supply of labour available to engage in the production of goods and services, relative to the population at working age. The breakdown of the labour force participation rate by sex and age group gives a profile of the labour force participation as shown in Figure 2.4.

Like most of the countries, the Rwanda labour force participation rate has an inverted-U shape. As usual, the male curve is above the female curve, reflecting a higher labour force participation of male at virtually all age groups. For each sex, the curve increases for young people when they leave school and enter the labour market. It reaches a peak in the age group 30-34 years for men and in the age group 25-29 for women. The labour force participation rate decreases sharply for both men and women from 50-year-old, as people leave and retire from the labour market at older ages. The age from which more than a half of working age population is out of labour force is 60 years old for males and 55 years old for females.

Figure 2. 4: Labour force participation rate (LFPR) by sex and age group
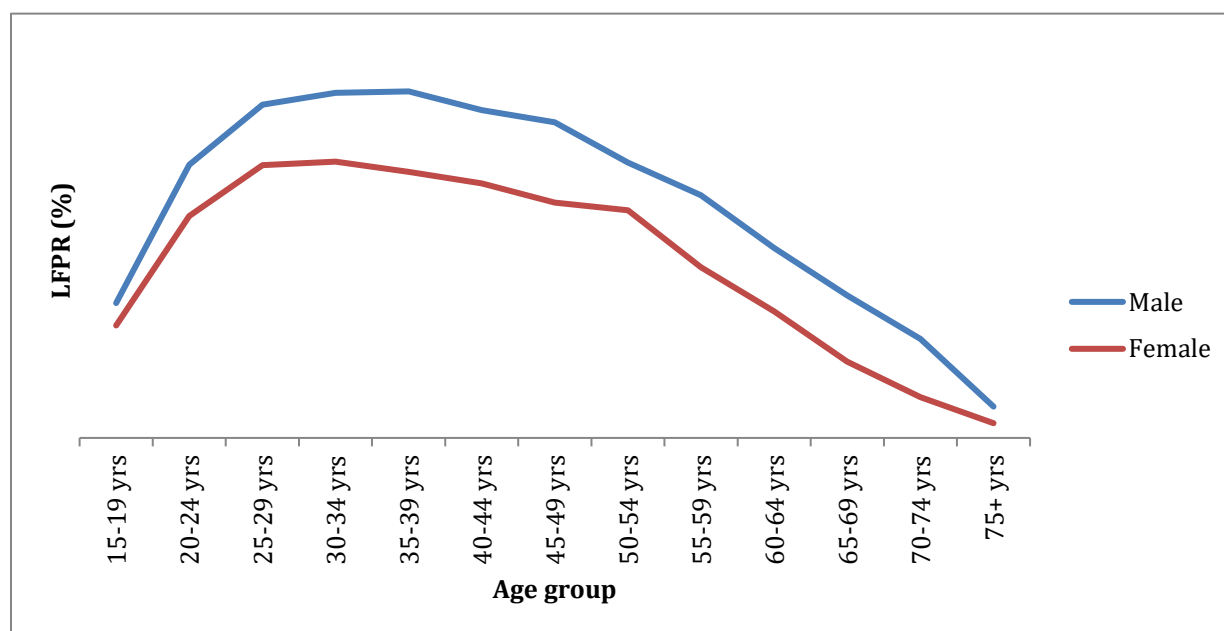
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Among the districts of Rwanda, the Labour force participation rate is higher in the Districts of the City of Kigali (Highest in Kicukiro with 70.7 percent, Gasabo with 70.2 percent and Nyarugenge with 68.3 percent), followed by Nyabihu (60.9 percent), Kirehe (63.9 percent), Musanze (62.7 percent) and Rulindo (62.6 percent). Conversely, the labour force participation rate was relatively lower in Muhanga (46.4 percent), Rusizi(48.5 percent),Nyamasheke (48.7 percent), Nyanza (48.7 percent) and Ruhango (49.5 percent).

Figure 2. 5: Labour force participation rate by District
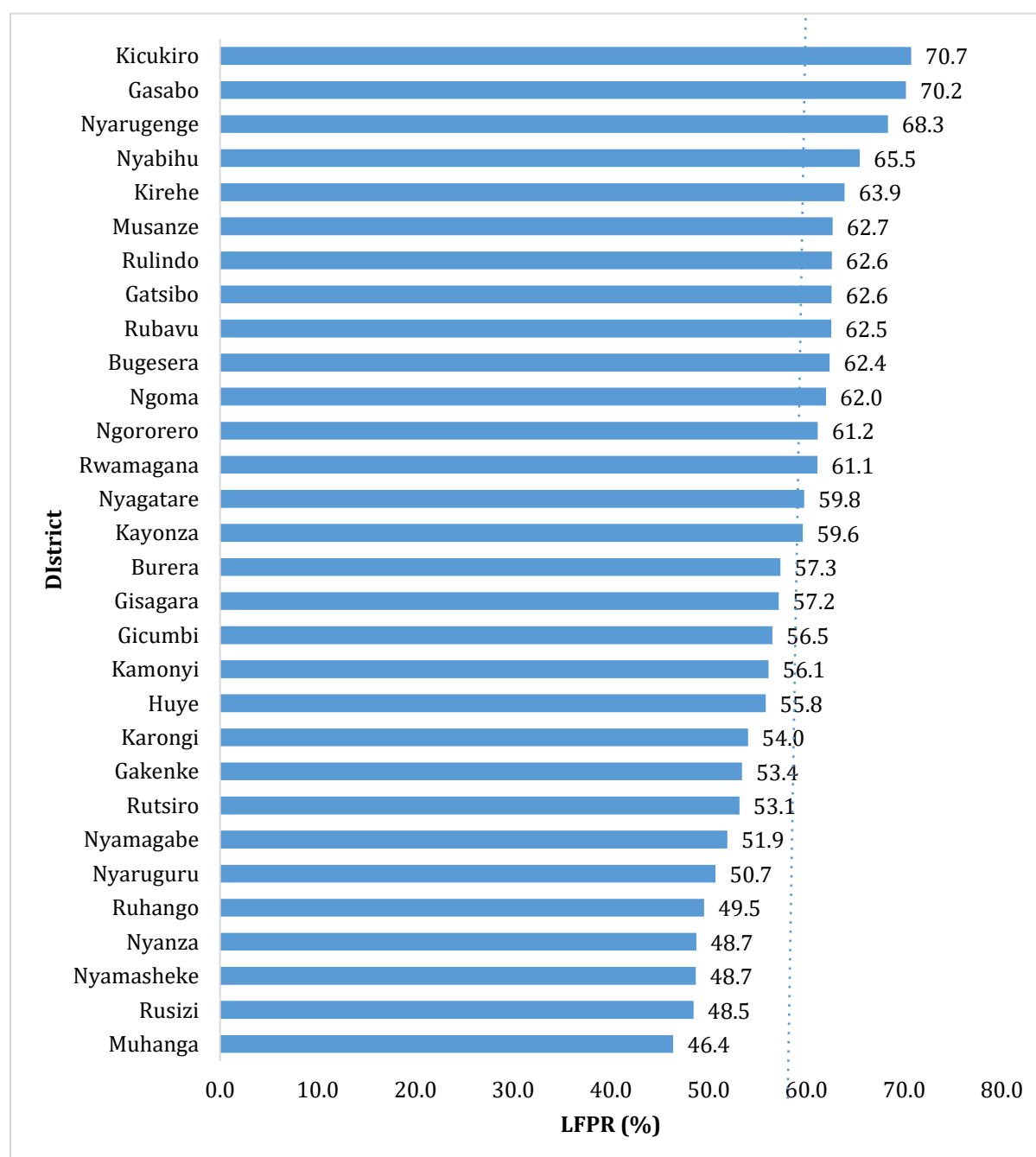
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Chapter 3: Employment

Aggregate employment generally increases with growing population. Therefore, the ratio of employment to the working age population is an important indicator of the capacity of the economy to provide employment to a growing population. In 2023, the employment-to-population ratio was 49.0 percent; indicating an increase of 4.5 percentage points as compared to the employment-to-population registered in the year 2022 which stood at 44.5 percent.

3.1. Status in employment

Status in employment classifies jobs held by persons at a given point of time with respect to the type of explicit or implicit contract of employment of the person with other persons or organizations.

The International Standard Classification of Status in Employment (ICSE-1993) identifies five main categories of persons with respect to their status in employment.[4] Figure 3.1 shows the composition of the employed population by status in employment in main job. Around 69 percent were employees or paid apprentices or trainees. The share of own-account workers was (27.0 percent), followed by contributing family workers (2.7 percent), employers (1.3 percent) and members of producers' cooperatives (0.2 percent).

Figure 3. 1: Distribution of Status in employment (%) at main job
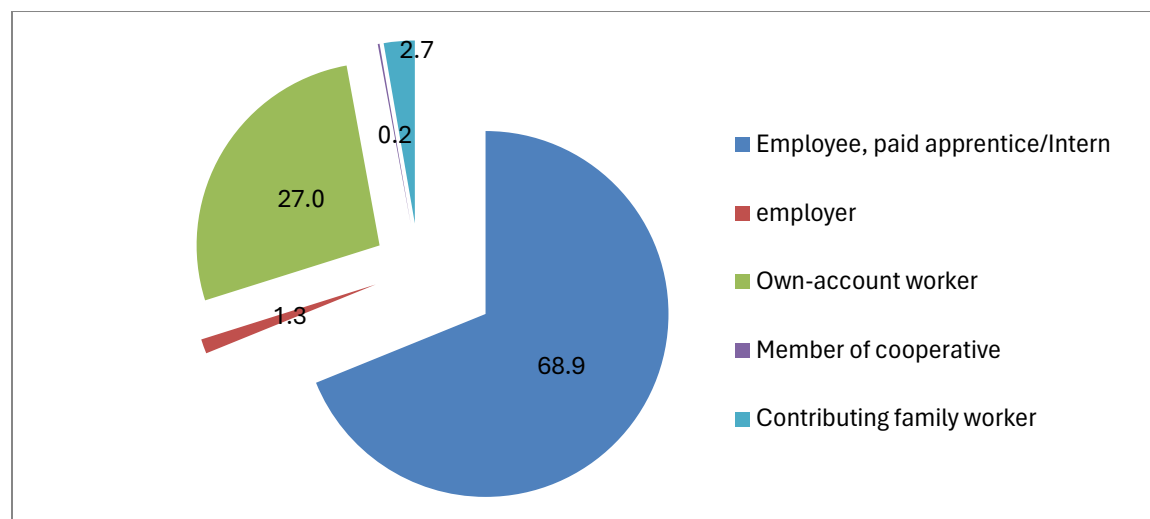
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The data disaggregated by sex show that there is a slight difference between males and females who were employed as employees. The percentage of female employed as employees was 68.0 percent against 69.6 percent among males while the percentage of females employed as contributing family workers was higher (4.9 percent) compared to 1.0 percent among males.

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[4]ILO, *International Classification of Status in Employment, ICSE-93*, Fifteenth International Conference of Labour Statisticians, Geneva, http://laborsta.ilo.org.

The distribution of the employed population by sector of employment reveals that the majority of employed persons were in private sector (90.7 percent) followed by public sector and household as employer that employ 5.5 percent and 3.8 percent respectively. The private sector also includes those who were engaged in the cooperatives, and in international/ local non-governmental organizations (less than 1 percent each).

Figure 3. 2: Employed population by sector of employment.
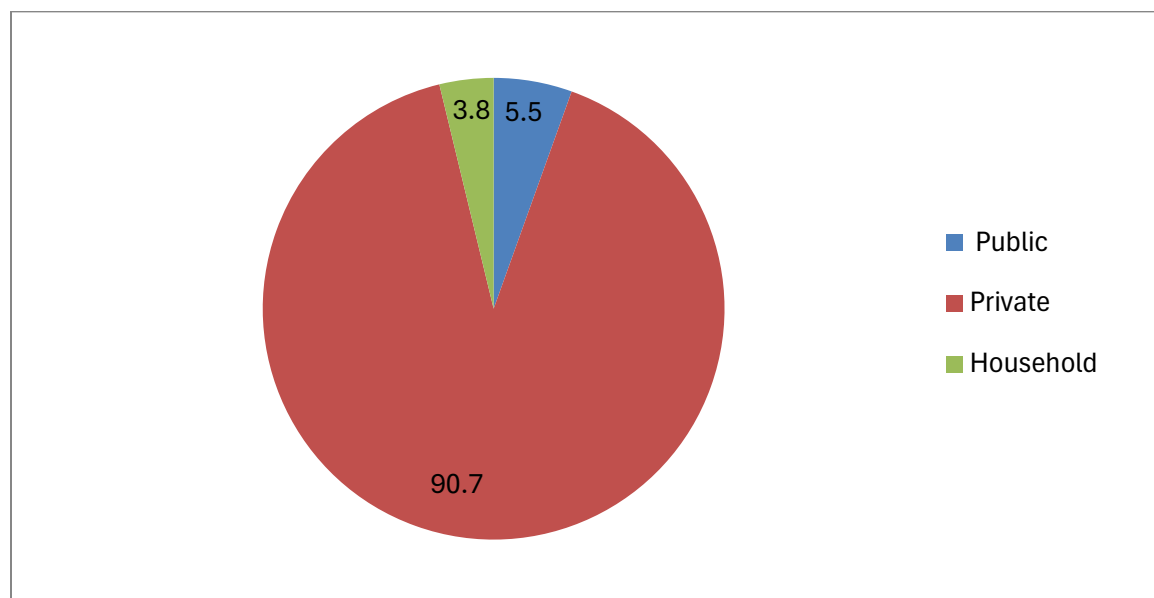
3.2. Branches of economic activity

Branch of economic activity refers to the activity of the establishment in which an employed person worked during the reference period. An establishment may be a farm, a mine, a factory, a workshop, a store, an office or a similar type of economic unit. It is important to distinguish enterprises from establishments. "Enterprise" is a broader concept than "establishment". An enterprise is a legal entity (or group of legal entities) and may have a number of establishments with different economic activities and different locations.

Table 3.1 illustrates the distribution of the employed population by branch of economic activity in main job. The survey results show that agriculture employment was by far the most frequent branch of economic activity, comprising 43.5 percent of employment. The branch of economic activity with the next highest number of employed persons was wholesale, retail trade, repair of motor vehicles, motorcycles (13.0) followed by construction (9.8), transportation and storage (5.9) manufacturing (5.5 percent),education(4.2 percent), activities of households as employers of domestic personnel (4.1 percent), accommodation and food service activities(3.2 precent). The other branches of economic activity comprised each less than three percent of total employment.

Table 3. 1: Employed persons by branch of economic activity in main job.

Branch of economic activity	Number	Percent
Total	3,958,817	100.0
Agriculture, forestry, and fishing	1,720,078	43.5
Mining and quarrying	49,968	1.3
Manufacturing	217,799	5.5
Electricity, gas, steam, and air conditioning supply	5,377	0.1
Water supply, sewerage, and waste management	2,693	0.1
Construction	386,365	9.8
Wholesale, retail trade, repair of motor vehicles, motorcycles	515,948	13.0
Transportation and storage	231,637	5.9
Accommodation and food service activities	122,162	3.1
Information and communication	11,405	0.3
Financial and insurance activities	36,775	0.9
Real estate activities	4,977	0.1
Professional, scientific and technical activities	25,203	0.6
Administrative and support service activities	77,547	2.0
Public administration and defense	56,093	1.4
Education	164,997	4.2
Human health and social work activities	44,679	1.1
Arts, entertainment and recreation	9,452	0.2
Other service activities	108,796	2.8
Activities of households as employers	162,606	4.1
Activities of extraterritorial organizations and bodies	4,259	0.1

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

The grouping of different branch of economic activities in broad sectors of economic activity as presented in Figure 3.3 shows that services sector employed 39.8 percent of employed person while the share of industry in the total employment was 16.7 percent. Female are more likely to be engaged in market-oriented agriculture than males while in industry and services, the proportion among males was relatively higher than the one among females.

Figure 3. 3: Share of employment by broad branch of economic activity

Note: Agriculture includes forestry, fishing and animal husbandry. Industry includes Mining and quarrying, Manufacturing, Electricity, gas, steam and air conditioning supply, Water supply, sewerage and waste management, and Construction. Services cover the remaining branches of economic activity.
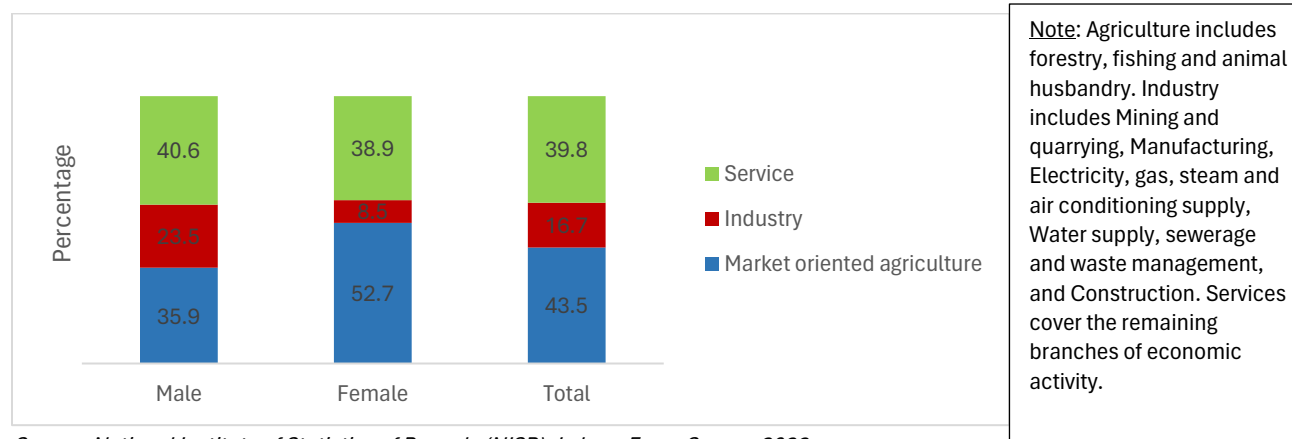
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Figure 3.4 shows the distribution of employed population by sex among the top twelve disaggregated levels of branches of economic activity. It is worth important to note that eight out of the top twelve economic activities were dominated by female workers, while men dominated in four economic activities with remarkable difference in construction of buildings and passenger transport. However, most of the economic activities dominated by females are related to agriculture and most of those females are agriculture laborers.

Figure 3. 4: Top twelve disaggregated branches of economic activity of employed persons at main job
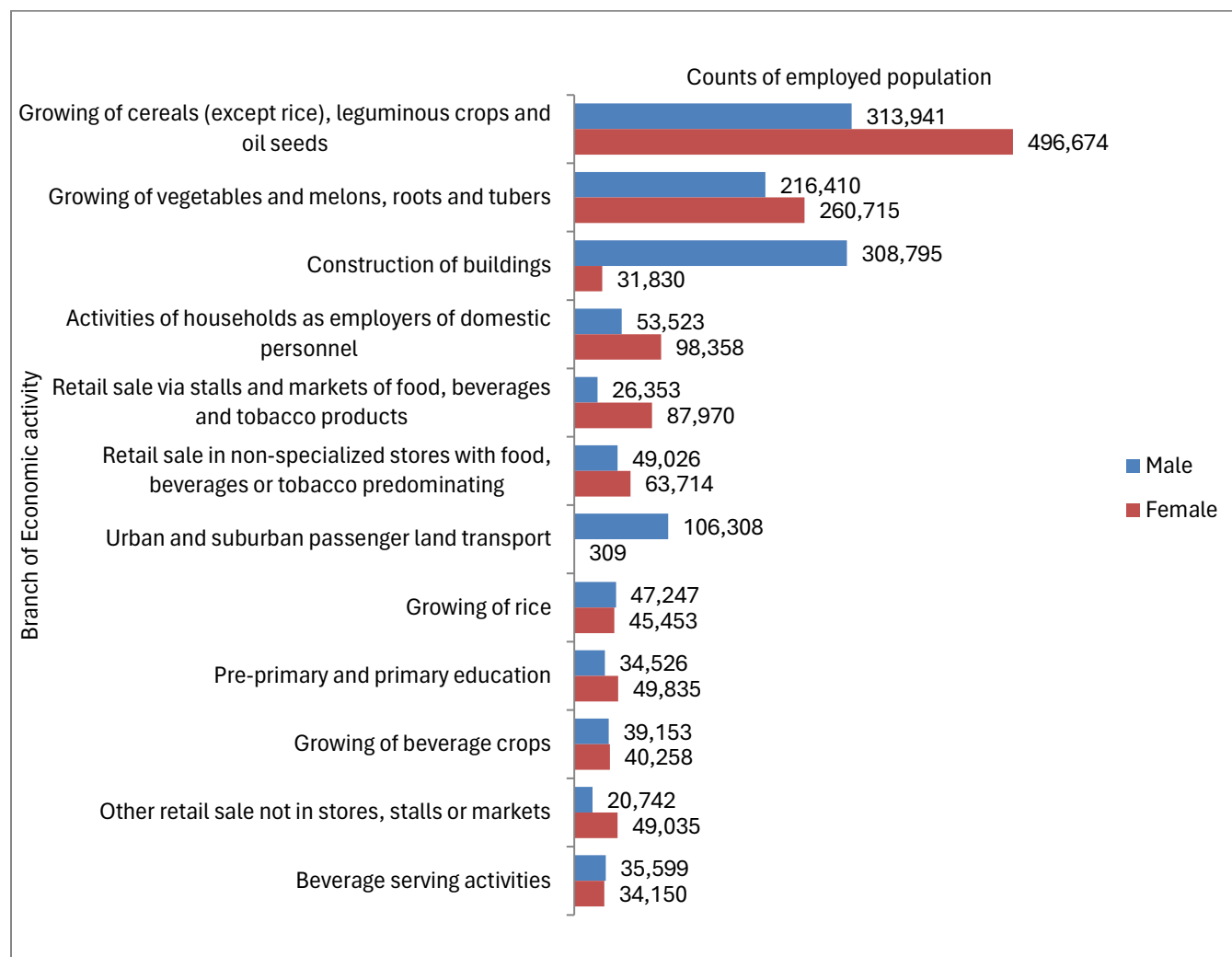
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

3.3. Occupation

Occupation refers to the kind of work done by a person employed (or the kind of work done previously or wanted if the person is unemployed), irrespective of the branch of economic activity or the status in employment of the person.

Table 3.2 presents the distribution of the employed population by occupation category and sex in the main job. The occupation category with the highest frequency (57.1 percent) was elementary occupations involving

the performance of simple and routine tasks. It includes cleaners and helpers, agricultural, forestry and fishery labourers, labourers in mining, construction, manufacturing and transport, food preparation assistants, street and related sales and service workers and other elementary workers.

Table 3. 2: Employed persons by occupation and sex in main job.

Major occupation group	Male	Female	Total	%
Total	2,176,709	1,782,108	3,958,817	100.0
Legislators, Managers and Senior Officials	24,547	14,935	39,482	1.0
Professionals	140,966	102,417	243,383	6.2
Technicians and Associate Professionals	24,638	8,664	33,303	0.8
Clerical Support Workers	15,015	17,883	32,898	0.8
Service and Sales Workers	323,688	383,580	707,268	17.9
Skilled Agricultural, Forestry and Fishery Workers	117,456	107,021	224,477	5.7
Craft and Related Trades Workers	231,256	80,176	311,432	7.9
Plant and Machine Operators and Assemblers	105,506	1,553	107,060	2.7
Elementary Occupations	1,193,636	1,065,878	2,259,514	57.1

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

The occupation category with the second highest frequency was services and sales workers (17.9 percent), followed by craft and related trades workers (7.9 percent), professionals (6.2percent) and skilled Agricultural (5.7 percent). Each of the remaining occupation categories covered less than three percent of the employed population. Most of the main occupation categories were male dominated with a huge difference among Craft and Related Trades Workers. The female - dominated occupations were service and sales workers as well as clerical support workers.

Table 3.3 below portrays the distribution of occupation according to the attained level of education. The results show that, holders of primary education or lower are predominantly employed in elementary occupations while University graduates are more likely to be engaged as professionals. It is observed that some of the university graduates are engaged in occupation categories which normally require lower level of skills than their qualifications. Holders of secondary level of education are predominantly employed as Service and sales workers or in elementary occupations.

Table 3. 3: Distribution of employed population by occupation according to the level of education.

ISCO High level	Primary or lower	Secondary (Lower and upper)	University	Total
Legislators, Managers and Senior Officials	0.1	0.7	12.1	1.0
Professionals	0.6	12.1	47.3	6.2
Technicians and Associate Professionals	0.2	1.1	7.3	0.8
Clerical Support Workers	0.1	1.5	6.3	0.8
Service and Sales Workers	14.6	28.5	20.0	17.9
Skilled Agricultural, Forestry and Fishery Workers	6.5	4.2	1.2	5.7
Craft and Related Trades Workers	7.0	12.3	3.6	7.9
Plant and Machine Operators and Assemblers	2.1	5.2	1.3	2.7
Elementary Occupations	68.9	34.5	1.0	57.1
Total	100.	100.	100.0	100.

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

Figure 3.5 lists the top twelve disaggregated occupations and compares their frequency among male and female employed persons. On one hand, it is observed that there were more women than men employed as crop farm labourers, domestic cleaners and helpers, stall and market salesperson and tailors, dressmakers, furriers and hatters. On the other hand, there were more men than women employed as building construction labourers, house builders, freight handlers and hand and pedal vehicle drivers. The remaining had more or less same number of males and females.

Figure 3. 5: Top twelve disaggregated occupations of employed persons at main job
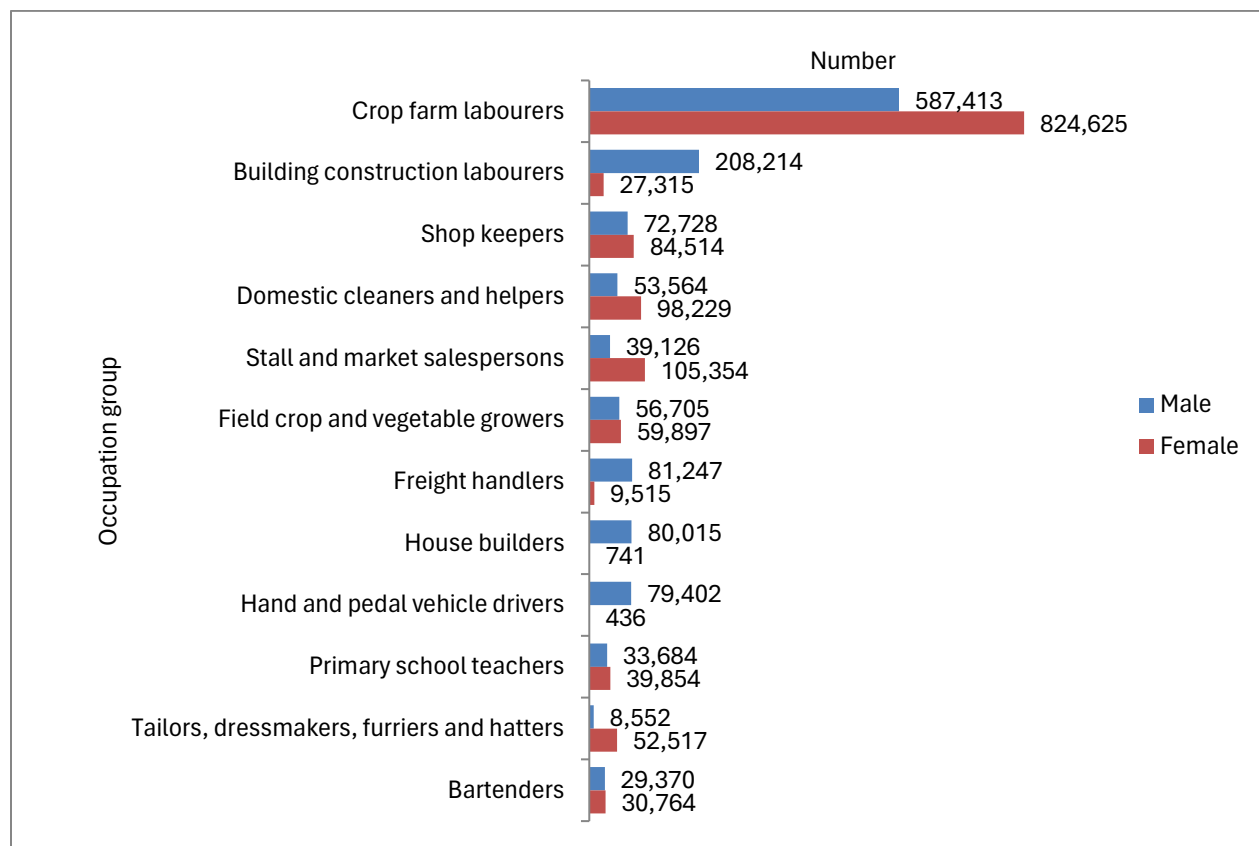
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

3.4. Employment in informal sector

The concept of informal sector is broadly characterized as unincorporated enterprises owned by households.[5] In such economic units the fixed capital and other assets of the enterprise do not belong to the production units as such but to their owners, and may be used both for production and personal purposes. Production expenditure can hardly be separated from household expenditure. In practice, in the LFS, employment in the informal sector was defined as all persons 16 years of age and over who were engaged in unregistered[6] private business enterprises that did not keep written records of accounts. Workers engaged by households were excluded from the classification of employment in the informal sector.

The results of the survey show that there were 3,264,809employed persons in the informal sector, corresponding to 82.5 percent of total employment. The employed persons in the informal sector were mostly male (54.8 percent), employees (63.6 percent) or own-account workers (31.9percent).

Employment in the informal sector was mostly in market-oriented agriculture (51.9 percent), followed by "whole sale and retail trade, repair of motor vehicles and motorcycles" (14.2percent), Construction(11.2 percent), Transport and storage (6.7 percent), and manufacturing (5.1 percent)

3.5. Informal employment

Parallel to the concept of employment in the informal sector, there is a separate concept of informal employment. While the concept of informal sector refers to production units as observation units, the concept of informal employment refers to jobs as observation units.[7] In the case of employees, informal employment is defined in terms of the employment relationship. A job held by an employee is considered informal, if the job does not entail social security contribution by the employer, and is not entitled to paid sick leave and paid annual leave.

In the case of own-account workers and employers, the informal employment status of the job is determined by the informal sector nature of the enterprise. Thus, own-account workers (without hired workers) operating an informal enterprise are classified as in informal employment. Similarly, employers (with hired workers) operating an informal enterprise are classified as in informal employment. All contributing family workers are classified as having informal employment, irrespective of whether they work in formal or informal sector enterprises.

According to LFS 2023, there were in total 3,575,893 persons with informal employment at main job, constituting almost 90.3 percent of total employment. Informal employment jobs were held mostly by male

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[5]ILO, *Resolution on the measurement of employment in the informal sector*, Fifteenth International Conference of Labour Statisticians (ICLS), Geneva, 1993.
[6] Unregistration meant not registered with the Rwanda Revenue Authority or not paying PAYE/TPR.
[7]ILO, *Guidelines concerning a statistical definition of informal employment*, Seventeenth International Conference of Labour Statisticians, Geneva, 2003.

workers (54.3 percent) however, the informal employment rate was higher among females (91.7 percent) as compared to males (89.2 percent)

Table 3.4 gives the cross-classification of the employed population according to informal or formal sector status of the production unit and informal or formal status of the job. The joint analysis of the informal or formal sector status of production units and the informal or formal status of jobs reveals the existence of a significant number of persons with informal employment engaged in the formal sector.

Table 3. 4: Classification of Production units and informal or formal job

Classification of production units	Classification of jobs			
	Formal employment	Informal employment	Don't Know	Total
Informal sector	9,291	3,242,477	13,042	3,264,809
Formal sector	351,512	182,179	8,435	542,127
Household	0	151,236	644.245	151,881
Total	360,803	3,575,893	22,121	3,958,817

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

The number of persons with informal employment in the formal sector was 182,179persons. An example of this category of persons remains the employee with short-term contract without social security contribution by the employer working in a large private corporation or a small enterprise.

3.6. Informal sector outside agriculture

The share of the informal sector in non-agriculture employment (70.1 percent) is substantially lower than the corresponding share in total employment (82.7 percent). This implies a relatively few agriculture holdings that are formal, most being informal this raising the share of the informal sector in total employment. Informal sector employment outside agriculture is composed of own-account workers (53.1 percent) and employees (42.1 percent), the remainder being contributing family workers (3.0 percent), employers (1.6 percent) others having less than 1 percent. The bulk is engaged in services sector (63.7 percent), particularly in retail trade as shopkeepers, street vendors, and market and stall salespersons.

The following diagrams show the composition of non-agriculture informal sector employment by sex, and by urban and rural areas. The left panel indicates that men make-up almost two-third of employment in the informal sector outside agriculture (65.2 percent). This is in contrast with the share of men in total informal sector employment (54.8 percent), suggesting that there are relatively fewer men than women engaged in informal agriculture holdings.

Figure 3. 6: Composition of non-agriculture informal sector employment by sex and urban/rural area
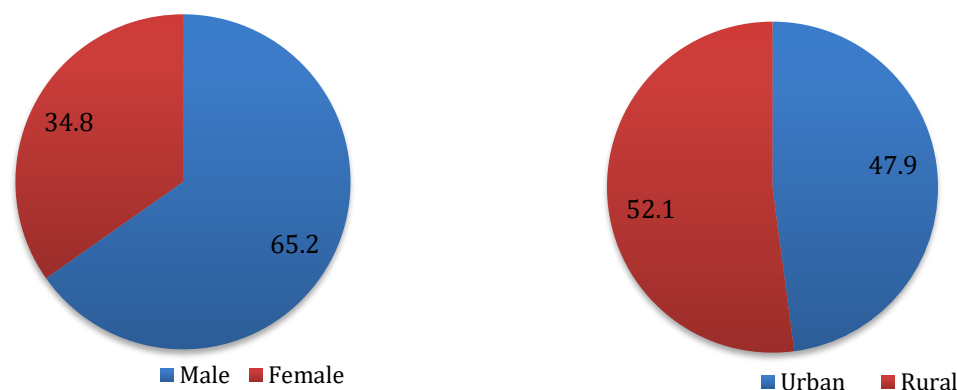
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The right panel of the diagram gives the urban-rural breakdown. It shows that more than one-third of informal sector employment outside agriculture is urban (47.9 percent), a value higher than the percentage of urban employment in total informal sector, agriculture and non-agriculture combined (28.8 percent). This result is in line with the expectation that employment in informal agricultural holdings is relatively lower in urban areas than in rural areas.

3.7. Working time

The international definition of employment is expansive covering even one hour of work during the reference week. It is thus important to note that employment is analyzed in conjunction with data on hours of work to distinguish the various intensities of employment. Data on hours of work are also necessary to calculate time-related underemployment and hourly income from employment so that the resulting income data are comparable across different categories of workers. The LFS measured two concepts of hours of work:

- Hours actually worked: The time spent in a job for the performance of activities that contribute to the production of goods and services during the specified reference period. It includes the direct hours that the person is engaged in the activities, as well as the related hours such as waiting time, on-call, resting time, coffee break, prayer, etc. It excludes annual leave, public holidays, sick leave and other leave, as well as commuting time between work and home, longer breaks such as meal breaks and educational activities, even if authorized by the employer.
- Hours usually worked: The hours actually worked in a job during a typical week (or in general any specific reference period). In principle, it is calculated as the most frequent number of hours that a person actually worked per week during the past month.

According to the results shown in table 3.5, the average number of hours usually worked per week by employed persons in their main job was 35.9 hours. The corresponding average number of hours actually worked during the reference week was 30 hours. Around 67,972persons representing 1.7 percent of the employed population reported to have been engaged in secondary jobs during the reference week. The

average number of hours usually worked on secondary jobs was 15.1 hours per week while the average number of hours actually worked on secondary jobs was 13.8 hours during the reference week.

Table 3. 5: Usual and actual hours of work at main and secondary jobs

Job category	Number of employed persons	Average hours usually worked per week	Average hours actually worked in reference week
Main job	3,958,817	36.2	30.5
Secondary job	67,972	15.1	13.8
All jobs	4,024,707	36.5	31.3

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

The average number of hours usually worked at all jobs was 36.5 hours per week and the corresponding number of hours actually worked during the reference week was 31.3 hours. Finally, for 8.7 percent of the employed persons, the usual number of hours worked was lower than the actual number of hours of work. In total, the volume of employment in terms of actual hours worked at all jobs in the reference week was around 121.6million hours.

Figure 3.7 shows the size distribution of total weekly usual and actual hours of work of the employed population. The percentage of persons working part-time, or short hours (lower than 35 hours per week) was 39 percent measured in terms of usual hours worked and 56.6 percent measured in terms of actual hours of work.

Figure 3. 7: Usual and actual hours of work of employed persons at all jobs
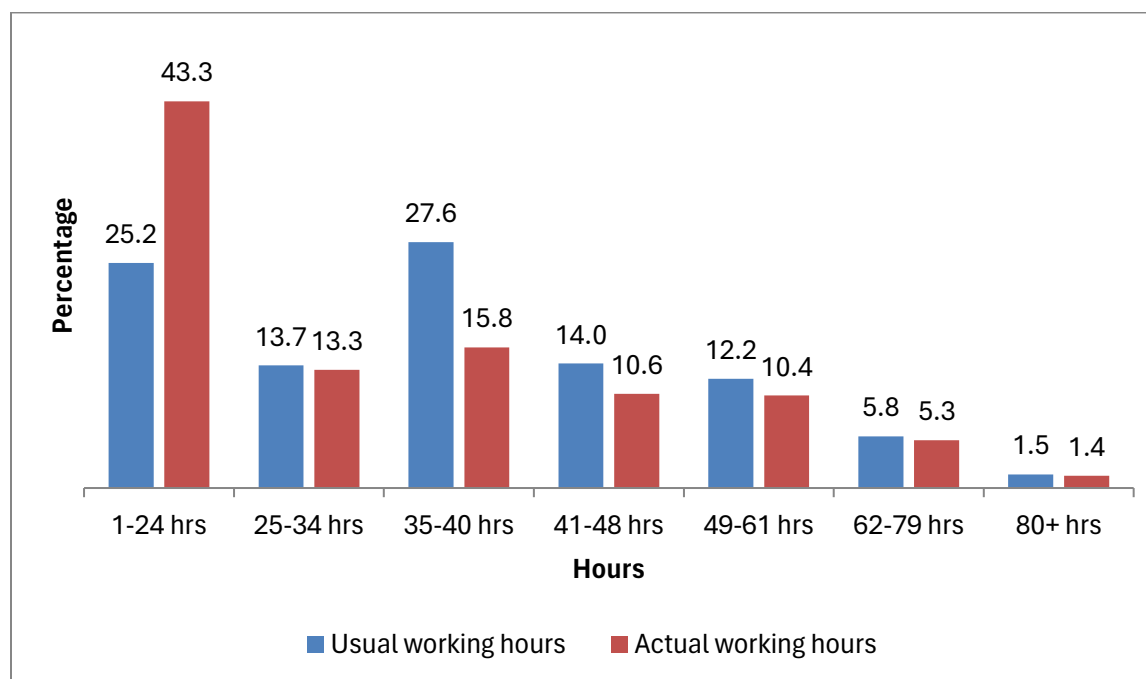
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The percentage of persons working excessive hours (49 or above hours) was about 17.1 percent, when measured in terms of actual hours of work and 19.5 percent when measured in terms of usual hours of work. Excessive hours of work are defined as more than 48 usual hours of work per week at all jobs. Very long or excessive hours of work is a threat to physical and mental health, interfering with the balance between work and family life, reducing productivity and often signaling an inadequate hourly pay.[8] The results show that male workers are affected relatively more by excessive usual hours of work than female workers (23.7 percent for males against 14.2percent for females).

3.8. Income from employment

An attempt has been made in the LFS to measure income from employment in cash and in-kind at the main job for both paid employees and self-employed workers. Because of the differences in the nature of income generation in self-employment and paid employment jobs, the international definition of *employment-related income* distinguishes between paid employment and self-employment.[9] In the case of paid employment, the concept is defined in terms of its components, namely, remuneration in cash and in kind, profit-related pay and current receipts of employment-related social benefits. In the case of self-employment, the concept is defined as the difference between gross value of output and operating expenses.

Table 3. 6: Period of coverage of last income payment of paid employees at main job

Period of payment	Cash income from employment		In-kind income from employment	
	Number of responses	Median income	Number of responses	Median income
Total	13,728		281	
Month	4,597	50,000	125	30,000
Two weeks	78	15,000	3	5,000
One week	600	5,500	15	4,000
One day	8,448	1,200	133	1,000
One year	5	350000	5	80000

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023
Note: Un-weighted numbers and medians

Given that respondents are generally reluctant about providing information on their income in surveys, the LFS questionnaire was designed in a way to make response as easy as possible. The series of questions (D12 to D19) thus began by asking paid employees the amount earned at their main job in cash the last time they were paid and then by asking the period it covered. If the respondent refused to provide the information or did not know the amount, another question was asked phrased in terms of income ranges rather than exact figures. Similar questions were designed for in-kind income and income from self-employment. The analysis of the data is limited to cash income from employment of employees at main job for which more reliable data could be obtained. The data were processed on this basis as presented in Annex B.5 of this report.

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[8][ILO, *Decent Work Indicators Concepts and definitions, ILO Manual (First version)*, May 2012, pp. 86-87.

[9]ILO, *Resolution concerning the measurement of employment-related income*, Sixteenth ICLS, October 1998.For the sake of simplicity, the term "income from employment" is used in this chapter in preference to the more exact term "employment-related income".

Table 3.6 shows the period of coverage of last payment of paid employees at main job. About 33.5 percent of employees reported that their last cash payment covered one month. For another 0.6 percent paid employees, the last payment covered two weeks, 4.4 percent covered one week, and 61.5 percent covered one day. The corresponding median monthly cash payment was 50,000 RWF, the median two-week cash payment was 15,000 RWF, the median one-week cash payment was 5,500 RWF and the median daily cash payment was 1200 RWF.

Table 3.7 presents the resulting size distribution of cash monthly income from employment of employees at main job. According to these results, a part of paid employees (14.0 percent) earns less than 20,000 RWF per month. It is also observed that about 50.8 percent of paid employees earn a monthly income of less than 30,000 RWF. The proportion of employees whose monthly income is 100,000RWF or above was 16,5 percent. The median income from paid employment of employees at the main job was about 26,000 RWF per month while the mean monthly income was 68,656 RWF.

Table 3. 7: Size distribution of harmonized monthly income from employment at main job

Monthly income from employment (RWF)	Number of paid employees/interns	Percentage distribution
Total	**2,726,348**	**100%**
Less than 20,000 RWF	380,581	14.0%
20,000 – 29,999 RWF	1,004,138	36.8%
30,000 – 49,999 RWF	475,795	17.5%
50,000 – 99,999 RWF	397,077	14.6%
100,000 RWF and above	448,501	16.5%
Not stated	20,256	0.7%
Median	**26,000 RWF**	
Average	**68, 656 RWF**	

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

Finally, the average hourly cash income from employment of employees at main job was calculated by broad branch of economic activity. The results are shown in Figure 3.8. The overall average hourly cash income from employment of employees at main job was 641 RWF per hour, and the corresponding values were 321 RWF per hour in agriculture, 798 RWF per hour in industry and 912 RWF per hour in services.

Figure 3. 8: Average hourly cash income from employment of employees at main job by broad branch of economic activity (RWF per hour)
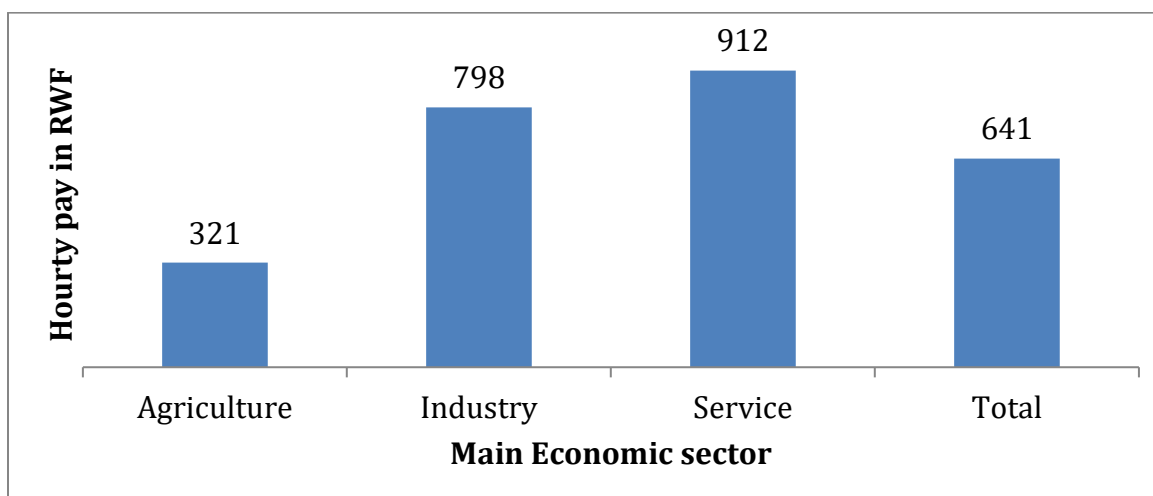
3.9. Job creation

The government of Rwanda through the National strategy for transformation has a target of creating 1,500,000 decent and productive jobs during the period of 7 years from 2017 to 2024 (around 214,000 jobs annually). Due to the absence of International or National guidelines on the measurement of decent and productive created jobs, the methodology used here focuses on the quantity of job gains or losses. The methodology used in the past was the calculation of the difference of employment stock in two consecutive points of data collection, which gives the net change in employment between two data collection periods.

Using the same methodology in the current annual labour force survey, the net change in number of jobs between 2022 and 2023 was calculated based on the stock of main off farm jobs in 2022 and 2023. The results presented in the table below show that off farm jobs increased by 18.7 percent corresponding to the net job gain of 352,572 off farm jobs between 2022 and 2023.

The analysis of job gain and loss according to the main economic sectors illustrates that the most contributed sector in job gain in terms of absolute number is Whole sale and retail trade; repair of motor vehicles and motorcycles with about 143,540 job gains corresponding to 38.5 percent annual increase, Accommodation and food services activities with about 48,643 jobs corresponding to 66.2 percent annual increase , Transportation and storage with about 33,603 jobs gained corresponding to 17 percent annual increase, Manufacturing with about 30,502 jobs gains equivalent to 16.3 percent annual increase, Activities of households as employers (+21,873 jobs) and Education (+21,002 jobs).

Table 3. 8: Net change in employment at main Job from 2022 to 2023

ISIC High level	2023	2022	Net Job Change	Annual change rate
Mining and quarrying	49,968	48,380	1,588	3.3%
Manufacturing	217,799	187,297	30,502	16.3%
Electricity gas stream and air conditioning supply	5,377	3,815	1,562	41.0%
Water supply, gas and remediation services	2,693	5,974	-3,281	-54.9%
Construction	386,365	366,450	19,915	5.4%
Wholesale and retail trade; repair of motor vehicles and motorcycles	515,948	372,408	143,540	38.5%
Transportation and storage	231,489	197,886	33,603	17.0%
Accommodation and food services activities	122,162	73,519	48,643	66.2%
Information and communication	11,279	8,228	3,051	37.1%
Financial and insurance activities	36,775	27,029	9,746	36.1%
Real estate activities	4,977	3,654	1,323	36.2%
Professional, scientific and technical activities	25,247	26,217	-970	-3.7%
Administrative and support activities	77,547	58,991	18,556	31.5%
Public administration and defense; compulsory social security	56,093	60,590	-4,497	-7.4%
Education	164,997	143,995	21,002	14.6%
Human health and social work activities	43,905	48,447	-4,542	-9.4%
Arts, entertainment and recreation	9,452	7,521	1,931	25.7%
Other services	109,800	101,455	8,345	8.2%
Activities of households as employers	162,606	140,733	21,873	15.5%
Activities of extraterritorial organizations and bodies	4,259	3,577	682	19.1%
Total	**2,238,739**	**1,886,167**	**352,572**	**18.7%**

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2022, 2023

A question on total experience of employed person was asked and the answers were recorded into years of experience. If the answer was 0 year, it indicates that the persons got employed in 12 months prior to the interview or that the accumulated experience in different lapses of employment is lower than a year. However, given that more than the majority of person having 0 year of experience are young people (83.8 percent), numbers in the table below may be interpreted as entry employment, especially for young people.

The results show that number of recoded persons with working experience less than one year in 2023 (235,332 persons) was higher than the number registered in 2022 (196,548 persons). The economic activities which offered relatively high number of employment opportunities to young people were agriculture, Activities of households as employers, Whole sale and retail trade; repair of motor cycle and motor vehicle , construction, manufacturing and Education.

Table 3. 9: Distribution of employed persons with less than 1 year of total experience by economic activity, according to the year of interview.

Economic activity	2022	2023
Agriculture forestry and fishing	42,911	48,343
Mining and quarrying	3,293	4,367
Manufacturing	16,517	16,510
Electricity gas stream and air condition	-	654
Water supply, gas and remediation service	96	
Construction	23,409	20,583
Wholesale and retail trade; repair of motor cycle and motor vehicle	27,815	37,613
Transportation and storage	11,556	16,581
Accommodation and food service activities	5,774	12,623
Information and communication	102	1,499
Financial and insurance activities	2,840	1,968
Real estate activities	65	402
Professional, scientific and technical activities	1384	3,597
Administrative and support activities	5,206	5,406
Public administration and defense; compulsory social security	2440	1,500
Education	8,834	9,875
Human health and social work activities	2,949	2,966
Arts, entertainment and recreation	600	431
Other services	6,346	5,684
Activities of households as employers	34,409	44,728
Activities of extraterritorial organization	-	-
Total	**196,548**	**235,332**

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2022,2023

Chapter 4: Unemployment and labour underutilization

Unemployment is a particular form of labour underutilization. It reflects the pressure on the labour market as 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 potential labour force referring to persons not in employment who express an interest in it but for whom existing conditions limit their active job search and/or their availability.

4.1. Unemployment rate

The unemployment rate, defined as the ratio of the number of unemployed persons to the total labour force, is the most commonly 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 results of the 2023 LFS, the unemployment rate in Rwanda stood at 17.2 percent. It decreased compared to the previous year (20.5 percent). The unemployment rate stood at 15.8 percent in the urban areas and 18.0 percent in the rural areas. The unemployment rate was higher among female (20.3 percent) than male (14.5 percent) and higher among the youth (20.8 percent) than in the adults (14.8 percent).

Figure 4. 1: Unemployment rate by sex, area of residence and age group
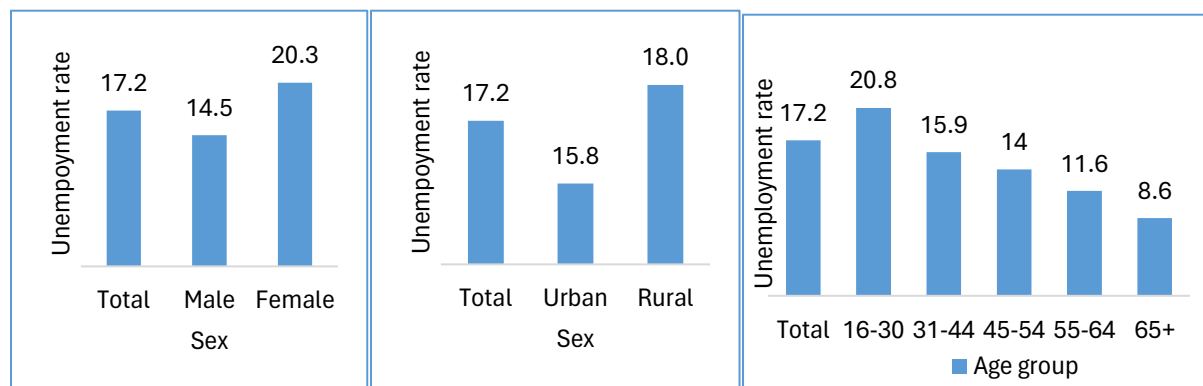
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

In terms of educational attainment, the results in Figure 4.2 indicate that the unemployment rate was the highest among persons with upper secondary education (23.1 percent) followed by lower secondary education (19.7 percent). It was the lowest among university graduates (14.2 percent) while for persons with no attained level of education it was 15.7 percent and 17.6 percent for persons with primary level of education. The unemployment rate was higher among those who completed general education (18.7 percent) compared to those who completed TVET (16.7 percent).

Figure 4. 2: Unemployment rate by educational attainment
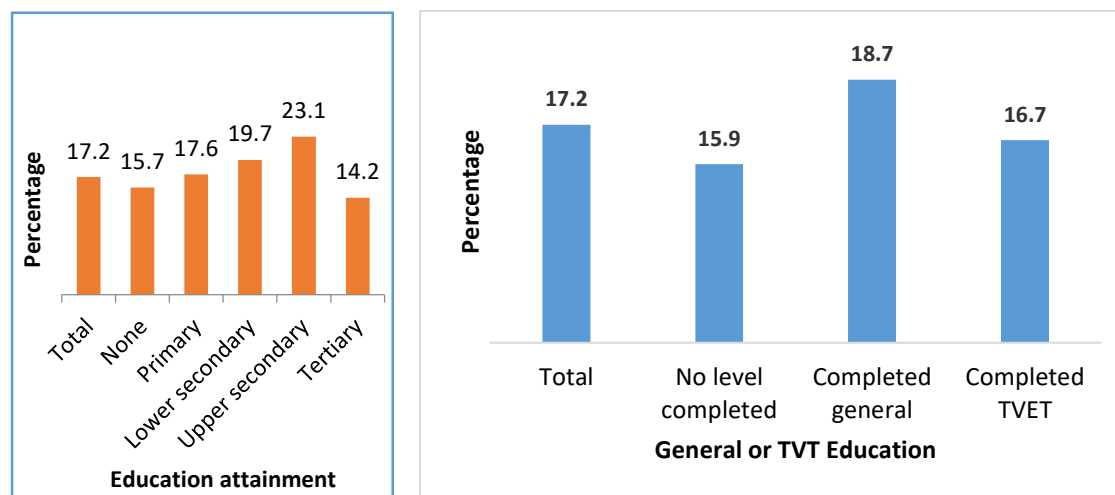
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

4.2. Methods and duration for seeking employment.

On average, each unemployed person used more than one method for seeking employment during the specified reference period. The most frequent method of job search was "applying to employers directly, checking at worksites, farms, factory gates, markets or other assembly places" (54.9 percent), followed by seeking the assistance from friends, relatives or other types of intermediaries (38.2 percent) and arranging for financial resources, applying for permits, licenses (18.0 percent). Other methods of job search were registering with or contacting public or private employment services (9.0 percent), placing or answering newspaper or online job advertisements or response to job advertisements (6.9 percent), looking for land, premises, machinery, supplies, farming inputs (5.8 percent) and placing and updating resumes on professional or social networking sites online (4.9 percent)

The survey provides also data on duration of job search that can be used to estimate long-term unemployment. Long-term unemployment refers to unemployed persons with duration of search for employment lasting 12 months or more, including the reference period. Duration of search for employment is measured from when the unemployed person began carrying out activities to seek employment, or from the end of the last job, whichever is shorter. Duration of unemployment is the length of time that an unemployed person has been without employment, available for employment, and actively seeking employment.

Table 4.1 shows that 17.0 percent of the unemployed who reported duration of job search were long-term unemployed, i.e., seeking employment for 12 months or more. Most unemployed persons were however seeking employment for the period less than three months (52.8 percent). The general shape of the curve of unemployment by duration of job search is L-shaped with concentration at the left-hand side of the distribution.

Table 4. 1: Duration of unemployment: Elapsed duration of job search

Elapsed duration of job search	Number of unemployed reporting duration of job search	%
Total	791,003	100
Less than 3 months	417,458	52.8
3 – less 6 months	167,958	21.2
6 – less 12 months	71,568	9.1
1 – less 2 years	68,586	8.7
2 years or more	65,433	8.3

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

The median reported duration of search for employment by the unemployed was 2.0 months. It is the median duration of job search until the date of the survey.[10] The duration of unemployment however continues after the survey. The median duration of completed spells of unemployment may be estimated as twice the duration of the interrupted spells of unemployment (2x2=4 months).

4.3. Labour underutilization

Unemployment is a particular form of labour underutilization. As mentioned earlier, other forms of labour underutilization include 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. Time-related underemployment is measured here as all persons in employment who, during the specified reference period of the survey (a) wanted to work additional hours, (b) were working in all jobs less than 35 hours during the reference period, and (c) were available to work additional hours given an opportunity for more work. 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 any activities to seek employment).

Potential labour force together with time-related underemployment and unemployment are different dimensions of labour underutilization. Figure 4.3 shows the composition of labour underutilization. It is instructive to note that unemployment was only a small part of labour underutilization in Rwanda comprising 824,852 persons and representing only 25 percent of labour underutilization. By far, the largest part of labour underutilization was the potential labour force with 1,340,478 persons, representing 40 percent of labour

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[10]Kiefer, Nicholas, M & Lundberg, Shelly J & Neumann, George R, "How Long Is a Spell of Unemployment? Illusions and Biases in the Use of CPS Data," *Journal of Business & Economic Statistics*, American Statistical Association, vol. 3(2), April 1985, pp. 118-128.

underutilization. The other part of labour underutilization includes the time-related underemployed, consisting of 1,165,285 persons representing 35 percent of Labour underutilization.

Figure 4. 3: Composition of labour underutilization
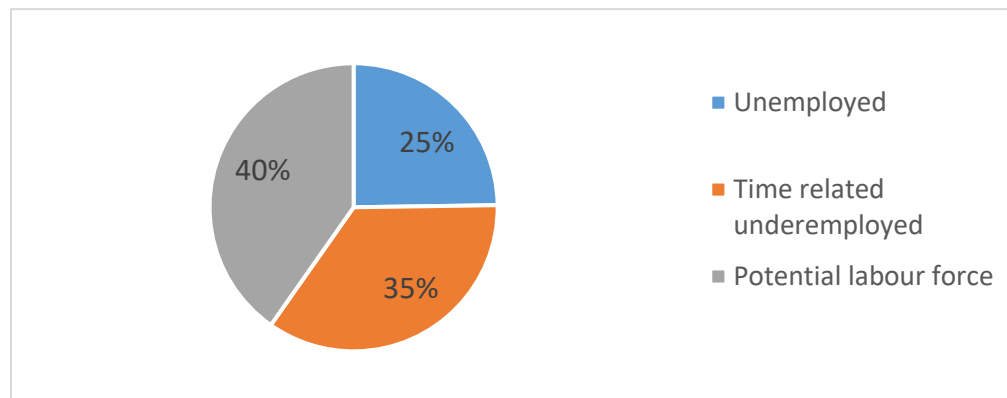
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

An important sub-category of the potential labour force is the discouraged jobseekers, i.e. those outside the labour force who did not "seek employment" for labour market-related reasons, such as 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). According to the results there were about 929,276 discouraged jobseekers representing around 28.3 percent of those out of the labour force. The majority of discouraged jobseekers are those with primary education or lower (84.7 percent), females (60.1 percent), adult aged 31 years old or above (57 percent), living in rural areas (87.8 percent) and participating in subsistence agriculture (64.5 percent).

The international standards further suggest the identification of a separate group of persons outside the labour force who expressed interest in employment. They are called *willing non-jobseekers* and defined as persons neither employed nor unemployed who wanted employment but did not seek employment and were not currently available for work. The estimate of the number of willing non-jobseekers obtained from the LFS 2023 annual data was 124,231 representing 3.8 percent of the population outside the labour force.

The proportion of willing non-jobseekers decreases as the level of education increases. It was 78.4 percent for those with primary education or lower and 0.9 percent for university graduates. Moreover, it was higher for females (67 percent) and among those living in rural areas (73.4 percent).

Figure 4.3 shows the composite measure of labour underutilization for different socio-demographic characteristics of the population. While the unemployment rate (LU1) is the narrowest measure of labour underutilization, the composite measure (LU4) is the broadest measure of labour underutilization. It is the ratio of total labour underutilization to the extended labour force, calculated as the sum of the labour force and the potential labour force.

Figure 4. 4: Labour underutilization rate (LUUR) by sex, urban/rural, age group and educational attainment
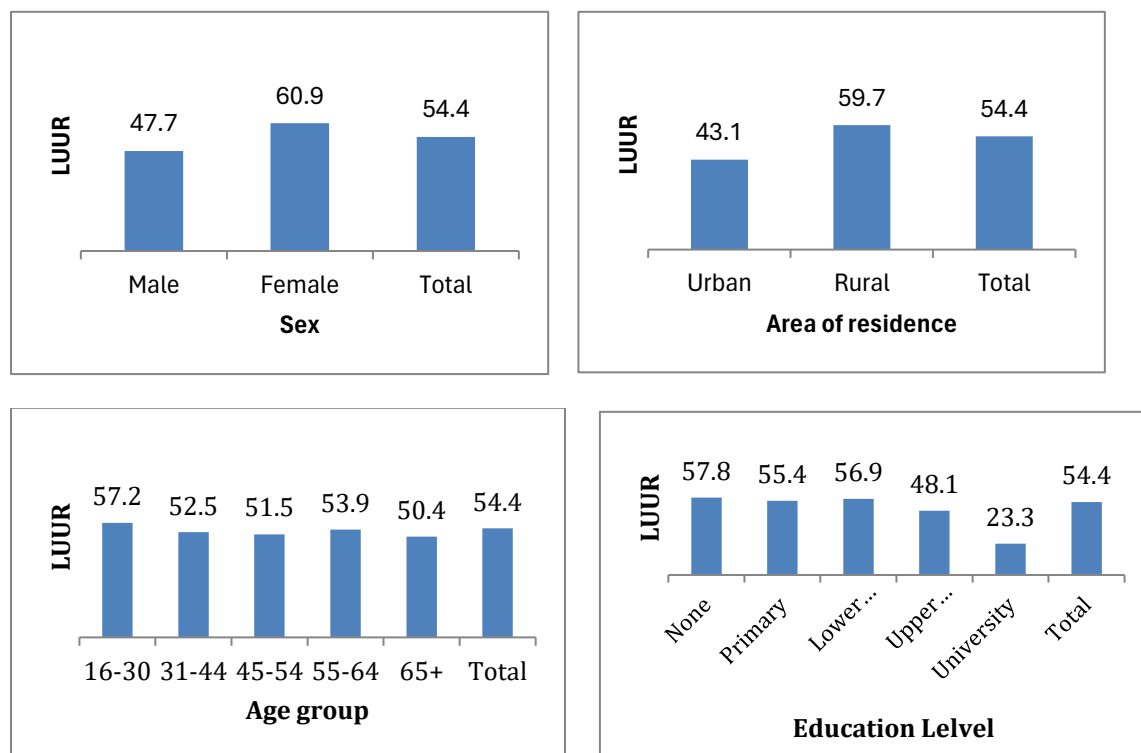
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

In terms of gender and age group, the composite measure of labour underutilization closely follows the pattern of the unemployment rate though at a much higher level. The female rate of labour underutilization (60.9 percent) is relatively higher than the male rate (47.7 percent). Similarly, youth (16 to 30 years old), are mostly affected by labour underutilization at a relatively higher rate (57.2 percent) than other age population groups.

According to area of residence, the rate of labour underutilization is higher in rural areas (59.7 percent) than in urban areas (43.1 percent). The reason may be attributed to a large pool of subsistence foodstuff producers in the rural areas outside the labour force, who is available for employment but not seeking work.

In terms of level of educational attainment, the composite measure of labour underutilization differs from the pattern of the unemployment rate. While the unemployment rate is higher among persons with upper and lower, secondary level of education, the rate of labour underutilization is higher among persons with no educational attainment (57.8 percent) and primary education (55.4 percent) and it is the lowest among university graduates (23.3 percent).

The analysis of labour underutilization rate by district as presented in figure 4.5 reveals that the labour underutilization of more than a half of districts (18 districts) is above the national labour underutilization rate (54.4 percent). Nyamasheke is the district with the highest labour underutilization rate (above 72.9 percent) while Kicukiro, Gasabo, Nyarugenge, Gatsibo and Rulindo, are the top five districts with lower underutilization rates.

Figure 4. 5: Labour underutilisation rate (LUUR) by District
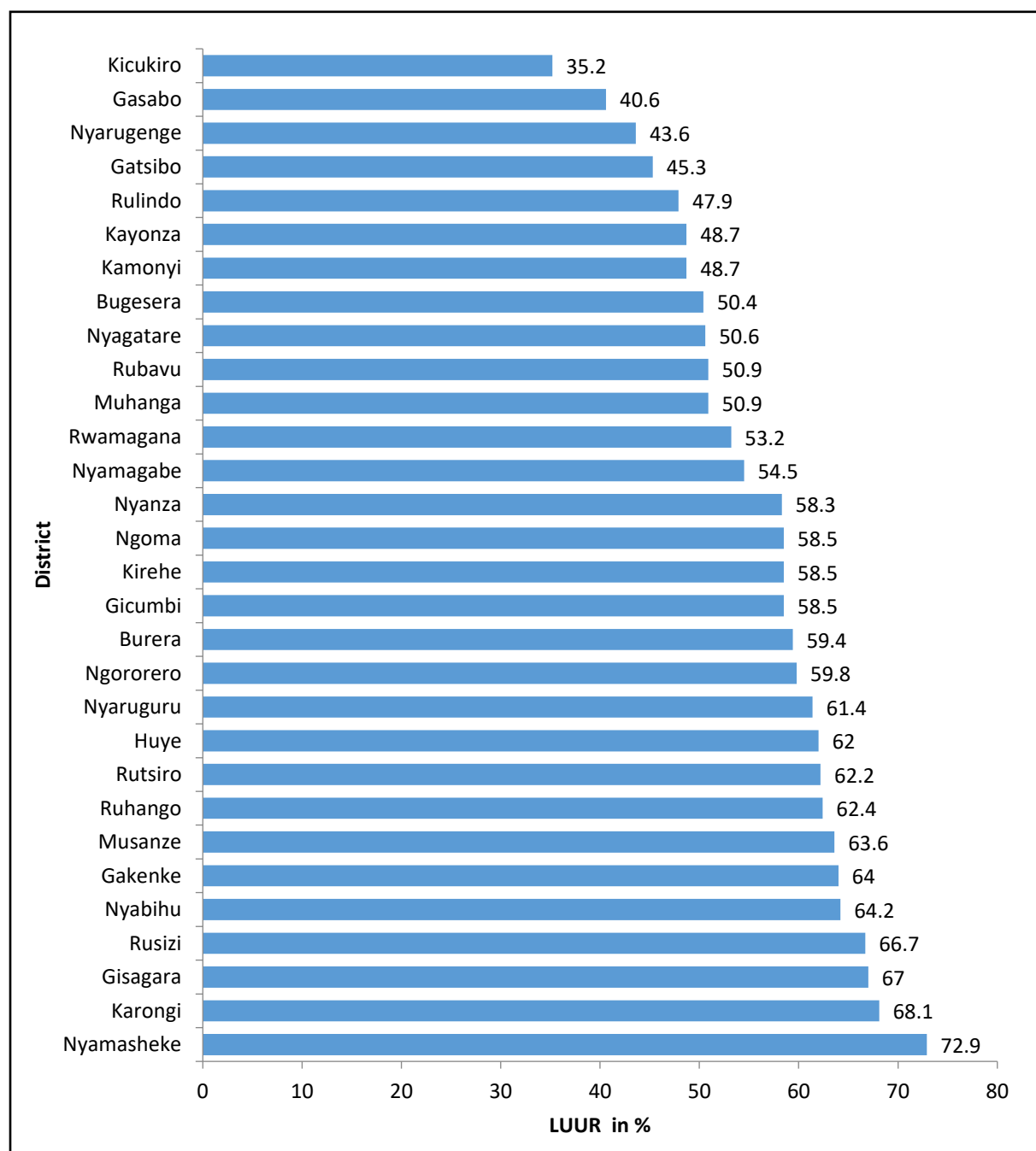
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Chapter 5: Persons outside the labour force

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 as big as the size of the labour force itself. The results from the 2023 LFS show that the number of working age population outside the labour force was 3,288,293 against 4,783,668 in the labour force. There is a substantial proportion of the persons outside the labour force who are subsistence foodstuff producers (42.3 percent). The observation of the proportion of working age population outside labour force by province reveals that the Southern Province account for 47.6 percent, followed by Western Province (43.5 percent), Northern Province (41.3 percent), Eastern Province (38.4 percent), and the City of Kigali with 30.1 percent.

Figure 5. 1: Proportion of working age population outside labour force by province.
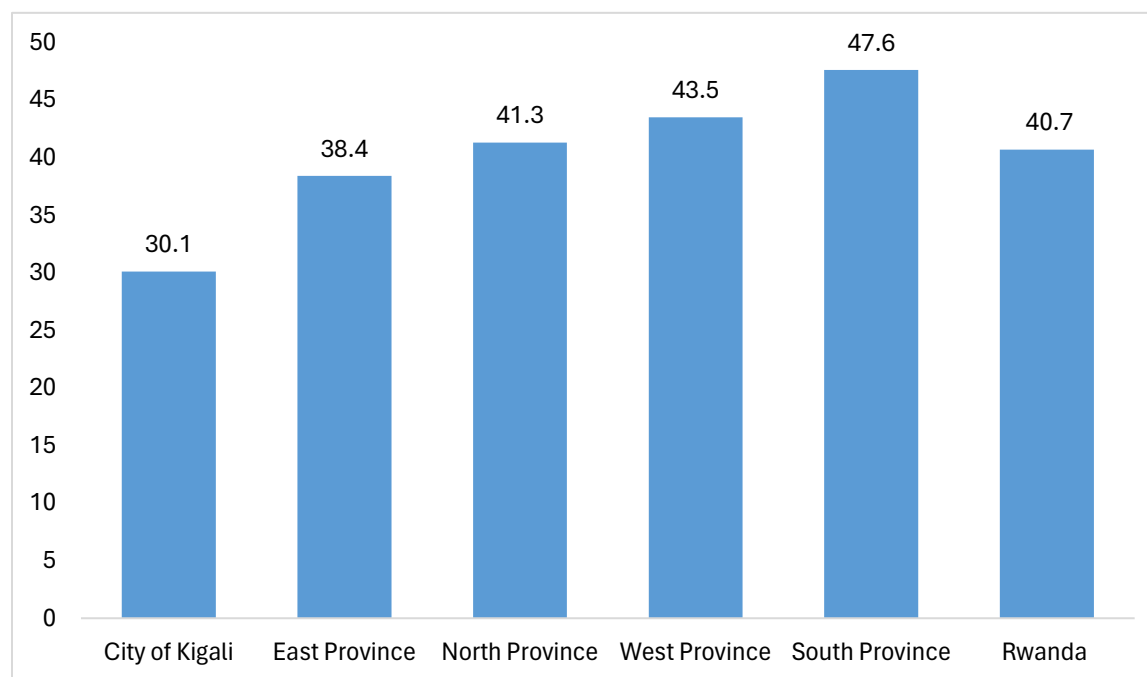
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The survey also asks a question on main source of livelihood of population outside the labour force. Table 5.1 presents the results by sex and broad age group. For most people outside the labour force, the main source of livelihood was own-production irrespective of sex and age group, except for the young population between 16 and 24 years old outside the labour force, for whom the main source of livelihood was from their parents. Table 5.1 also shows that for elderly persons 65 years old and above who were outside the labour force, the main source of livelihood after own production was from their children or assistance received (VUP).

Table 5. 1: Main source of livelihood of persons outside the labour force by sex and age group

	Sex			Age group				
	Total	Male	Female	16-24 yrs	25-34 yrs	35-54 yrs	55-64 yrs	65+ yrs
Total ('000)	**3,285**	**1,235**	**2,049**	**1,265**	**420**	**713**	**388**	**498**
Parents	33.6	44.0	27.3	79.5	17.6	2.7	0.7	0.3
Husband/Wife	13.0	4.4	18.1	4.2	34.2	24.1	8.4	4.9
Child	3.6	2.0	4.5	0.1		1.2	5.0	17.8
Other family members	5.8	5.9	5.7	8.3	5.2	2.5	2.9	6.8
Pension	0.4	0.8	0.2	0.0	0.0	0.1	0.8	2.0
Own production	36.9	36.3	37.2	6.5	38.6	61.8	72.4	49.0
Assistance received [VUP]	2.0	1.3	2.5	0.0	0.2	0.6	1.7	11.0
Assistance received [FARG]	0.3	0.1	0.4	0.0		0.3	0.8	0.8
Assistance received [Church, Other NGO]	0.2	0.2	0.1	0.1	0.1	0.2	0.5	0.2
Assistance from friends	1.1	0.9	1.2	0.3	1.0	1.6	1.2	2.2
Revenue from own property/Savings	2.0	2.2	1.9	0.1	0.9	2.7	4.6	4.9
Past work	0.9	1.2	0.6	0.3	1.7	1.9	0.9	0.2
Schorlaship	0.3	0.5	0.2	0.6	0.4	0.0		
Others	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.0

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

Population outside the labour force have different degrees of attachment to the labour market. While some are in the potential labour force as discussed in the preceding section, others may not be in the potential labour force but have had past work experience or were willing to work although they were not currently seeking or available for work.

Among the population outside the labour force, about 1,156,419 persons representing 35.2 percent reported to have past work experience. Figure 5.2 below shows that 33.9 percet of them reported that the reason for stopping employment was the nature of their jobs which was temporaly or seasonal. For others, the main reason was illness/injury or disability (17.6 percent), pregnancy or family responsibilities (10.7 percent) and retirement (9 percent).

Figure 5.2: Past work experience and reason for stopping last employment of persons outside the labour force
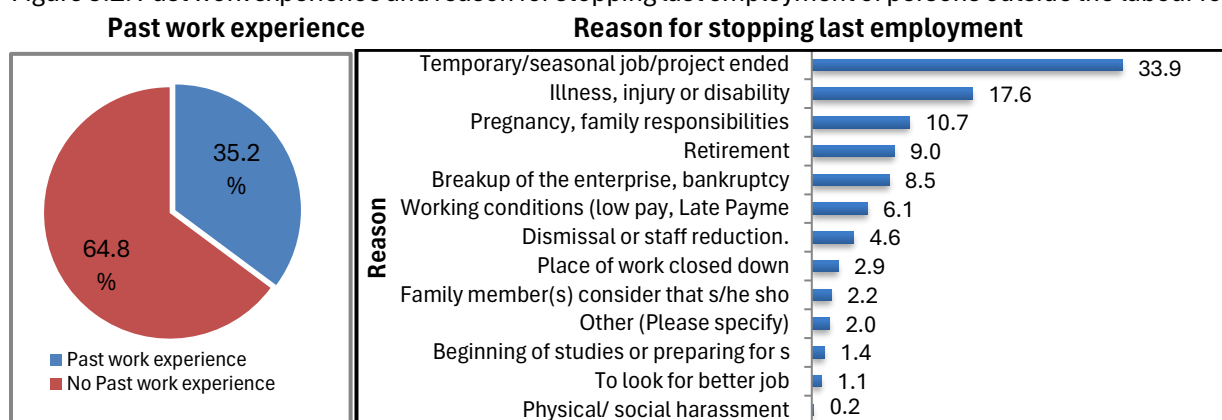
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Some other characteristics of the population such as education, age and sex have also been analyzed for the population outside the labour force. Table 5.2 below describes the relationship between population outside the labour force and those characteristics. It is observed that 62.4 percent of the population outside the labour force were females, 80.1 percent had primary education or lower and 46.6 percent were youth (16 to 30 years old).

Table 5. 2: Demographic characteristics of population outside labour force

Characteristics	Total	%
Sex		
Male	1,236,294	37.6
Female	2,051,999	62.4
Education level		
Primary or lower	2,634,180	80.1
Secondary (lower and upper)	615,226	18.7
University	38,888	1.2
Age group		
16-24_yrs	1,266,810	38.5
25-34_yrs	420,501	12.8
35-54_yrs	714,349	21.7
55-64_yrs	388,036	11.8
65+_yrs	498,597	15.2
Youth and adult		
16-30	1,531,738	46.6
31+	1,756,555	53.4
Total	3,288,293	100

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

Chapter 6: Women and equal opportunities

The 2023 LFS provides a rich set of current information on women and equal opportunities. Here a few aspects are examined: female labour force participation rate by marital status, the proportion of women in managerial positions, and occupational segregation index.

Women account for 46.8 percent of the labour force in Rwanda. The overall female labour force participation rate was 52.2 percent. As presented in Figure 6.1 below, females labour force participation rate was significantly lower than the one for males among married (males:70.0 percent; females: 52.9 percent) or living together couples (males:86.3 percent; females:64.4 percent). For divorced/separated the labour force participation rates of both sexes is the same (around 74 percent). The labour force participation rate was lower for widower (37.0 percent and 33.8 percent for males and females respectively) due to the predominance of old persons in this category.

Figure 6. 1: Labour force participation by marital status and sex
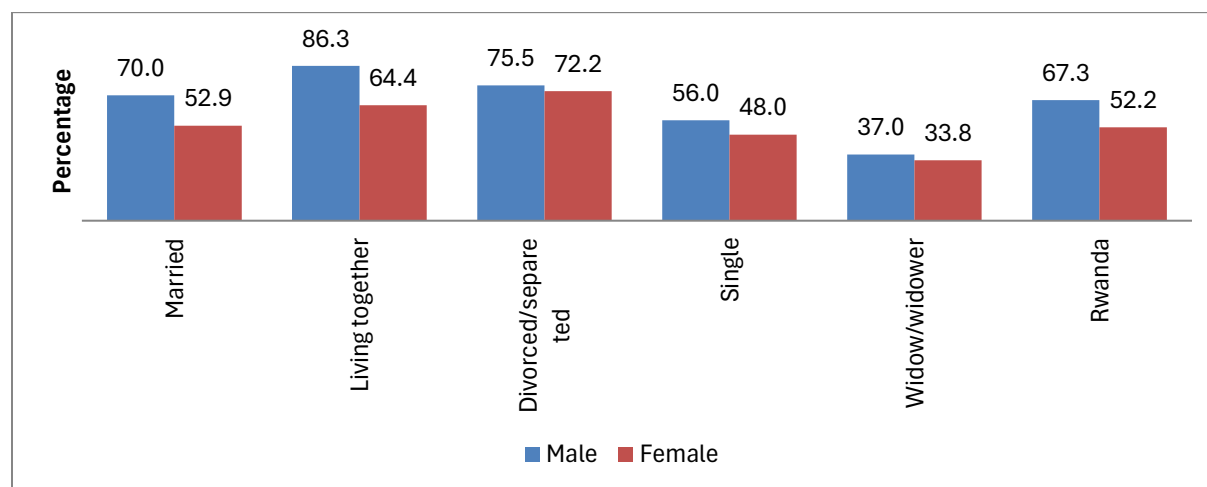
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The primary goal of Rwanda is to promote opportunities for both women and men to obtain decent work. Over the past few years, Rwanda has experienced a significant progress toward achieving gender equality in the working place. The results below show gender differentials in managerial positions.

The results in Table 6.1 show that there were 4,942 women working as chief executives, senior officials and legislators, 6,581women as administrative and commercial managers, giving a total of 11,522 women in specialized managerial positions. The corresponding total for men was 17,550 persons. Thus, the overall share of women in specialized managerial positions was 39.6 percent.

Table 6. 1: Women and men in managerial positions

Sub-major occupation groups	Persons			%		
	Total	Male	Female	Total	Male	Female
Total Persons in specialized managerial positions	29,072	17,550	11,522	100	60.4	39.6
Chief executives, senior officials and legislators	13,155	8,214	4,942	100	62.4	37.6
Administrative and commercial managers	15,917	9,336	6,581	100	58.7	41.3

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

The degree of segregation of occupations by sex may be measured with the occupational segregation index. It measures extent to which labour markets are separated into "male" and "female" occupations. The occupational segregation index (D) is commonly used as a proxy indicator for equality of opportunity in employment and occupation.[11] It is defined by

$$D = \frac{1}{2}\sum_i \left| \frac{n_{Ai}}{n_A} - \frac{n_{Bi}}{n_B} \right|$$

Where n_{Ai} and n_{Bi} are, respectively, the number of men and women in a given occupational i and n_A and n_B are, respectively, the total number of men and women in all occupations. The value of the index ranges from zero to one, zero indicating no segregation and one indicating complete segregation. The index may be interpreted as the fraction of persons that need to change occupations to achieve zero segregation.

According to the results of the 2023 LFS, the segregation index calculated at four-digit level of occupation was 0.42 indicating that 42 percent of the male and female employed population needs to exchange occupations to eliminate occupational segregation in Rwanda.

Among the 353 distinct 4-digit occupations recorded from the survey, six contributed more than a half of total occupational segregation index in the country as displayed in the table 6.2 below:

Table 6. 2: Occupations with high gender segregation

Occupation with high segregation index	Male	Female	Total
Crop Farm Labourers	587,413	824,625	1,412,037
Building Construction Labourers	208,214	27,315	235,530
House Builders	80,015	741	80,756
Hand and Pedal Vehicle Drivers	79,402	436	79,838
Freight Handlers	81,247	9,515	90,762
Stall and Market Salespersons	39,126	105,354	144,480

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

It can be observed from these results that building construction laborers, house builders and hand and pedal vehicle drivers and Freight handlers were male-dominated occupations while crop farm laborers and Stall and market salespersons, were female dominated occupations.

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[11]ILO, *Decent Work Indicators Concepts and definitions, ILO Manual (First version)*, May 2012, pp. 127-130.

Chapter 7: Youth population

7.1. Youth and education

The international definition of the youth population is "persons aged 15-24 years old."[12] To cover countries where entry into the labour market occurs at a later stage, the ILO extends the definition to include young adults aged 25-29 years old for certain purpose. In Rwanda, youth is defined as persons aged between 16 to 30 years old.

In general, there is a two-way relationship between the education system and the labour market. The education system supplies the labour market with educated labour force, while the labour market – through the wage structure of occupations and other labour market variables – transmits signals on the types of qualifications expected from the education system. The data collected by the 2023 LFS contain the elements for carrying such types of analysis.

Figure 7.1 presents in the left panel the youth labour force participation rate by educational attainment and youth unemployment rate by educational attainment on the right. The results show that the labour force participation rate was higher among the university graduates (80.3 percent). It was above the National average (59.3 percent) among those who attained upper secondary level (62.5 percent) and those with no completed education level (65.1 percent), while it was less than the national average in the rest of education levels with the lowest rate among youth with lower secondary education for whom the labour force participation rate was 35.6 percent.

The unemployment rate among youth was 20.8 percent which is higher than the rate at national level (17.2 percent). The breakdown of youth unemployment rate by competed level of education shows an increasing pattern from 17.3 percent for young people with no educational attainment to 30.0 percent for holders of upper secondary level and 22.7 percent among youth who completed university education.

This pattern suggests that the higher the educational attainment of a young person, the higher his or her risk of unemployment. One could think of a number of reasons for this phenomenon. First, persons with higher educational attainment have a higher reservation wage, preferring to wait for a suitable employment rather than accepting a job considered as inadequate or low paying. Another possible reason may be the existence of mismatch between the qualification of the youth and the skill requirements of jobs in the labour market or limited job opportunities.

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[12]ILO, *Global Employment Trends for Youth 2015,* Employment Policy Department, International Labour Office, Geneva, 2015.

Figure 7. 1: Youth (16-30 years old) labour force participation rate and unemployment rate by educational attainment
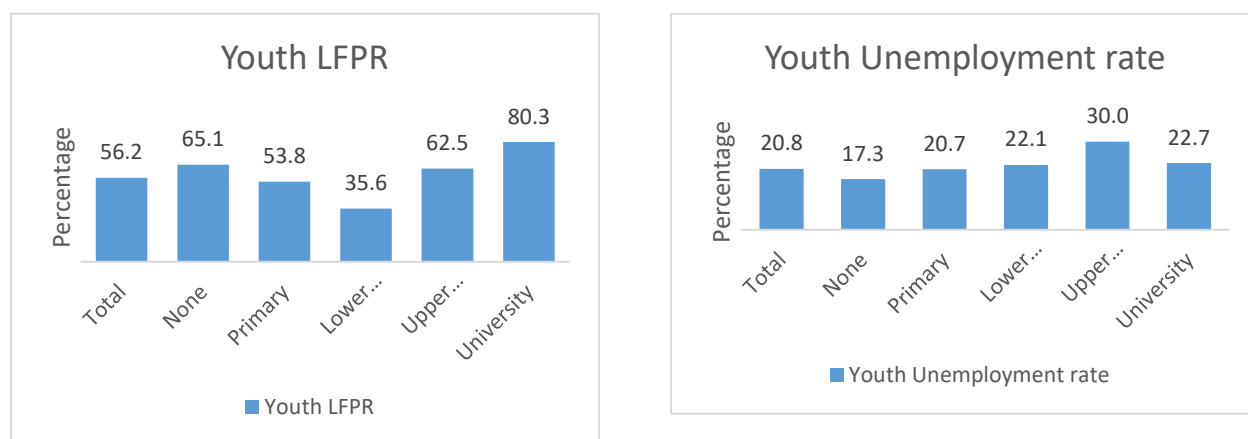
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

7.2 Youth neither in employment, nor in education or training (NEET)

The NEET rate is an ILO decent work indicator and serves as a broader measure of potential youth labour market entrants than youth unemployment.[13] A full account of the labour market situation of young people is important for the formulation of employment policies regarding the youth. The results of LFS 2023 shows that out of 3,495,825 youth population, 791,738 were in education or training, and 1,478,873 were in employment during the reference week, including about 76,365 youth population in both employment and in education or training. The number of youth population who were neither in employment, nor in education or training was 1,148,849 corresponding to about 32.9 percent of the youth population. Table7.1 provides a measure of the youth who are outside the educational system and not in employment (NEET).

Among the NEET population the estimated number of youth who were unemployed or in the potential labour force was 383,505 and 510,712 respectively. The remaining 254,632 are not accounted for in the above categories Some may want employment but not seeking, nor currently available for work, but 32.7 percent of them were involved in subsistence agriculture. As results from the table 7.1 show, the NEET rate is higher among youth women (39.4 percent) than among youth men (25.9 percent), as relatively more women than men remain outside the labour force after completing their education or training. Many of them are however in the potential labour force, available to take up employment under suitable conditions.

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[13] ILO, *Decent Work Indicators Concepts and definitions, ILO Manual (First version)*, International Labour Office, Geneva, May 2012, pp. 51-53.

Table 7. 1: Youth population (16-30 yrs) with respect to employment and education or training, 2023

	Number			Percentage		
	Total	Youth Male	Youth Female	Total	Youth Male	Youth Female
Total youth population (16-30 yrs)	3,495,825	1,692,395	1,803,429	100	100	100
In education or training	791,738	395,465	396,273	22.6	23.4	22.0
In employment	1,478,873	810,203	668,670	42.3	47.9	37.1
In both employment and education or training	76,365	48,896	27,468	2.2	2.9	1.5
Not in employment nor in education/training (NEET)	1,148,849	437,832	711,017	32.9	25.9	39.4
-Unemployed	383,505	160,159	223,345	33.4	36.6	31.4
-Potential labour force	510,712	178,450	332,262	44.5	40.8	46.7
-Others	254,632	99,222	155,410	22.2	22.7	21.9

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

The results in figure 7.2 indicate that the percentage of youth aged 16-24 yrs not in employment and not in education or training is slightly lower than that of the youth aged 16-30 yrs, namely 31.9 percent versus 32.9 percent.

Figure 7. 2: Youth not in employment and not in education or training
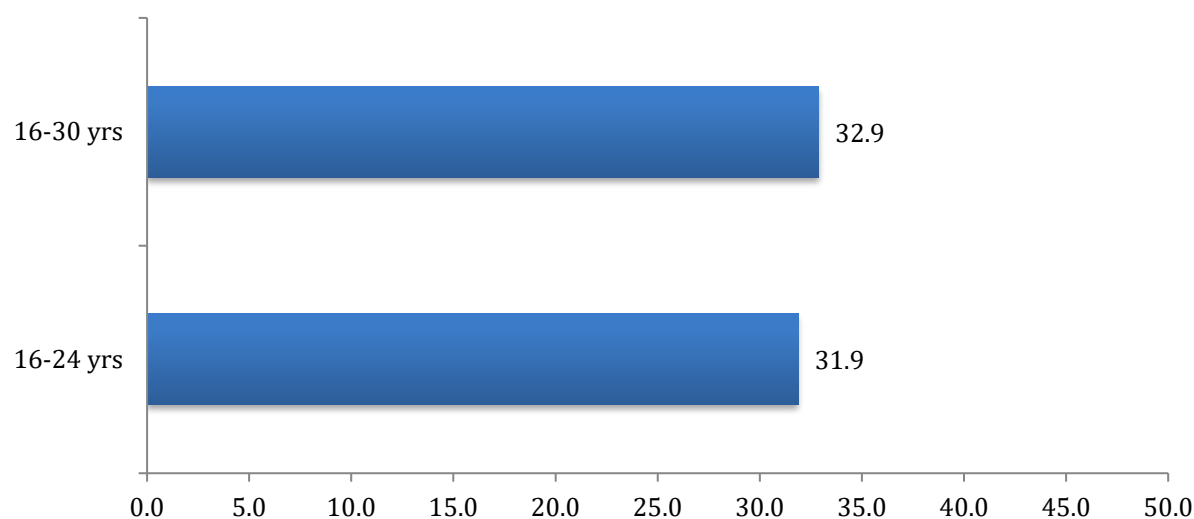
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Figure 7. 3 below illustrate the proportion of youth (16-30 years) neither in education nor in employment or training by district. It is observed that the youth NEET rate in 12 out of 30 districts of Rwanda were below the national average while it was higher than the national average in the remaining districts. District with the highest youth NEET rate is Rusizi followed by Karongi and Gicumbi.

Figure 7. 3: Proportion of Youth (16-30) neither in Employment nor in Education or Training (NEET) by District
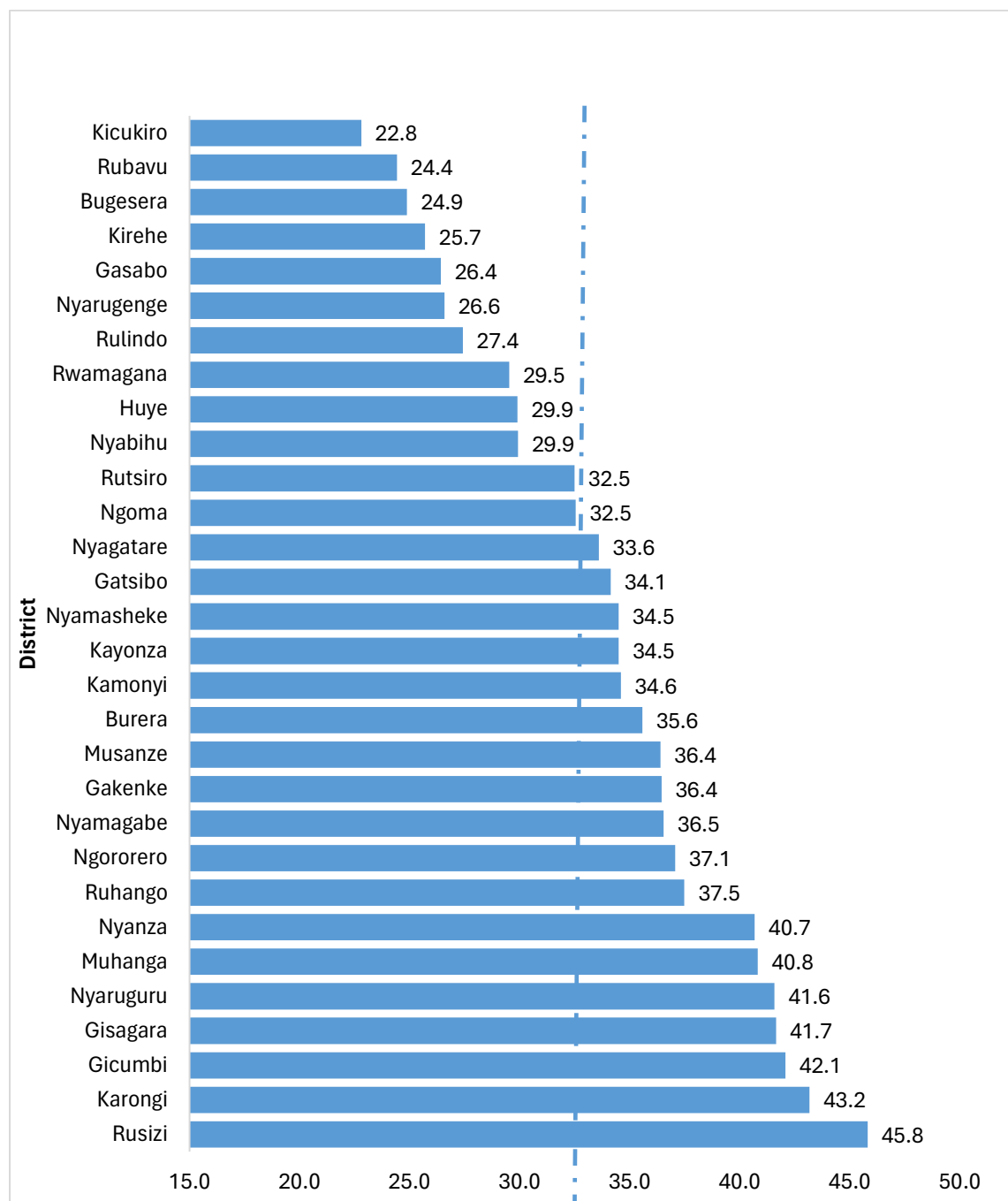
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Note: dotted line represents the national average

Chapter 8: Participation in training programmes

The role of training for insertion or reinsertion into the labour market is widely recognized. In order to assess the outreach of training among the youth and adults as well as to understand the nature of the demand for training in terms of subjects or trades/courses and type of training providers, the LFS questionnaire included four questions (B07-B10) on current participation or past acquisition of any trade or technical vocational course among all eligible respondents.

Table 8.1 gives the distribution of training courses completed and the status of employment of the participants. There is in total 13 training courses or subjects that covered more than 1 percent each of the total number of graduates. Among them, the most popular training course was tailoring with a participation rate of 32.3 percent, followed by masonry with participation rates of 17.9 percent and hairdressing with 6.2 percent.

Table 8. 1: Participation in trade or technical vocational course and current employment status

Type of technical skills learned	Completed vocational training		Currently working	
	Number of persons	%	Number of persons	%
Tailoring	221,119	32.29	124,247	56.2
Masonry	122,206	17.85	80,790	66.1
Hairdressing	42,420	6.20	27,614	65.1
Carpentry	42,367	6.19	29,669	70.0
Culinary arts	39,184	5.72	23,303	59.5
Driving	36,308	5.30	27,275	75.1
Automotive body repair	34,235	5.00	26,496	77.4
Welding	21,445	3.13	16,964	79.1
Automotive technology.	18,125	2.65	14,593	80.5
Domestic Electricity	15,974	2.33	11,173	69.9
Other	11,560	1.69	8,717	75.4
Crochet embroidery	9,947	1.45	4,765	47.9
Motor vehicle engine mechanics	9,154	1.34	7,976	87.1
Plumbing	4,882	0.71	3,592	73.6
Front office	4,464	0.65	2,430	54.4
Industrial electricity	3,595	0.53	2,020	56.2
Leather craft	3,429	0.50	2,851	83.1
Computer maintenance	3,399	0.50	1,680	49.4
Food processing	2,864	0.42	2,032	70.9
Software Development	2,808	0.41	1,047	37.3
Agri-Business	2,752	0.40	1,234	44.8
Typing(dactilographie)	2,501	0.37	1,282	51.2
Engine mechanics	2,360	0.34	2,290	97.0
Painting and decoration	2,315	0.34	1,934	83.5
Biding and Jewelries	2,281	0.33	1,292	56.7
Nursery growing	2,212	0.32	1,434	64.8

Type of technical skills learned	Completed vocational training		Currently working	
	Number of persons	%	Number of persons	%
Beauty therapy	2,210	0.32	1,788	80.9
Civil construction	1,928	0.28	1,248	64.7
House keeping	1,906	0.28	346	18.1
Auto- Electricity	1,765	0.26	817	46.3
Crop production	1,727	0.25	1,283	74.3
Networking	1,387	0.20	1,150	82.9
Multimedia	1,238	0.18	920	74.3
Food & Beverage services	1,158	0.17	498	43.0
Animal health	1,156	0.17	1,156	100.0
Concrete masonry	1,132	0.17	717	63.3
Manicure and Pedicure	1,125	0.16	1,125	100.0
Film making	1,113	0.16	90	8.1
Screen printing	830	0.12	754	90.9
NCDs and Palliative Care Community Health	751	0.11	479	63.7
Other	563	0.08	158	28.1
Livestock	230	0.03	230	100.0
Sport and Medical Massage	209	0.03	209	100.0
Music	191	0.03	191	100.0
Agriculture Mechanization	133	0.02	133	100.0
Milk processing	59	0.01	0	0.0

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

The evaluation of the success or non-success of the training courses in terms of the current employment status of the graduates revealed that training courses with the highest percentage of graduates currently employed were the most successful, and training courses with the lowest percentage of graduates currently employed were the least successful. In this sense, it appears that among the training courses with more than 3 percent of the graduates, welding was the most successful training course with 79.1 percent currently working graduates , followed by automotive body repair(77.4 percent), Driving (75.1 percent), carpentry (70.0 percent) and Masonry (66.1 percent).

The LFS 2023 also included a question on the success of the training course in terms of "what happened after the completion of the course". The results presented in Figure 8.1 show the benefits after completing vocational training among those who completed their studies 3 years prior to the survey. The results show that 58 percent of them reported benefits after completing the training course. These included 44.2 percent who managed to get a job and 9.6 percent who managed to start their own business. By contrast, a considerable portion (41.9 percent) reported no particular improvement in their situation after completion of the training course in last 3 years. Among male who completed vocational training in last three years, 32.4 percent did not report any improvement after completion while among female this proportion was 48.7 percent. Female reported having started their own business as a result of training completion more than male

(13.5 percent compared to 4.1 percent) and male reported getting a job more than female (57.2 percent as compared to 34.9 percent).

Figure 8. 1: Percentage distribution of self-reported benefits after completing vocational training three years after completion.
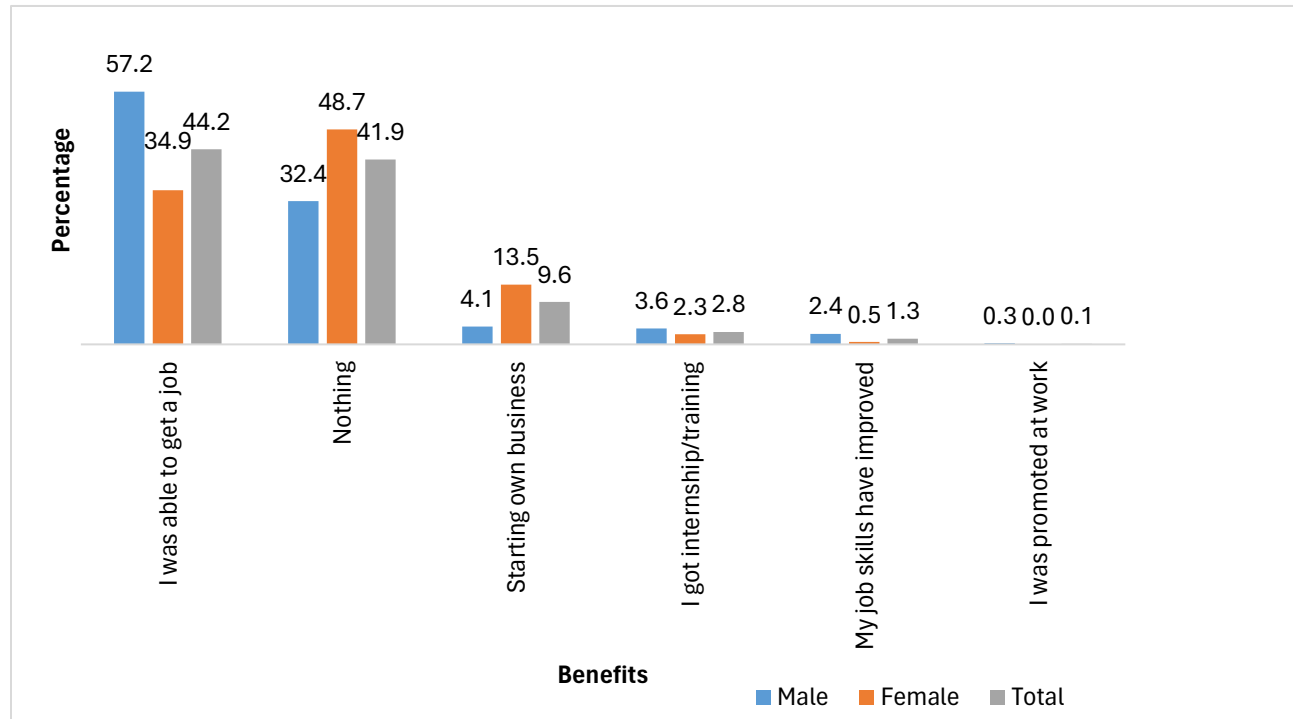
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The analysis of the duration of training course shows that most of TVET graduates completed one year vocational Training (35.3 percent) followed by those who completed the training 3 to 6 months (29.5 percent). There were 16.1 percent of TVET graduates who completed 3 year or more in their technical or vocational training , 7.4 percent who spent 2 years to complete their technical or vocational training, and 11.2 percent who completed 1 to 2 months in their technical or vocational training.

Figure 8. 2: Distribution of TVT graduates in last three years by duration of training
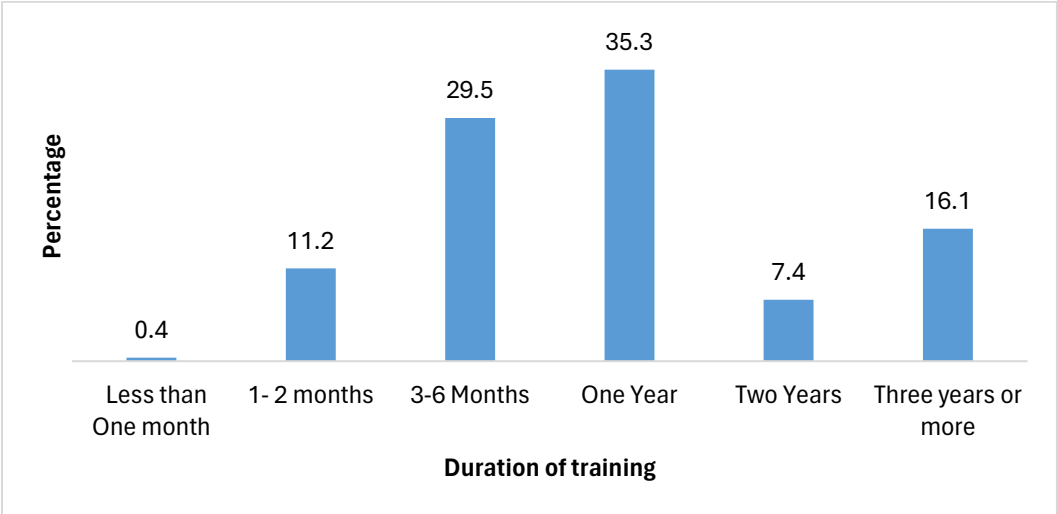
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Chapter 9: Work in Agriculture

Considering a substantial number of Rwandan population involved in agriculture sector, a special attention has been paid to it in the present report. The introduction of 2013 standards on work, employment and labor underutilization statistics split workers in agriculture occupations into two categories: market oriented and non-market oriented (Subsistence agriculture). 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 analyze the work in agriculture sector as a whole.

9.1 Agricultural status of workers

From the data of LFS, the following four categories were identified to explain the status of workers in agriculture: Those who are engaged in market oriented agriculture as main job, working for pay or self-employed; those who are exclusively engaged in subsistence agriculture; those who have their main job out of agriculture but performed foodstuff production activities for own use and finally, those who were involved in market oriented agriculture as their secondary job.

The full count of workers in agriculture sector as presented in table 9.1 revealed that in 2023, about 49.3 percent of working age population were involved in agriculture activity either in subsistence or market oriented. Workers engaged exclusively in subsistence agriculture represented the majority of agriculture sector (45.0 percent), followed by those engaged in market oriented agriculture as their main job (43.2 percent). The proportion of those who combine non-agricultural employment and subsistence agriculture represented 11.6 percent and the remaining 0.2 percent were involved in marked oriented agriculture as their secondary job.

Table 9. 1: Works status in agriculture

Categories of agriculture	Number	%
Workers in market oriented agriculture as main job	1,720,078	43.2
Workers in subsistence agriculture exclusively	1,788,368	45.0
Workers in market oriented agriculture as secondary job	8,787	0.2
Workers in subsistence agriculture but engaged in non-agricultural activities	460,559	11.6
Total	**3,977,791**	**100.0**
Proportion of working age population (%)		**49.3**

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

9.2 Characteristics of agriculture workers

The focus of the following sub-sections is on the two first categories of table 9.1 (Workers in market oriented agricultural in main job and those involved exclusively in subsistence agriculture) to describe characteristics of workers primarily engaged in agriculture job.

9.2.1 Market-oriented agriculture workers

Agriculture constitutes the main source of livelihood of many Rwandans as the portion of population which were only in market-oriented agriculture represented more than a third (43.5 Percent) of the employed population according to LFS 2023.

Figure 9.1 describe the distribution of person working in market-oriented agriculture by level of education. It is generally observed that employment in market-oriented agriculture declines as the level of education increases, it is 65.1 percent among person who did not complete any level of education and less than one percent among those with university level of education.

Figure 9. 1: Proportion of working age group involved in agriculture employment by level of education attained.
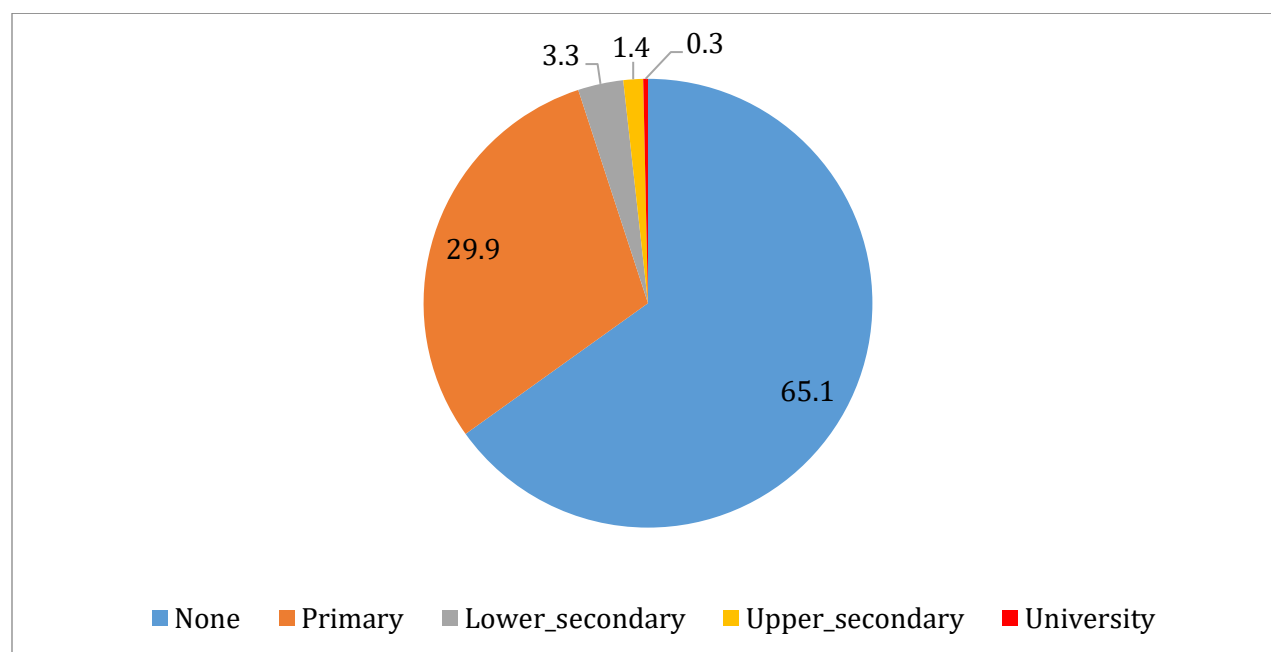
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

At the national level, women were more engaged in market-oriented agriculture than men with 54.6 percent versus 45.4 percent. Market oriented agriculture activity was also mostly observed among adults (65.8percent) compared to youth (34.2 percent).

The majority of people employed in market-oriented agriculture were paid employees who represent 83.5 percent, mostly working on daily basis contract (89.8 percent) and whose average monthly salary is 28,324 Frw. Own account workers represented 12.2 percent of market-oriented agriculture while contributing family workers represented 3.3 percent.

9.2.2 Subsistence foodstuff producers

Among the population aged 16 years and above, 1,788,368 representing 22.2 percent of the working age population were exclusively engaged in subsistence foodstuff production. They have spent on average 23.5 hours per week on this activity, which is lower than 29.3 usually weekly hours spent by those engaged in market-oriented agriculture, but higher than 17.7 hours per week spent in subsistence foodstuff production by those who have other non-agriculture employment.

People who have a higher level of education, are less likely to be involved in subsistence agriculture. About ninety percent (90.2 percent) of those engaged in subsistence agriculture have at most primary school level of education (None and Primary). In addition, young people are less likely to be engaged in subsistence agriculture compared to adults.

Figure 9. 2: Proportion of working age group involved in subsistence agriculture by age group.
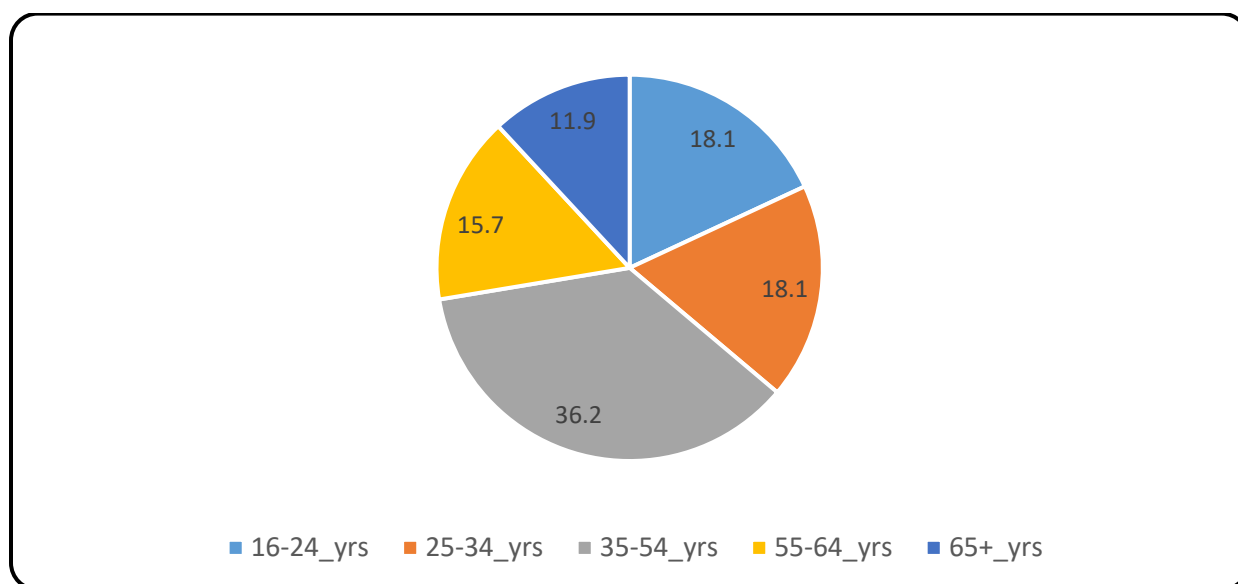
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

9.3 Practices of households engaged in subsistence foodstuff production

The survey collected additional information on subsistence foodstuff production including on whether any portion of the products was sold in the market and the net income obtained from agricultural activities last season as well as the number of paid employees engaged in the activities in addition to family members in the household.

Figure 9. 3: Percentage distribution of the use of household production
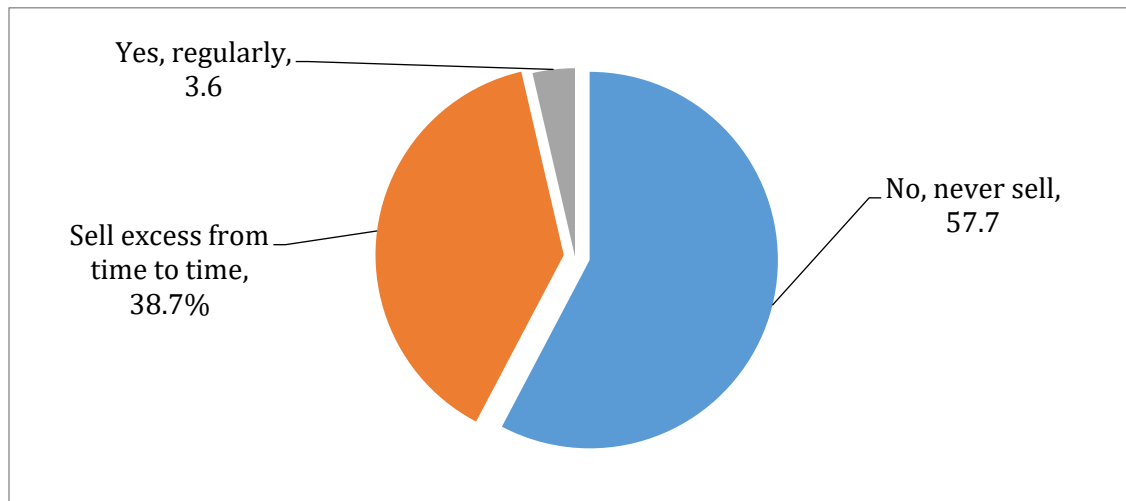
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Figure 9.3 above shows that 57.7 percent of households engaged in subsistence agriculture in Rwanda did not sell any production. As expected in a country with predominant agriculture, production was directly used for the household. Only 3.6 percent of households were selling their production on a regular basis while 38.7 percent sell excess of their production from time to time.

Among the households which participated in subsistence agriculture, 547,654corresponding to 30 percent of those households, employed regularly or sometimes agriculture laborers. The results show that 92.0 percent of households which engaged workers in subsistence agriculture, employed between 1 to 3 persons excluding other members of the household.

Figure 9. 4: Participation of paid workers in exclusive subsistence agriculture

Households

70%

30%

503,923

29,355

14,376

- ■ In subsistance agriculture but not engaging paid workers
- ■ In subsistance agriculture engaging 1 - 3 employees
- ■ In subsistance agriculture engaging 4 - 5 employees
- ■ Insubsistance agriculture engaging more than 5
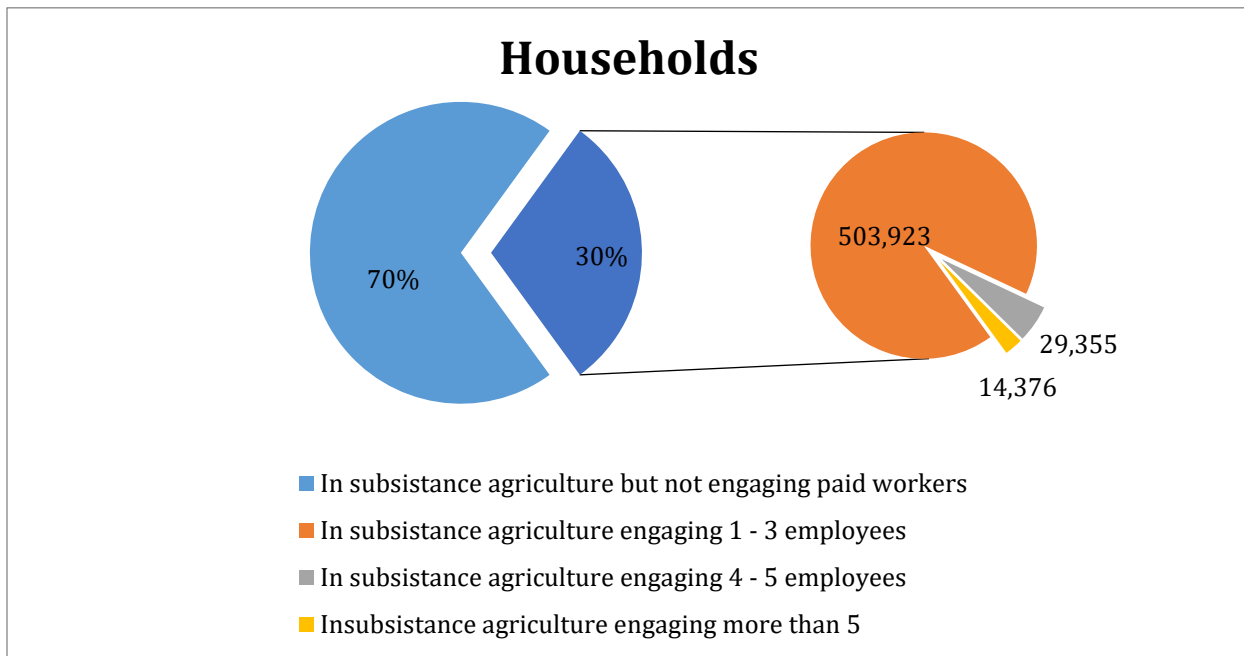
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

9.4 Share of agricultural workers in total work force

The present sub section shed light on the proportion of agricultural workers in the total work force defined as the sum of total employment and the number of persons not employed but engaged in subsistence agriculture. According to the results presented in figure below, 71.2 percent of the working age population was part of workforce in 2023. The share of agriculture workers in the total workforce was 69.1 percent, which means that the remaining proportion (30.9 percent) was the share of non-agriculture employment in the workforce. Workers mainly engaged in subsistence agriculture represented a big share (51.0 percent) of agricultural workers.

Figure 9. 5: Workforce framework

Working age population: 8,071,962		
Workforce (Sum of employment and subsistence agriculture): **5,747,184** *71.2%*		Not employed nor in subsistence agriculture: **2,324,778** *28.8 %*
Employment in non-agriculture sector: 1,778,180 *30.9%*	Workers mainly engaged in agriculture. (market + subsistence agriculture): 3,508,445 *69.1 %*	
	Market oriented agriculture: **1,720,077** *49.0%*	Mainly in subsistence agriculture **1,788,368** *51.0%*

Chapter 10: Own use production works out of agriculture.

The international standards on statistics of work, employment and labour underutilization define *own-use producers* as all persons of working age who were engaged in own-use production work for at least one hour during the reference period. Own-use production comprises any activity to produce goods or provide services for own final use, interpreted to mean production where the intended destination of the output as self-declared is *mainly* for final use by the producer in the form of capital formation, or final consumption by household members, or by family members living in other households. In the case of agricultural, fishing, hunting or gathering goods intended mainly for own consumption, a part or surplus may nevertheless be sold or bartered.

Production of goods is within the SNA production boundary and covers: (i) producing or processing for storage agricultural, fishing, hunting and gathering products; (ii) collecting or processing for storage mining and forestry products, including firewood and other fuels; (iii) fetching water from natural and other sources; (iv) manufacturing household goods (such as furniture, textiles, clothing, footwear, pottery or other durables, including boats and canoes); (v) building, or effecting major repairs to, one's own dwelling, farm buildings, etc.

Provision of services is outside the SNA however it is included in SNA general production boundary and covers (i) household activities of accounting and management, purchasing or transporting goods; (ii) preparing or serving meals, household waste disposal and recycling; (iii) cleaning, decorating and maintaining one's own dwelling or premises, durables and other goods, and gardening; (iv) childcare and instruction, transporting and caring for elderly, dependent or other household members and domestic animals or pets, etc.

Information about participation and time-spent in own-use production work is essential to inform a wide range of policies including those targeting employment creation in rural areas, poverty reduction, food security, and provision of a wide range of services, including water supply, child and elderly care, domestic services, etc. It is also essential for addressing gender issues in the world of work and for better understanding participation and access to labour markets, and related issues such as work-life balance.

The LFS questionnaire contains 7 questions on time spent on different types of own-use production work excluding production or processing of food stuff. These questions were asked to all people excluding domestic workers who are paid to undertake that kind of work. The results presented in Table 10.1 indicate that 6,381,943 persons aged 16 years old and above, representing 80.5percent of the people who were eligible to respond to questions related to own use production work (7,932,986 persons), were engaged in at least one type of own-use production work during the reference period. Among them 2,582,471 representing 40.5 percent were male and 3,799,472 (59.5 percent) were females. They devoted on average 19.5 hours per week on these activities. The type of activity in which the highest numbers of persons were engaged was "doing household chores including shopping, preparing meals", covering 63.4 percent of the working age population and involving on average 10.1 hours per week, followed by "fetching water for the household, including travel time" (45.0 percent of working age population) and on average 4.3 hours per week.

Table 10. 1: Average time spend per week on own-use production

	Number of persons	(%)	Average number of hours
Population aged 16 years old and above engaged in some type of own-use production work	6,381,943	**80.5**	**19.5**
Collecting firewood for the household including travel time	2,969,547	37.4	4.8
Fetching water for the household, including travel time	3,572,667	45.0	4.3
Searching for fodder or grazing for the household's animals	2,797,385	35.3	9.0
Constructing your dwelling, making major repairs on it, farm buildings, private roads, or wells	81,471	1.0	7.4
Manufacturing household goods for own or family use	214,600	2.7	7.3
Doing household chores including shopping, preparing meals	5,030,749	63.4	10.3
Looking after children and elderly	2,440,888	30.8	7.4
Own-use production work among the labour force			
Labour force	3,816,049	48.1	18.8
Employed	**3,073,520**	**38.8**	**18.0**
Unemployed	742,528	9.4	22.4

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

Table 10.1 also shows that 3,816,049 persons combined labour force activity with own-use production work above mentioned. The average time spent per week on own-use production work among people in labour force was 18.8 hours. As expected, the average number of hours of own-use production work was lower among the employed and relatively higher among the unemployed.

Figure 10.1 below illustrates the proportion of working age population who were engaged in own use production activities by sex. Females were more engaged in own-use production (88.6 percent) than males (68.3percent). Except for repairing household and searching folder of own dwelling, the proportion of females in working age engaged in other type of own use production activities was higher than the proportion of males in working age.

Figure 10. 1: Proportion of working age population who are own use producers by sex
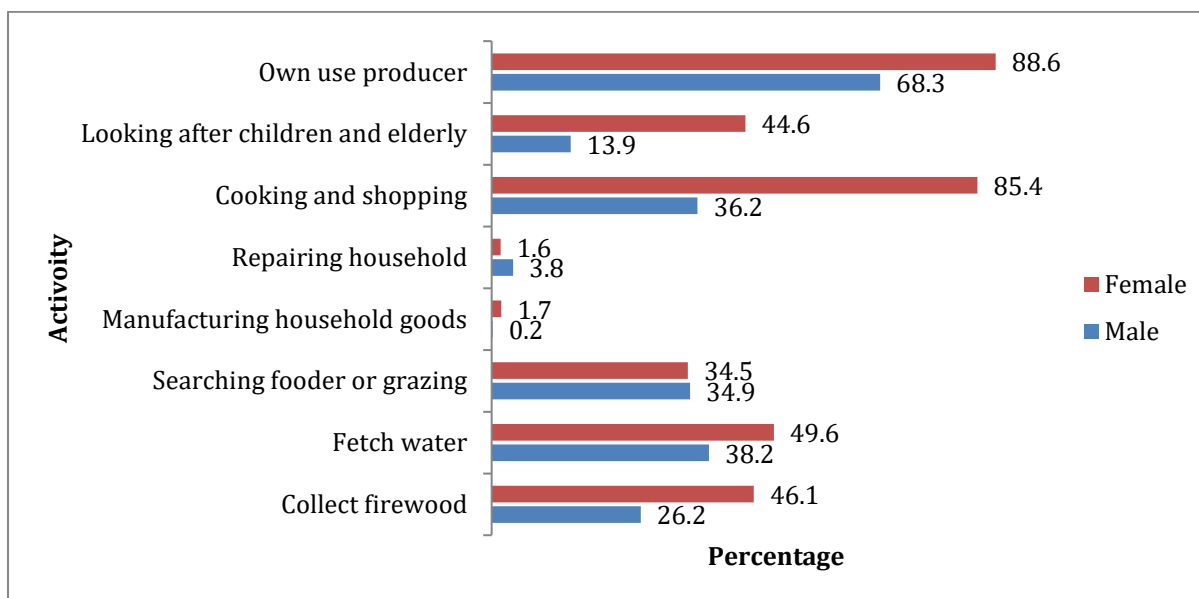
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Figure 10.2 presents the average number of times spent per week in own use production of different services by sex. The time spent by females (24.0 hours) was almost twice as high as the time spent by males (13.6 hours) in those activities. The activities in which females were spending more time were cooking and shopping (12.0 hours) followed by looking after children or elderly (8.2 hours) while males were spending more time in searching folder or grazing (10.1 hours) and repairing household (7.7 hours)..

Figure 10. 2: Average number of hours spent in own use production activities by type and sex
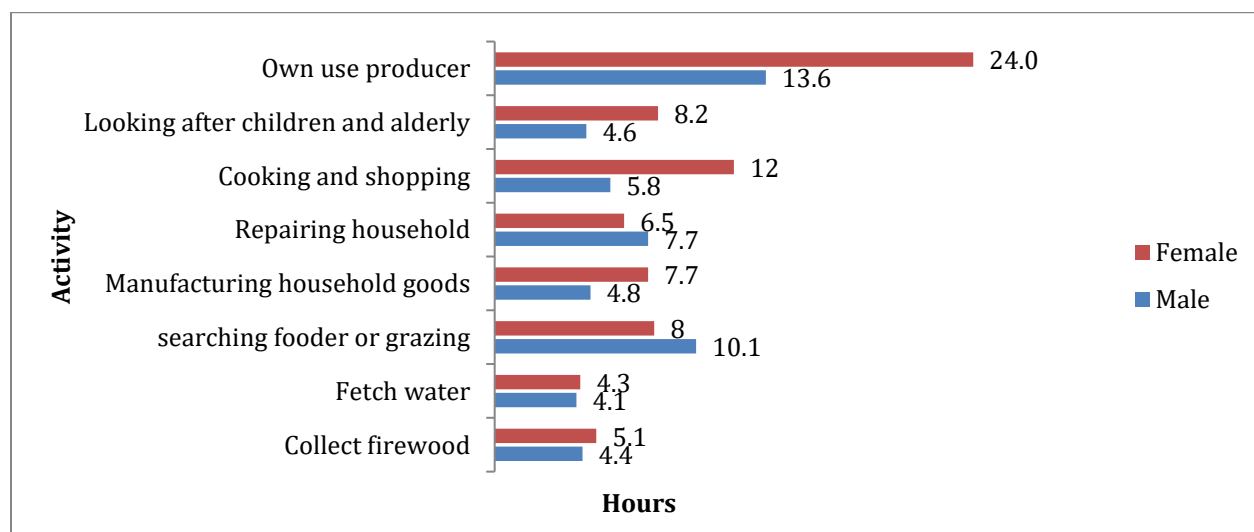
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Considering the area of residence, own use services activity was predominant in rural area (84.0 percent) as compared to urban areas (67.9 percent). More than half of the working age population was engaged in cooking and shopping, and in fetching water in rural areas. In urban areas, the activities that involve an

important proportion of the working age population were cooking and shopping, looking after children and fetching water.

Figure 10. 3: Proportion of working age population engaged in Own use production of services by residential area and activity
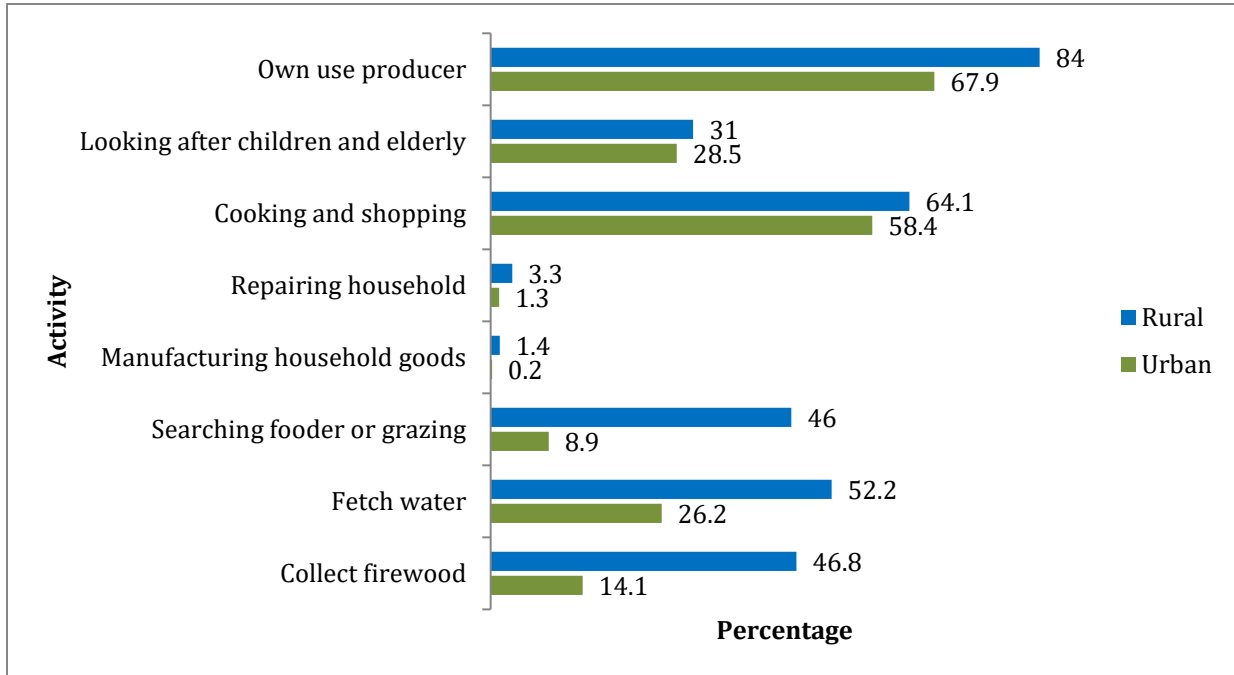
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Chapter 11: Migrant workers

In the Labour force survey, a migrant was defined to be any current resident, member of a private household in Rwanda of working age who has changed his or her district or country of usual residence in the last five years. A migrant worker was defined to be a migrant of working age who was engaged in an employment for pay or profit in the current area of residence.   According to the results of the LFS 2022 presented in Figure 11.1 below, the stock of the migrant population at the time of the survey was 1,413,692 persons, representing 10.6 percent of the total population. Among them, an estimated 654,731 were migrant workers (16 years and above).

Figure 11. 1: Size of the migrant and migrant workers populations

Total
population
13,362,858

Migrants
1,413,692

Migrant 16
yrs+
1,057,416

Migrant
workers
654,731
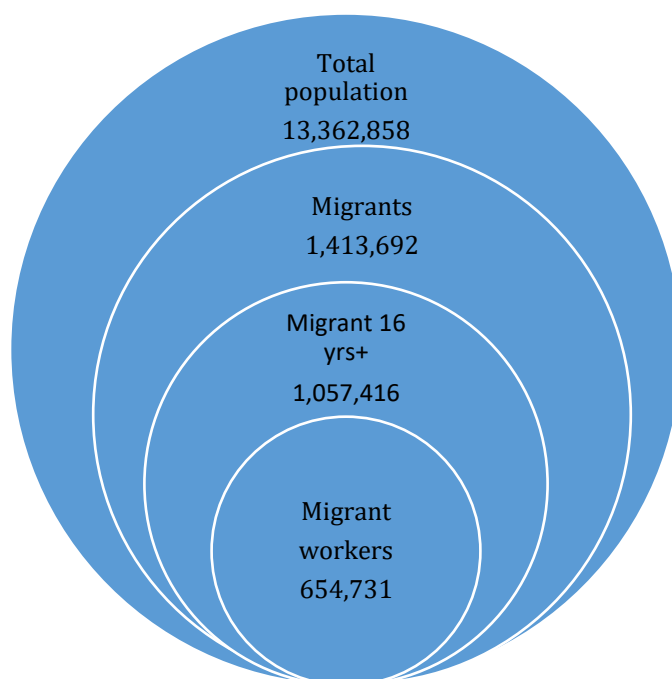
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

The migrant population includes the internal migrants and the international migrants. Similarly, the migrant workers include the internal migrant workers and the international migrant workers. The internal migrant and internal migrant workers were those who have moved from one district of Rwanda to another during the last five years, and the international migrant and international migrant workers were those who have moved from outside the country to Rwanda in the last five years and were classified as employed. The majority of the migrants were internal migrants (1,326,404) and the international migrants were 87,287. The share of

international migrants in total population of Rwanda (0.7 percent) remains significantly lower than the world average (4.9 percent).[14]

The proportion of females among internal migrants of working age (16 years old and over), is higher (53.3 percent) than the corresponding proportion among male (46.7 percent); while it is higher for male (61.7 percent) than female (38.3 percent) among international migrants.

Table 11.1 shows the distribution of internal migrant by considering internal migrants from the province prior residence to the province of current residence, and Table 11.2 shows the distribution of international migrants from the country of prior residence to the province of current residence.

Table 11. 1: Province of last move and province of current residence of internal migrants

		Province of current residence					
		Kigali	South	West	North	East	Total
Province of last move	Kigali	139,978	77,952	26,772	33,873	113,675	392,249
	South	125,037	92,630	13,944	11,673	48,328	291,612
	West	82,329	38,063	63,194	17,071	52,088	252,745
	North	38,865	2,510	7,089	41,075	47,980	137,520
	East	80,738	34,942	16,223	23,934	96,441	252,278
	Total	466,947	246,097	127,222	127,626	358,513	1,326,404

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

The diagonal elements highlighted in the Table 11.1 show that around one-third of the internal migrants moved from one district to another district in the same province, these can be considered as non-migrant when migration is studied according to the province. The total numbers in the diagonals of the table is 433,318 corresponding to 32.7 percent internal migrants. The majority or about two-third of the internal migrants moved from one province to another. From the off-diagonal elements of Table 11.1, one can observe that the migration corridor with the largest movement was from the South Province to the City of Kigali (125,037 migrants), followed by the movement from the City of Kigali to the East Province (113,675) and the movement from the West Province (82,329) to the City of Kigali.

It is worth important to note that the City of Kigali was a major destination as well as a major Provinces of origin of migrant workers. Around 35.2 percent of the internal migrants currently reside in the City of Kigali. Similarly, around a quarter (29.6 percent) of the working age internal migrants moved from a district of the City of Kigali to another district inside or outside the City of Kigali in the last five years. The Eastern Province was the second pole of attraction as a destination Province while the Southern Province was the second highest migrant-sending Province after the City of Kigali.

Table 11. 2: Country of last move and current residence of international migrants of working age

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[14] International Labour Office, *ILO global estimates on migrant workers. Results and methodology. Special focus on migrant domestic workers.* Labour Migration Branch, Conditions of Work and Equality Department and Department of Statistics, 2021.

		Province of current residence					
		Kigali	South	West	North	East	Total
Country of last move	Burundi	4,772	642	113		2,719	8,247
	Congo-Kinshasa	2,173	730	4,541	2,523	1,470	11,438
	Kenya	2,614	380	494	185		3,672
	Tanzania	682			103	1,380	2,165
	Uganda	2,819	2,634	2,786	9,395	10,064	27,699
	Rest of Africa	3,893	1,093	17	24		5,026
	Other countries	2,865		156			3,021
	Total	19,818	5,479	8,107	12,229	15,634	61,267

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023 In terms of international migration, most migrants of working age were coming from Uganda and Congo Kinshasa (45.2 and 18.7 percent, respectively), followed by Burundi 13.5 percent).The City of Kigali was the destination of the highest number of international migrants of working age (32.3 percent) followed by East Province(25.5 percent) and North Province (20.0percent).

Figure 11.2 shows the summary indicators of the labour force status of internal and international migrants according to the results of the RLFS 2023.

Figure 11. 2: Labour force status of internal and international migrants.
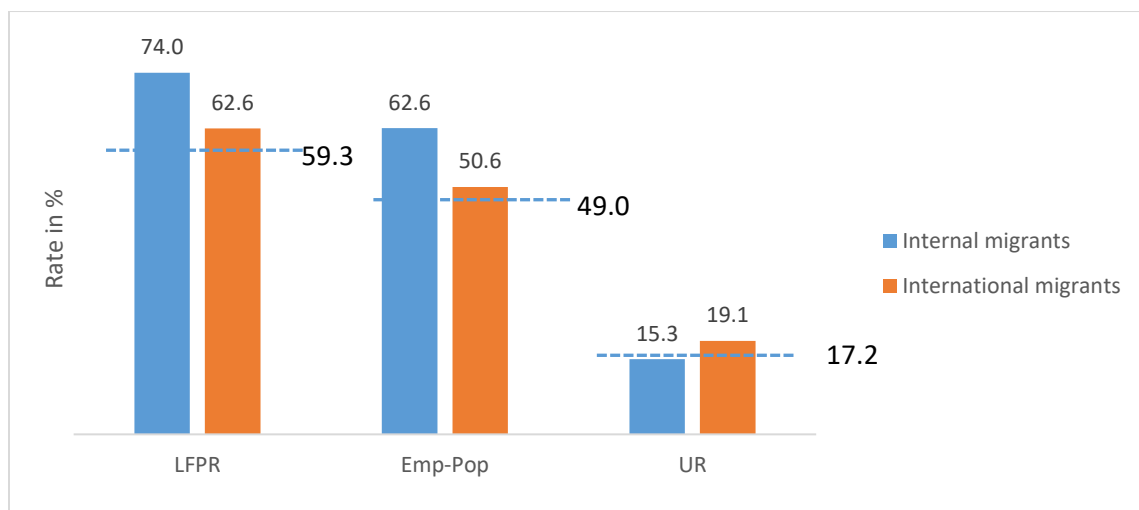
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Notes: LFPR = Labour force participation rate; Emp-Pop = Employment-to-population ratio; and UR = Unemployment rate. Dotted lines correspond to corresponding national rates or ratio.

It can be observed that the share of the working age migrants engaged in the labour force is significantly higher than the general population as a whole. The labour force participation rate of internal migrants was 74.0 percent and that of the international migrants was 62,6 percent, both significantly higher than the overall

labour force participation rate (59.3 percent). Similarly, the employment-to-population ratio of internal migrants (62.6 percent) and that of the international migrants (50.6 percent) were higher than the overall employment-to-population ratio of the country (49.0 percent). On contrary, the unemployment rate of internal migrant workers (15.3 percent) was below the national unemployment rate (17.2 percent) while the unemployment rate for international migrant workers (19.1 percent) was higher than the national unemployment rate.

These results are in line with expectation as migration is often motivated by economic and labour market factors. According to the results of the 2023 LFS, the main reason to move from the previous place of residence of the recent working age migrants was the movement of parents (26.8 percent), looking for work (19.2 percent), Coming back in country/building/Renting (14.3 percent), living with relatives (13.1 percent) followed by Marriage(9.5 percent) and start a a new job (8.5 percent).

It is also instructive to note that the unemployment rate was lowest (about 3.3 to 9.9 percent) among migrant who moved from their previous place of residence because of employment reason such as Found job, job transfer or looking for employment; (about 3.4 percent to 35.1 percent) among those who moved for personal reasons family or other reasons such as divorce, marriage, attending school. Correspondingly, the employment-to-population ratio was highest among migrants who moved for labour market reasons than those who moved for personal, family or other reasons.

More detailed analysis of the relationship between labour force status and reason of migration of migrant workers may be carried out based on the data presented in Tables 50-52 of the Statistical Annex C. One particular result that should be mentioned here is the very high employment-to-population ratio (93.2 percent) and the relatively low unemployment rate (3.3 percent) of migrants whose main reason of migration was found a job. This result means that many of these migrants keep their employment following their move, although not all. The same can be observed among those who moved due to job Transfer.

The structure of employment among migrant workers in terms of branch of economic activity is shown in figure 11.3 for both internal and international migrants. The branch of economic activities with relatively higher number of internal migrants are found in Non market services (Public administration; Community, social and other services and activities) (31.2 percent) closely followed by Market services (Trade; Transportation; Accommodation and food; and Business and administrative services) (31.1 percent) and by agriculture with 21.4 percent. The results show also that the percentage of person engaged in manufacturing among the internal migrant workers was (4.9 percent) was lower as compared to the national average (5.5 percent).

The shares of internal migrants engaged in manufacturing (4.9 percent) and in construction (10.8 percent) are about the same as the corresponding national average (5.5 and 9.7 percent respectively), suggesting that migrant workers in these two branches of economic activity were engaged in the same activity prior and after migration.

Figure 11. 3: Employed migrant workers by top four branch of economic activity.
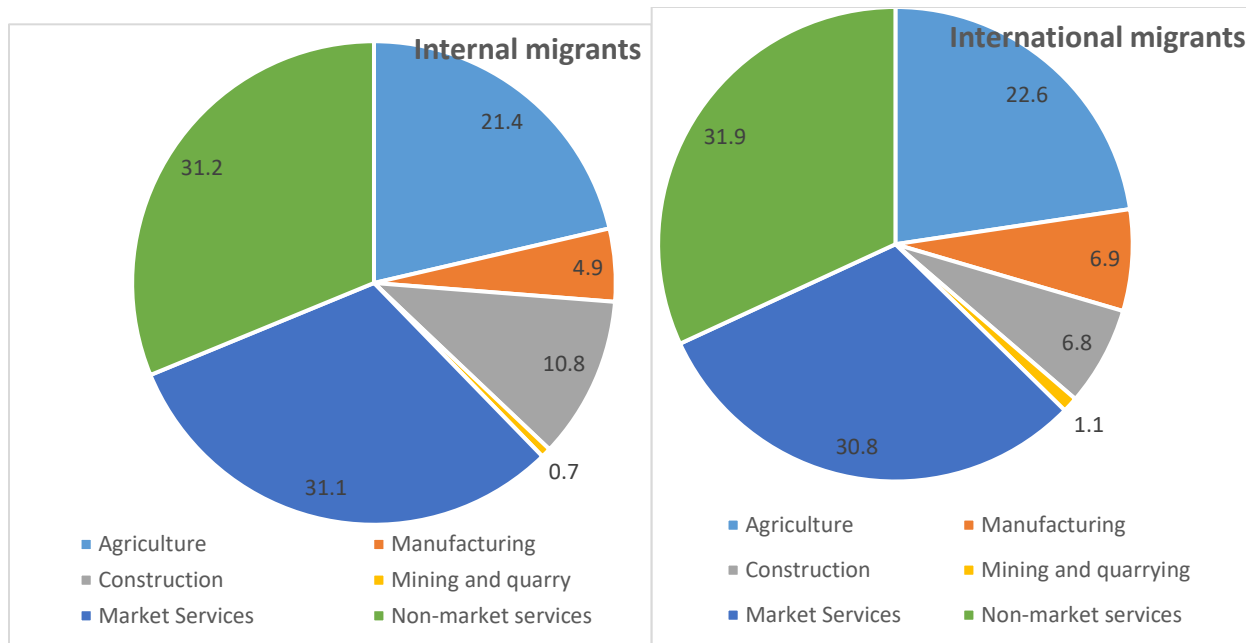
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023

Turning to international migration, the results show that the international migrant workers were mostly engaged in non- market services, Market services and agriculture (31.9 percent and 30.8 percent and 22.6 percent respectively), in Manufacturing (6.9 percent), in construction(6.8 percent) and in mining and quarrying (1.1 percent). In the aggregated branches of economic activity presented in figure 11.3 the share of international migrant workers was lower than the corresponding national share of employment in 'Agriculture, forestry and fishing', but was higher in manufacturing sector (5.5 percent).

According to the 2023 LFS, the proportion of internal migrants of working age, engaged in subsistence foodstuff production, not counted in labour force was 6.7 percent. The proportion among the international migrants was 11.6 percent. Both figures are considerably lower than the corresponding national percentage of 37.9 percent, indicating that migrants are relatively less engaged in subsistence foodstuff activity than the working age population at large. One implication of these results may be attributed to the fact that the higher labour force participation rate of migrants noted earlier in this chapter would be dissipated if the participation rate would be calculated on the basis of employment work as well as subsistence foodstuff production work.

Chapter 12: Workers with disabilities

The National Institute of Statistics of Rwanda adopted the recommendation of the UN formed Washington Group on Disability Statistics, the Rwanda labour force survey has been using the recommended abridged questionnaire for identifying people with disabilities and their disaggregation by labour force status and other demographic and economic characteristics. Data collection on disabilities and on workers with disabilities aims to contribute to the UN Sustainable Development Goals (SDGs), a universal and ambitious plan of actions for ending poverty and hunger by 2030, leaving no one behind including people with disabilities. Such disaggregated statistics are critical for monitoring progress towards the achievement of the SDGs.

Figure 12.1 compares the main labour market indicators for persons aged 16 years and above with disabilities and the corresponding indicator for the working age population at large. The results showed that 20.4 percent of the working age persons with disabilities were labour force participants. The corresponding rate for the working age population at large among persons without disability was 59.3 percent. About 16.5 percent of the working age persons with disabilities are engaged in work for pay or profit. The corresponding rate for the working age population at large was 49.0 percent among persons without disability.

Figure 12. 1: Main labour force indicators: Working age persons with disabilities versus working age population at large.
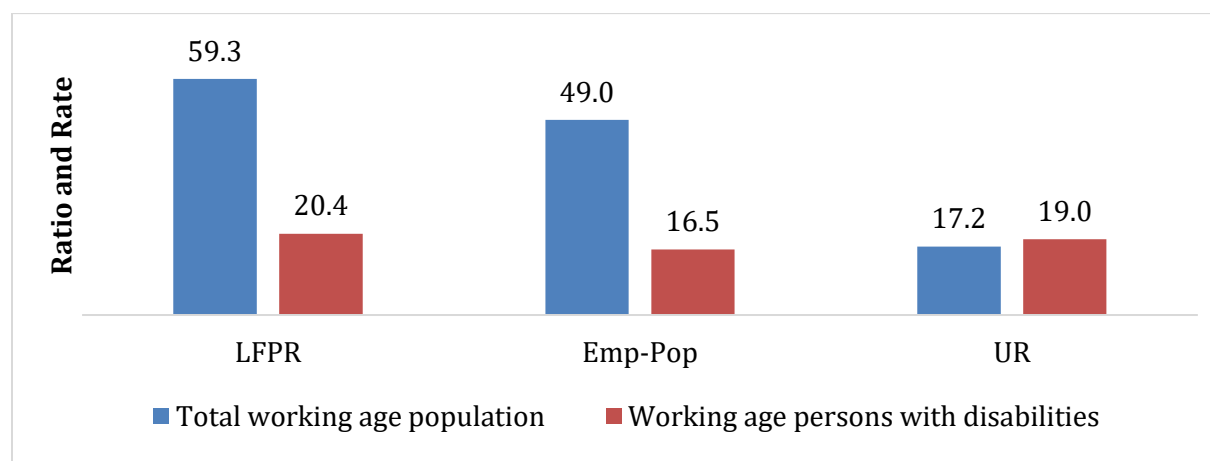
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey, 2023
Note: LFPR = labour force participation rate; Emp-Pop = Employment-to-population ratio; and UR = Unemployment rate.

The unemployment rate among persons with disabilities (19.0 percent) was higher than the one among the person without any disability (17.2 percent). On the other hand, the proportion of person outside the labour force was far higher among the persons with disability than among those without disability (79.6 percent and 39.7 percent respectively).

The analysis of employment status of the working age population with disabilities by type of disability (presented in Table 5 of the Statistical Annex) showed that the employment-to-population ratio is highest among persons with hearing impairment (24.4 percent) and lowest among persons with difficulty in washing all over and dressing (3.5 percent). Unemployment rate is higher among persons with difficulty in remembering or concentrating (38.5 percent) and labour force participation rate is lowest among persons with difficulty in washing all over and dressing (5.6 percent).

Annex A. Main concept and definitions.

The main concepts and definitions used in the survey are in line with the international standards on statistics of work, employment, and labour underutilization adopted by the 19th International Conference of Labour Statisticians (Geneva, 2013).[15] They are briefly described below.

- **Work**

The starting point of the international standards on statistics of work, employment and labour underutilization is the concept of work defined as:

- "Any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for own use" in line with the General production boundary defined in the System of National Accounts 2008.
- Work is defined "irrespective of its formal or informal character or the legality of the activity."
- It excludes "activities not involving production of goods or services (begging, stealing), self-care (personal grooming, hygiene) and activities that cannot be performed by another person on one's own behalf (sleeping, learning, own recreation)."

The international standards recognize different forms of work: Own-use production work (production of goods and services for own final use); employment (work performed for others in exchange for pay or profit); unpaid trainee work (work performed for others without pay to acquire workplace experience or skills); volunteer work (non-compulsory work performed for others without pay); and other forms of work (not defined at this time by the international standards). The RLFS focuses on the measurement of employment and labour underutilization and separately on own-use production work.

- **Working age population**

The working age population in Rwanda is defined as all persons 16 years old and over. For international reporting, the international standards recommend the lowest age bracket starting with 15 years. To enable comparison with the past and to conform to the international standards, the LFS questionnaire collected data on labour force and labour underutilization characteristics of the population 14 years and over. Accordingly, the main indicators presented in this report are based on the 16 years old limit.

- **Employment**

Employment is a particular form of work. Persons in employment are defined as all those above a specified age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit. It excludes persons engaged wholly in activities to produce goods or services for own final use such as producing agricultural, fishing and gathering products for own-consumption or cleaning, decorating, gardening and maintaining one's own dwelling or premises, durables and other goods. Persons in employment comprise: (a) employed persons "at work," i.e., who worked in a job for at least one hour; and

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[15]ILO, *Resolution concerning statistics of work, employment and labour underutilization*, 19th International Conference of Labour Statisticians, Geneva, October 2013.

(b) employed persons "not at work" due to temporary absence from a job, or to working-time arrangements (such as shift work, flexi-time and compensatory leave for overtime).

This definition of employment differs from the definition used in past surveys and censuses that was based on the previous international standards.[16] The main difference concerns the statistical treatment of subsistence foodstuff producers. According to these earlier standards, "persons engaged in the production of goods and services for own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the households." According to the new standards, however, only those are included in employment if the production was "intended mainly for sale or barter, even if part of the output is consumed by the household or family."

- **Labour underutilization**

Labour underutilization refers to mismatches between labour supply and demand. It reflects the unmet need for employment among the population. Measures of labour underutilization include, but may not be restricted to unemployment; time-related underemployment; and potential labour force.

- **Unemployment**

Persons in unemployment are defined as all those above a specified age who (a) were not in employment; (b) carried out activities to seek employment during a specified recent period; and (c) were currently available to take up employment given a job opportunity. The definition of unemployment provides an exception in the case of *future starters*. They are considered as unemployed even if they did not carry out activities to seek employment during the specified recent period, if satisfy the availability condition.

Although this definition of unemployment is essentially the same as the definition used in past surveys and censuses, the resulting statistics differ considerably from each other. This is due to the impact of the change in the definition of employment. Persons who are not classified as employed under the new definition are now subject to classification as unemployed if they satisfy the other two criteria of unemployment.

- **Time-related underemployment**

Persons in time-related underemployment are defined as all persons in employment who, during a specified reference period, (a) wanted to work additional hours, (b) whose working time in all jobs was less than a specified hours threshold, and (c) who were available to work additional hours given an opportunity for more work. The hour-threshold was set at 35 hours of work during the reference week at all jobs. It corresponds to the median value of the distribution of hours actually worked at all jobs during the reference week

- **Potential labour force**

Potential labour force is defined as all persons above a specified age who, during the short reference period, were neither in employment nor in unemployment but who were considered as either (a) *unavailable*

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[16] ILO, *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the 13th International Conference of Labour Statisticians, Geneva, 1982.

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 relationship among the various concepts is shown in the figure below.

A1. Labour force and labour underutilization framework
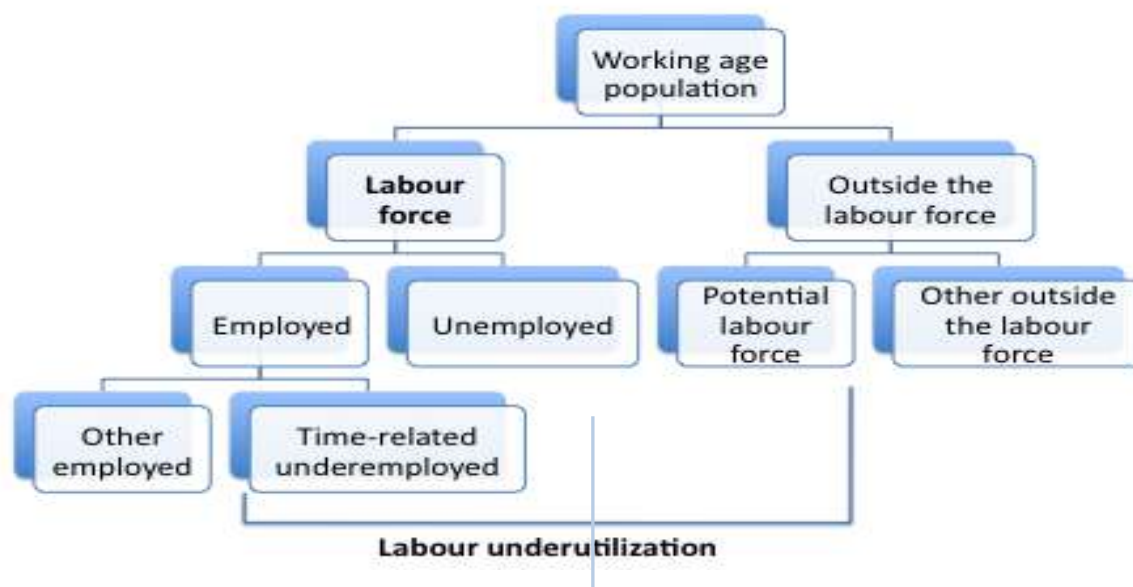
Note: The employed excludes workers engaged in the production of goods or services for own consumption or in other forms of work not regarded as employment.

- **Discouraged jobseekers**

Among the potential labour force, one particular group requires separate attention. These are the discouraged jobseekers. Discouraged jobseekers are persons outside the labour force who wanted employment and were currently available but did not seek employment during the short reference period of measurement for labour market-related reasons as listed below:

▪ past failure to find a suitable job
▪ lack of experience
▪ lack of qualifications or jobs matching the person's skills
▪ lack of jobs in the area
▪ considered too young or too old by prospective employers

The discouraged jobseekers are a subset of the potential labour force, or more particularly, a subset of the "available potential jobseekers". During the survey reference period, they wanted and were available for employment, but were not seeking employment for labour market-related reasons as opposed to personal, family or other non-labour related reasons. They are considered as potential jobseekers because in principle they have been seeking employment in the past but stopped looking for employment after failure or repeated

failures to obtain suitable employment due to various reasons related to the unsuitability of their age, qualification, work experience, and similar labour-market reasons. If these obstacles could be overcome, they would presumably be again jobseekers.

- **Others outside the labour force**

The potential labour force is one group of persons outside the labour force. In general, persons outside the labour force include persons of working age population who were neither in employment nor in unemployment during the reference period of measurement. Persons outside the labour force may be classified in terms of their current main activity status as well as the main reason for not being engaged in the labour force and their potential future labour force engagement. The international standards recommend the classification of persons outside the labour force by main activity status, as self-declared, with the following categories:

- own-use production of goods or own-use provision of services;
- unpaid-trainee work;
- volunteer work;
- studies;
- self-care (due to illness or disability);
- leisure activities (social, cultural, recreational).

The main status of the individual is to be determined by the person himself or herself, or in practice by the survey respondent if the survey allows for proxy-response.

Additional classifications of the population outside of the labour force (or more generally, the population not in employment) that may be considered in survey design are past work employment and characteristics of last employment for those who had past employment experience, and main current source of livelihood.

- **Willing non-jobseekers**

One particular group of persons outside the labour force who are not in the potential labour but have some attachment to the labour force are the so-called "willing non-jobseekers". Willing non-jobseekers are defined as persons who wanted employment but were not seeking employment and were not currently available for employment during the corresponding specified reference periods of measurement.

The willing non-jobseekers are a subset of the persons outside the labour force, and more particularly, a subset of those persons outside the labour force who are not in the potential labour force. The willing non-jobseekers were not seeking employment, nor were available for employment during the appropriate reference periods and as a result are not classified as unemployed or as potential labour force. However, they wanted employment during the appropriate reference period, and in this sense they are considered as a separate category among the population outside the labour force.

- **Own-use production work**

Persons in own-use production work are defined as all those of working age who, during a short reference period, performed any activity to produce goods or provide services for own final use for a cumulative total of

at least one hour. "For own final use" is interpreted as production where the intended destination of the output is *mainly* for final use (in the form of capital formation, or final consumption by household members, or by family members living in other households). In the case of agricultural, fishing, hunting or gathering goods intended mainly for own consumption, a part or surplus may nevertheless be sold or bartered.

Subsistence foodstuff producers constitute an important subgroup of persons in own-use production work. They are defined as all those who performed any of the specified activities to produce foodstuff from agriculture, fishing, hunting or gathering that contribute to the livelihood of the household or family. Excluded are persons who engaged in such production as recreational or leisure activities.

Own-use producers and in particular persons engaged in own-use production of goods such as subsistence foodstuff producers (and for that also matter unpaid trainee workers or volunteer workers) may be engaged, in the same reference period, in other activities, including employment or search for employment. On the basis of their other activity, therefore, certain own-use producers may also be in the labour force and classified as employed, unemployed or other labour underutilization category.

The following table lists the terminology and definitions of the main labour force and labour underutilization indicators used in the survey. The definitions of other concepts used in the survey are described as part of the analysis of the data in the body of the report.

A2. Main labour force and labour underutilization indicators

Concept	Definition
Working age population (Pop16+)	E+U+N
Labour force (LF)	LF = E+U
Potential labour force	P
Extended labour force (XLF)	XLF = E+U+P
Employment	E
Unemployment	U
Time-related underemployment	T
Labour force participation rate	LF/Pop16+
Employment-population ratio	E/Pop16+
Unemployment rate (LU1)	U/LF
Combined rate of unemployment and time-related underemployment (LU2)	(U+T)/LF
Combined rate of unemployment and potential labour force (LU3)	(U+P)/XLF
Composite measure of labour underutilization (LU4)	(U+T+P)/XLF

Annex B. Survey methodology and data quality.

The ultimate goal of the labour force survey (LFS) programme is to collect data on the employment and labour underutilization characteristics of the population on a continuous basis, providing quarterly estimates of the main labour force aggregates with sufficient precision at the district level. Given this ambitious measurement objective, it has been decided to adopt a gradual approach starting with an annual survey with the sample spread over four points in time. The sample is designed such that the survey provides for:

o Quarterly national estimates of employment and labour underutilization with specified precision, and
o Annual district-level estimates by pooling together the data of each quarter of the calendar year.

The timing of the quarter rounds is based on the seasonal variations of labour force activities in Rwanda, in particular, the high and low seasons of agriculture activities, in February May , August, and November respectively. This approach is in line with the international standards that recommend a national data collection strategy that allows reporting "on a quarterly basis, main aggregates of employment, labour force, labour underutilization, including unemployment, in order to monitor short-term trends and seasonal variations."

An annual survey with the sample spread over four points in time has a number of advantages in comparison with an approach that starts with an annual survey conducted at one point in time during the year. The querterly approach allows NISR to put in place a survey management system that oversees survey operations and data processing tasks that cover the entire year. This would make it easier to transit at a later stage into a more frequent reporting system. It will also lessen the number of transitions and inevitable disruptions at each transition toward the final objective of reaching a continuous survey with quarterly reporting.

A qurterly approach also provides the possibility of incorporating a rotation scheme into the sample design. A rotation scheme allows to produce more accurate measurement of employment and labour underutilization trends as well as new statistics on labour force dynamics, in particular, flow data on job gains (number of persons obtaining employment during a given period) and corresponding data on job losses (number of persons losing employment during the period).

1. Sample design.

The sample design of the LFS is a two-stage stratified design according to which at the first stage of sampling, a stratified sample of enumeration areas from the latest population census is drawn with probabilities proportional to size measured in terms of the census number of households or census number of household members, and at the second stage of sampling, a fixed number of sample of households is selected with equal probability within each sample enumeration areas. Finally, all household members in the sample households are selected for survey interviewing.

The scope of the survey is all persons living in private households. It excludes the institutional population permanently residing in houses such as hostels, health resorts; correctional establishments etc., as well as persons living in seasonal dwellings not covered in the survey. It also excludes workers living at their work-sites. A household is a group of persons who live together and make common provision for food and other

essentials for living. The people in the group may be related or unrelated or a combination of both. A household may consist of only one person or several persons.

- **Sample size.**

Sample size determination in most household-based surveys with multi-stage stratified design is based on the principle of first calculating the required sample size for a single «domain» assuming a simple random sample design and no non-response. A domain is a well-defined population group for which estimates with pre-determined accuracy are sought. The results are then extended to allow for non-response and deviation from simple random sampling.

The application of this principle with the choice of parameters described below leads to a sample size requirement of 18,691 households for measuring annual unemployment with margin of errors of +/- 0.3% at 95% confidence level. In these calculations, the main indicator is the ratio of unemployment to the working age population. The design effect (deff) is set at 3, within the range of values (3 to 4) generally used for labour force surveys. The margin of errors (ME = 0.0026) is twice the standard error of the estimate.[17]Similar calculations for employment gave a sample size requirement of 18,792 households.

- **Sample rotation.**

The main purpose of sample rotation is to improve the precision of the trend estimates. It also allows obtaining data on labour force flows by matching sample individuals common in different survey rounds. From 2023, NISR opted to use 2-2-2 rotation scheme. In case of regular Labour Force Survey carried out on quarterly bases, rotation scheme 2-2-2 is considered to be a good compromise between precision of the estimates, respondents burden and fieldwork organization.

If we consider the theoretical sample for quarter Q1 2023 (in blue) we see that: ¼ of the sample (last group of rotation 6A) participates to the survey for the first time; ¼ of the sample (rotation 5B) participates to the survey for the second time, having started(theoretically) its participation in the previous quarter as 5A); ¼ of the sample (rotation 2C) participates to the survey for the third time after a break of two quarters, having started participation 12 months earlier; and ¼ of the sample (first group of rotation 1D) participates to the survey for the fourth (and last) time, having started its participation in quarter 4, 2022.

If we consider the theoretical sample for the next quarter (quarter 2, 2023) we see that: ¼ of the sample (first group of rotation 7A) are households that will be interviewed for the first time. ¾ of the sample (6B, 3C, 2D) are households that have been already interviewed in previous quarters and need to be re-interviewed.

In the 2-2-2 rotation scheme there is a 50% sample overlap for 2 consecutive quarters and 50% overlap for the same quarters of two consecutive years.

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[17]For more detail description of the calculations reference is made to: "Labour Force Survey of Rwanda: Proposed survey programme and instruments, FarhadMehran, GIZ Consultant, National Institute of Statistics of Rwanda (NISR), 31 July 2015.

The theoretical Sample rotation 2-2-2

2023				2024			
Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
1D							
2C	2D						
	3C	3D					
		4C	4D				
5B			5C	5D			
6A	6B			6C	6D		
	7A	7B			7C	7D	
		8A	8B			8C	8D
			9A	9B			9C
				10A	10B		
					11A	11B	
						12A	12B
							13A

- **Sampling frame and sample allocation among districts**

A primary sampling unit is the villages of the Population and Housing Census 2022. There are altogether 14,689 villages in the sampling frame constructed by NISR based on the population and housing census.

To ensure adequate geographical distribution of the sample over the different parts of the population, the sample is allocated among the 30 districts of the country. Prior to sample selection, the sampling frame is sorted according to urban and rural areas within districts. This provides an implicit stratification of the population by urban and rural areas. The resulting distribution of the sample obtained based on the square-root allocation is shown in the following tables. The LFS annual sample design provides a total of 18,432 (including the overlap) households in 1152 PSUs, with 8,768 urban households in 548 PSUs and 9,664 rural households in 604 rural PSUs.

Annual sample allocation of enumeration areas and households by district

DISTRICT	Number of sample enumeration areas			Number of sample Households		
	Urban	Rural	Total	Urban	Rural	Total
Nyarugenge	67	39	106	1072	624	1696
Gasabo	86	77	163	1376	1232	2608
Kicukiro	96	6	102	1536	96	1632
Nyanza	13	22	35	208	352	560
Gisagara	14	13	27	224	208	432
Nyaruguru	2	22	24	32	352	384
Huye	12	17	29	192	272	464
Nyamagabe	9	11	20	144	176	320
Ruhango	12	13	25	192	208	400
Muhanga	6	12	18	96	192	288
Kamonyi	14	12	26	224	192	416
Karongi	5	14	19	80	224	304
Rutsiro	10	18	28	160	288	448
Rubavu	20	20	40	320	320	640
Nyabihu	4	15	19	64	240	304
Ngororero	11	16	27	176	256	432
Rusizi	8	22	30	128	352	480
Nyamasheke	15	16	31	240	256	496
Rulindo	10	22	32	160	352	512
Gakenke	10	24	34	160	384	544
Musanze	13	18	31	208	288	496
Burera	7	21	28	112	336	448
Gicumbi	8	23	31	128	368	496
Rwamagana	18	21	39	288	336	624
Nyagatare	16	21	37	256	336	592
Gatsibo	14	22	36	224	352	576
Kayonza	12	17	29	192	272	464
Kirehe	11	16	27	176	256	432
Ngoma	8	17	25	128	272	400
Bugesera	17	17	34	272	272	544
Total	**548**	**604**	**1,152**	**8,768**	**9,664**	**18,432**

Selection of sample enumeration areas

The next step in sample design was the selection of the 288 sample enumeration areas in each quarter. The sample was drawn in each district by probability proportional to size (pps) from the sampling frame based on the 2022 census.

- **Selection sample households**

The sample enumeration areas were freshly listed prior to selection of the final sample of households. According to the quarterly sample design, 16 sample households were selected from the list of households in each sample enumeration area by systematic sampling with equal probability. If the list contained 16 households or less all households in the sample enumeration area were drawn in the sample. If the list contained more than 16 households, a sample of fixed size (16 households) was drawn from the list by systematic random sampling. In order to keep almost the same number of households, the sample size in each quarter was about 4608 households, composed of four rotation groups.

The purpose of listing was to ensure that every household currently residing in the sample locality has a non-zero probability of selection. Listing permits to update the sampling frame and account population movements and new household formations that have occurred since the last preparation of the sampling frame. It aims at covering the newly constructed buildings with living quarters and taking into account demolished or vacant buildings, or transformed dwellings no longer used as living quarters, such as dwelling addresses turned to stores or workshops, or living quarters used as secondary housing units or for holidays.

The listing form was developed to capture the information categorized in four columns: (1) A three-digit serial number for listing buildings; (2) Another three-digit serial number for listing dwellings within buildings; (3) The name of the head of household residing in the dwelling; and (4) The street address of the household.

- **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 overall design weight is the inverse of the product of these two probabilities,

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

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

$$AdjustedWeight(hh_k) = d'_k = \frac{d_k}{r_k}$$

where the response rate r_k 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 population less than 16 years old and males and females 16 years old and over living on private households

The population projections were derived from the NISR census publication.[18] 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.[19] Accordingly, the final calibrated weights were obtained from the formula,

$$CalibratedWeight(hh_k) = w_k = d'_k \times (1 + \lambda x'_k)$$

where $d_k{}'$ is the adjusted weight for non-response, λ is a regression vector obtained from the calibration formula, and xk' is the vector of the count of male less than 16 years old, male 16 years old and over, female less than 16 years old and female 16 years old and over of interviewed households in the enumeration area k. All individuals in the same household are assigned the weight of the household in which they belong.

2. Questionnaire design

The questionnaire of the Rwanda Labour Force Survey 2023 in its present form contains questions organized into 9 sections and a cover page, dealing with following topics:

    A   Household roster

    B   Education

    C   Identification of employed, time-related underemployed, unemployed and potential labour force

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[18] National Institute of Statistics of Rwanda, *Fourth Population and Housing Census, Rwanda, 2012, Thematic Report Population Projections*, January 2014.

[19] Deville, J.C., and Sarndäl, C.E., "Calibration Estimators in Survey Sampling," *Journal of the American Statistical Association*, Vol. 87, 1992, pp. 376-382.

D   Characteristics of main job/activity

E   Characteristics of secondary job/activity

F   Past employment

G   Own-use production of goods and services

H   Subsistence foodstuff production

I   Housing and household assets

Not all questions are addressed to every household member. For children under 14 years of age, a minimum number of questions are asked. For older youngsters and adults 14 years of age and above, the number of questions depends on the situation and activities of the person during the reference period. The basic reference period is the last 7 days prior to the date of the interview. For certain questions, however, other reference periods are used. In each case, the relevant reference period is indicated in the text of the question.

The questionnaire was prepared both in Kinyarwanda and in English. An earlier version of the Kinyarwanda questionnaire was tested during the Pilot LFS February 2016. The field test was conducted in selected urban and rural areas with the aim of assessing the integrity of the instrument, such as understanding of question wordings, duration of interviews, coding and data processing. The experience gained was used to finalize the questionnaire.

Experience gained from the pilot survey led to certain modifications of the questionnaire. The revised questionnaire was again tested prior to the LFS August 2016 and February 2017 through the mock interviews conducted during the training of supervisors and interviewers. Slight modifications were further introduced following the experience gained during the fieldwork of previous LFS rounds.

A specimen of the final version of the questionnaire is presented in Annex C of the present report. It is accompanied with two documents: An extensive manual for interviewers, providing instructions on the role of interviewers, listing of household members, and procedures to be adopted for asking each question and recording the corresponding response;[20] and a set of diagrams and corresponding STATA syntax providing rules for combining the survey responses for constructing the main labour force indicators of the survey. These derived variables included:

- Labour force status (STATUS1):
- Employed, Unemployed and Outside the labour force.
- Time-related underemployed (TRU)
- Potential labour force (PLF)
- Discouraged jobseeker (discourage)
- Willing non-jobseeker (willing)
- Subsistence foodstuff producer (sub)
- Employment in informal and formal sector (IS and FS)
- Informal and formal employment (IE and FE)
- Monthly cash income from employment of employees at main job (cash)

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[20] NISR, *Rwanda Labour Force Survey, Interviewers Manual (RLFS, 2016)*, National Institute of Statistics of Rwanda, Kigali, December 2015. Revised for the RLFS, August 2016.

- Not in employment, nor in education or training youth 16-24 years old (NEET youth)
- Not in employment, nor in education or training young persons 16-30 years old (NEET young)
- Migrant worker (migrant)
- Worker with disability (disable)

3. Field operations

The main pre-survey activities conducted in preparation for the field operations included the establishment of the field organization, the recruitment and training of interviewers and the preparation of Tablets.

The following diagram shows the field organization of the survey. It consisted of 2 coordinators, coordinating the work of 10 supervisors, 24 team leaders and 96 interviewers. In many occasions the team leaders and conducted also survey interviews. So altogether the survey interviewing was carried out by a total of 120 interviewers.

Field organization, LFS
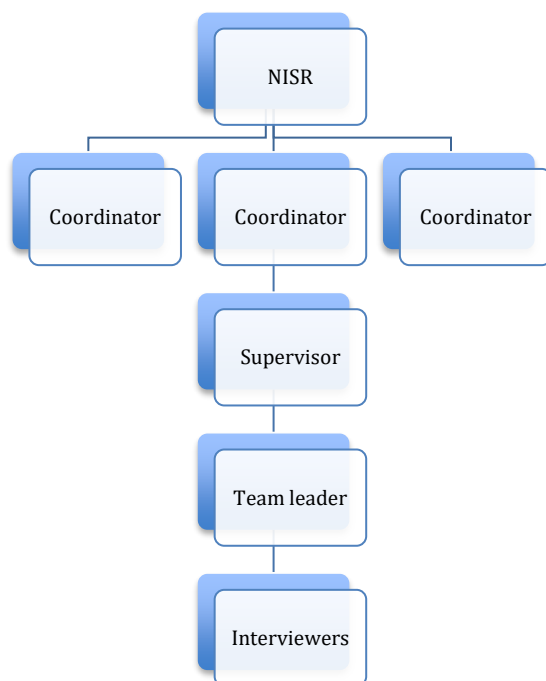
The training of the survey staff was carried out in two stages. There was first the training of the supervisors followed with the training of the interviewers. The coordinators conducted the training of the supervisors, and the combined pool of supervisors and coordinators conducted the training of the interviewers.

The field operations were conducted from February, May, August and November, each month from the beginning of the month up to the end of the month during the year 2023. Listing was conducted at the same time as data collection in Kigali city and others District out of Kigali.

Prior to household selection and interviewing, all households in the sample enumeration areas were listed in a special listing form. A separate manual was prepared for household listing, providing special instructions

for segmentation of large clusters and quality control of the results.[21] Finally, procedures were developed for selecting sample households from the list as part of the field operations.[22]

4. Data processing

As well as from the previous year, data were collected using computerized assisted interview (CAPI). Data was uploaded to NISR main office from field via wireless network channel by synchronizing every day with the NISR server. It was carried out every day to have a daily back up of data. All the activities of codification were also done to the field by interviewers who were trained. Several questions with textual responses were pre-coded and tabled in cascaded way. These concerned education (major field of study in highest qualification attained, and subject of training), occupation and branch of economic activity (at main and secondary job and past employment experience); they were coded into the corresponding national standard classifications using on-screen coding with corresponding dictionaries in Kinyarwanda. 23 Coding of geographic areas and addresses was incorporated in the data entry programme as look-up.

Following coding, responses of each questionnaire were edited for blanks, missing values, duplicates, out-of-range values, and inconsistencies such as no head of household or age of child greater than age of head of household using developed batches of controlling inconsistence in CsPro and Stata. Editing specifications on coverage and demographic characteristics were based on the population and housing census (PHC5 2022). Other edit rules were developed for consistency checks on questions related to the measurement of the main labour force variables, including employment, unemployment, multiple jobholding, total hours usually worked at all jobs, total hours actually worked at all jobs, status in employment at main job, etc. The detected errors were directly sent back to the field for correction by the interview.

As part of data processing, the data file was augmented by adding a field on sampling weights (weight) and a series of additional fields on derived variables constructed on the basis of the information on each record. Some examples of the construction of the derived variables is schematically shown in diagrams B1 to B5 for employment (E), time-related underemployment (TRU), unemployment (U) and potential labour force (PLF), employment in informal sector (IS) and informal employment (IE) at main and secondary jobs, and monthly cash income from employment of employees at main job (cash). The numbered elements of the diagrams refer to the question numbers and response categories of the LFS questionnaire. The end nodes of the diagrams refer to the derived variable categories, employed, time-related underemployed, unemployed, etc.

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[21] National Institute of Statistics of Rwanda, *Manual for Household Listing, Rwanda Pilot Labour Force Survey (RLFS-P 2016)*, NISR, Kigali, February 2016.

[22]Mehran, F., GIZ Consultant, "Rwanda Labour Force Survey February 2016. Selection of households without data entry as part of the field operations." 30 December 2015.

[23] National Institute of Statistics of Rwanda, *Customized International Standard Industrial Classification of all Economic Activities (ISIC Rev. 4)*, The Rwanda Classification Manual, 2012 edition.

National Institute of Statistics of Rwanda, *Customized International Standard Classification for Occupation (ISCO-08)*, The Rwanda Classification Manual, 2012 edition.

National Institute of Statistics of Rwanda, *Customized International Standard Classification of Education (ISCED 97)*, The Rwanda Classification Manual, 2012 edition.

B.1 Derived variable: Employment (E)

Employed, at work
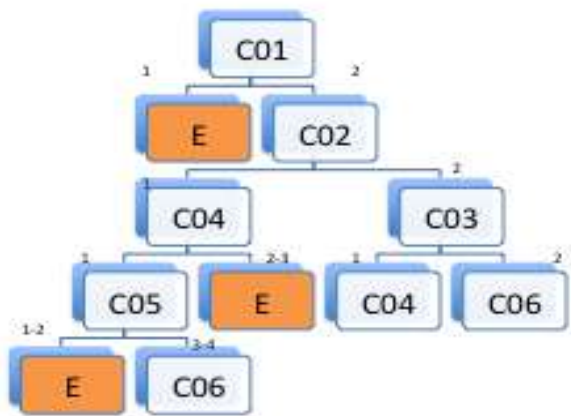
Employed, not at work
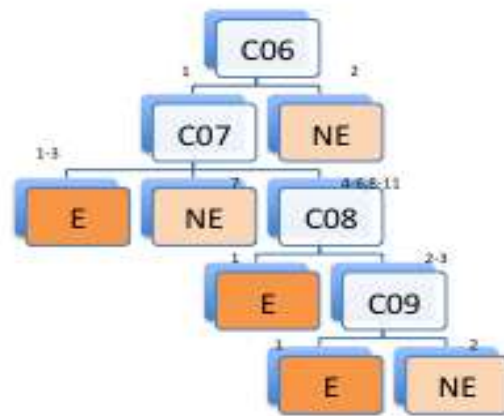
E = Employed
NE = Not employed

B.2 Derived variable: Time-related underemployment TRU)
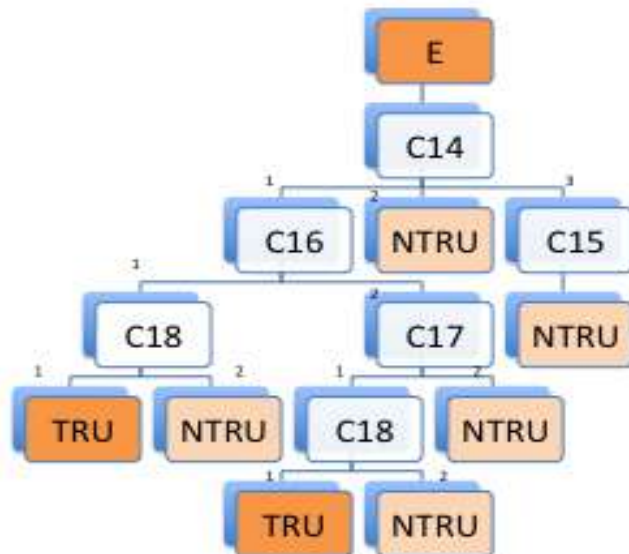
E = Employed
TRU = Time-related underemployed
NTRU = Not time-related underemployed

B.3 Derived variables: Unemployment (U) and potential labour force (PLF)

NE = Not employed
U = Unemployed
PLF = Potential labour force
NPLF = Not in potential labour force
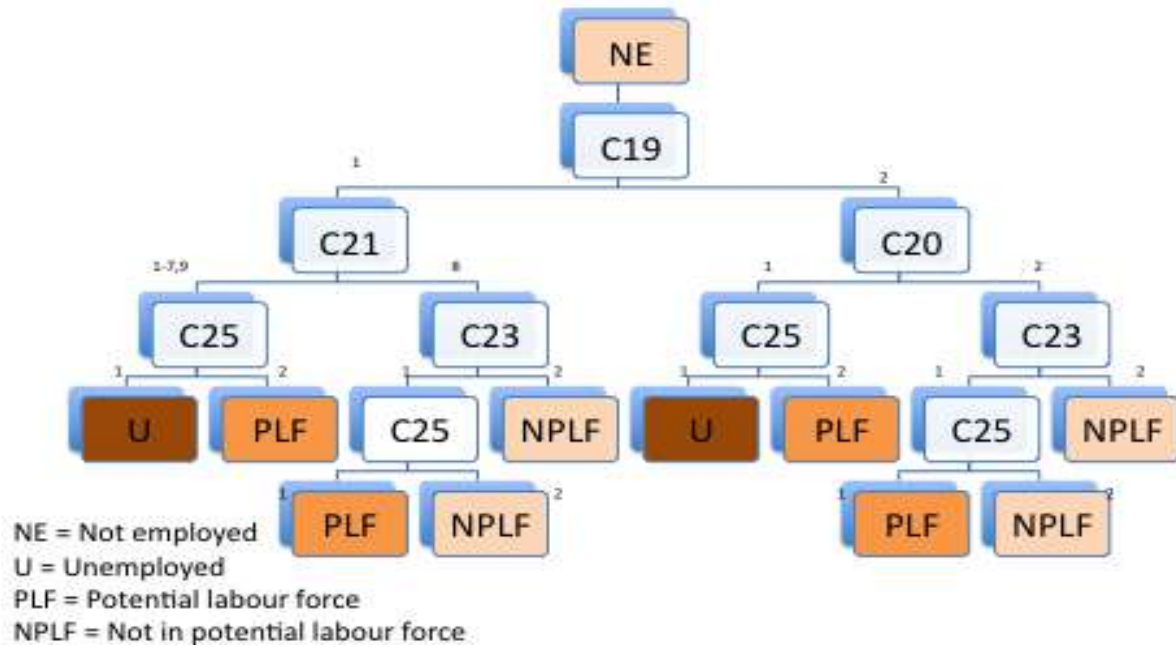
B.4 Derived variables: Informal sector (IS) and informal employment (IE) at main job

Informal sector

IS = Informal sector
FS = Formal sector
X = Out-of-scope (Domestic workers engaged by households are excluded from the count of informal and formal sector)

Informal employment
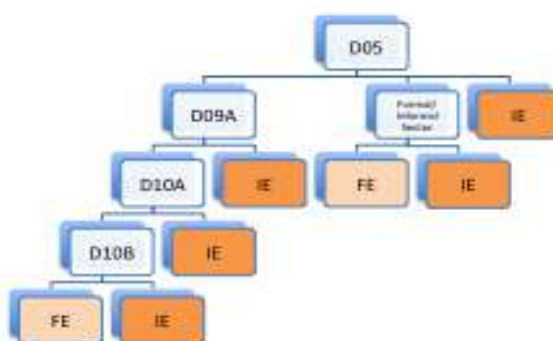
IE = Informal employment
FE = Formal employment

B.5. Derived variable: Monthly cash income from employment of employees at main job (INC)

Status in employment		Response	Monthly cash income from employment at main job
-1	-2	-3	-4
Employee or Intern or Other	D05=1,2,7	D12=1 Amount	D12A x 1 if D13=1
			D12A x 26/12 if D13=2
			D12A x 52/12 if D13=3
			D12A x 52/2 if D13=4
			D12A /12 if D13=5
		D12=2,3, Refusal, Don't know	2*20,000/3=13,333 if D17=1
			2/(1/20,000+1/30,000)=24,000 if D17=2
			2/(1/30,000 +1/50,000)=37,500 if D17=3
			2/(1/50,000 +1/100,000)=66,667 if D17=4
			2*100,000 = 200,000 if D17=5

Based on these results, it was decided to use the conversion factor 1 for monthly payments, 2 for two-weekly payments, 52/12 for weekly payments, and 26 for daily payments to calculate the monthly income.

Finally, the augmented data file with derived variables and sampling weights was used for producing the survey estimates specified in the tabulation programme of the survey as well as other analytical tables for the body of the report. The tabulation programme of the survey included 66 tables presented in the statistical annex of the present report (Annex C).

In order to speed up data processing and ensure better quality data, NISR has introduced tablets for data collection, and incorporated an assisted coding of the questions with textual responses and automated editing procedures for both detection and correction of errors thus minimizing the need for the time-consuming task of making reference to the physical questionnaires.

5. Data quality

Like in all sample surveys, the results of the LFS 2023 are subject to sampling and different forms of measurement errors. This section provides information on different sources of survey errors, namely, sampling errors, coverage errors, non-response errors, response errors and other errors such as coding and data entry 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 on the basis of a complete count of the population under otherwise identical conditions.

Information on sampling errors is used for interpreting the survey results. It provides an assessment of the precision of the estimates and on the degree of confidence that may be attached to them. In the same vein, it allows decision on the degree of detail with which the survey data may be meaningfully tabulated and analyzed. Information on sampling errors is also used for determining whether the survey estimates of change over time or the estimates of differences between two or more population subgroups are statistically significant. Finally, information on sampling errors may be used for future sample design. Rational decisions on the choice of sample size, sample allocation among strata, clustering and estimation procedures, can only be made based on detail knowledge of their effect on the magnitude of sampling errors in the resulting statistics obtained from the survey.

The following table gives the sampling errors of the main labour force estimates obtained from the LFS 2023. They have 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 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 24. 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.

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[24]Verma, Vijay, *Sampling Methods,* Manual for Statistical Trainers Number 2, Statistical Institute for Asia and

B.6: Sampling errors of estimates of main labour force aggregates

Indicator	Estimate	Standard error	Relative standard error	Confidence interval	
				Lower	Upper
Population 16+ yrs	8,071,962	184,527	2.3%	7,709,905	8,434,018
Labour force	4,783,413	111,080	2.3%	4,565,466	5,001,361
Employment	3,958,817	94,457	2.4%	3,773,483	4,144,150
Unemployment	824,597	27,371	3.3%	770,892	878,302
Outside labour force	3,288,548	87,639	2.7%	3,116,593	3,460,504

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

As an illustration of the use of the table, consider the second row of the table on the labour force. The total labour force 4,783,413 is estimated with a relative standard error of 2.3 percent. The true value at 95 percent confidence level lies within the interval 4,565,466 and 5,001,361. Similarly, it can be stated that the total number of unemployed persons, 824,597 is estimated with a relative standard error of 3.3 percent. And the true value at 95 percent confidence level lies within the interval 770,892 and 878,302.

The next table 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 17.2 percent has a standard error of 0.4 percentage points. This may be interpreted to mean that the true unemployment rate lies with 95 percent confidence within the interval, 16.4 to 18.1 percent.

B.7: Sampling errors of estimates of main labour force indicators (percentage)

Indicator	Estimate	Standard error	Confidence interval	
			Lower	Upper
Labour Force Participation Rate	59.3	0.6	58.2	60.3
Employment-Population Ratio	49.0	0.5	48.0	50.1
Unemployment rate	17.2	0.4	16.4	18.1

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

It is not practical to compute and report sampling errors for every published statistics of a labour force survey. For this purpose, general variance estimates are typically calculated using the approximate relationship between the variance of an estimate and its size, expressed by $var(y)/y^2 = b + a/y$. The results are presented in the following table.

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the Pacific (SIAP), Tokyo, Revised 2002.

B.8: Approximate sampling errors by size estimates

Size of estimate	Standard error	Relative standard error	Confidence interval	
			Lower	Upper
5,000,000	63,000	1.3%	4874000	5126000
2,500,000	37,000	1.5%	2426000	2574000
1,000,000	20,000	2.0%	960000	1040000
500,000	14,000	2.8%	472000	528000
250,000	9,000	3.6%	232000	268000
100,000	6,000	6.0%	88000	112000
50,000	4,000	8.0%	42000	58000
25,000	3,000	12.0%	19000	31000
10,000	2,000	20.0%	6000	14000

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

Thus, an estimate about 5,000,000 has an approximate standard error of 63,000 with a confidence interval at 95% level between 4,874,000 and 5,126,000. Similarly, an estimate of about 500,000 has an approximate standard error of 14,000 with a confidence interval between 472,000 and 528,000. It can be observed that the relative standard error sharply increases as the size of the estimate decreases. Estimates as low as 10,000 have very high relative standard errors, almost 20 percent. The table can be used to decide on the size of estimates that can be meaningfully considered or more as statistically significant for analysis. For size of estimates that are not listed in the table, the approximate standard errors can be obtained by interpolation or extrapolation of the values given in the table.

- **Non-response errors**

Non-response occurs due to failure to obtain the required information from the units selected in the sample (unit non-response) or to failure to obtain some items of information for the selected unit (item non-response). Unit non-response may occur due to incorrect address of the sample household, or inaccessibility of certain dwellings or refusal of the sample household to be interviewed, or because no one was at home when the interviewer contacted the household, or for other reasons.

Absence and refusal are considered as non-response while vacant demolished or out-of-scope housing units are considered as non-coverage. The average non response rates for all February, May, August and and November round 2023 stood at 4 percent.

- **Response errors**

Response errors refer to errors originating at the data collection stage. In relation to an individual respondent, response errors may occur because the respondent was unwilling to divulge certain information or because the respondent did not know the answer to the question asked or did not fully understand the meaning of the question. Response errors can also occur due memory lapses, for example by forgetting to report an event, or incorrectly reporting the timing. Response errors may also occur because of errors made by the interviewer or by the instrument used for measurement. Interviewers may introduce errors because of haste and

misreporting the responses, or because of misunderstanding of the survey concepts and procedures, or preconceptions and subjective biases. The questionnaire itself may be faulty, with wrong question wordings and incorrect skipping patterns.

The measurement of response errors is one of the most difficult parts of quality assessment of survey data. It generally requires carefully designed re-interview programmes. In the absence of such data, the quality of survey responses may be assessed by comparing the survey results with corresponding information from more reliable external sources such as administrative sources, for example, reconciling the LFS estimate of employment with the corresponding estimate obtained from the Integrated Business Enterprise Survey.[25] More detailed assessment may be carried out by comparing the LFS estimates of employment in specific occupations such as primary and secondary school teachers, nurses, and civil servants with corresponding statistics from the line ministries. Other indicators of response errors may be obtained by measuring the degree of self-response against proxy-response, or by testing the internal consistency of certain sets of inter-related responses. The assessment of response errors along the lines described here should be considered in future rounds of the survey when the survey programme has been stabilized.

- **Other errors**

Other sources of errors include coding and editing errors, as well as errors in data entry and data processing. Here the occupation and industry coding is evaluated. Table B.10 shows that the employed persons were coded in 354 distinct 4-digit occupation codes and 317 distinct 4-digit industry codes. The percentage of employed persons who were coded with codes ending with the digit "9" was 3 percent for occupation and 7 percent for branch of economic activity. Codes ending with "9" indicate that the occupation or industry descriptions in the LFS questionnaire could not be precisely found in the classification system and had to be coded as "other", suggesting insufficient information for precise occupation and industry coding. The number of codes ending with "9" was decreased during the current year as compared to the previous years. This decrease may be attributed to the fact that enumerators are getting experience and familiar with codding both for economic activity and occupations.

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[25]National Institute of statistics of Rwanda, *Integrated Business Enterprise Survey*, NISR 2014.

Table B.10: Coding into occupation and branch of economic activity codes ending with "9"

	Occupation (ISCO-08)	Branch of economic activity (ISIC Rev 4)
February 2023		
Distinct 4-digit codes	258	251
Number of employed persons coded in with 4-digit distinct codes ending with "9" (non-weighted)	23	34
Total number of employed persons (non-weighted)	5,262	5,262
Percent	8.9 %	13.5 %
May 2023		
	Occupation (ISCO-08)	Branch of economic activity (ISIC Rev 4)
Distinct 4-digit codes	231	252
Number of employed persons coded in with 4-digit distinct codes ending with "9" (non-weighted)	22	28
Total number of employed persons (non-weighted)	5,560	5,560
Percent	9.5%	11.1%
August 2023		
	Occupation (ISCO-08)	Branch of economic activity (ISIC Rev 4)
Distinct 4-digit codes	214	258
Number of employed persons coded in with 4-digit distinct codes ending with "9" (non-weighted)	22	24
Total number of employed persons (non-weighted)	5,727	5,727
Percent	10.2%	9.3%
November 2023		
	Occupation (ISCO-08)	Branch of economic activity (ISIC Rev 4)
Distinct 4-digit codes	216	252
Number of employed persons coded in with 4-digit distinct codes ending with "9" (non-weighted)	20	30
Total number of employed persons (non-weighted)	5,665	5,665
Percent	9.3%	11.9%

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

Overall, the quality assessment of the results of the LFS 2023 shows acceptable levels of sampling errors and non-response errors.

Annex C: Statistical tables

Table C. 1: Summary labour force indicators, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Population 16 years old and over	8,071,962	3,783,020	4,288,942	2,472,784	5,599,178	3,063,360	5,008,601
Labour force	4,783,414	2,546,471	2,236,943	1,662,343	3,121,071	1,672,835	3,110,578
- Employed	3,958,817	2,176,709	1,782,108	1,399,480	2,559,337	1,274,992	2,683,824
- Unemployed	824,597	369,762	454,835	262,863	561,734	397,843	426,754
Outside labour force	3,288,548	1,236,549	2,051,999	810,441	2,478,107	1,390,525	1,898,023
Labour underutilization	3,330,360	1,444,393	1,885,967	845,875	2,484,485	1,746,679	1,583,681
- Unemployed	824,597	369,762	454,835	262,863	561,734	397,843	426,754
- Time-related underemployed	1,165,285	595,034	570,251	282,416	882,869	538,371	626,914
- Potential labour force	1,340,478	479,597	860,881	300,596	1,039,882	810,465	530,013
Labour force participation rate (%)	59.3	67.3	52.2	67.2	55.7	54.6	62.1
Employment-to-population ratio (%)	49.0	57.5	41.6	56.6	45.7	41.6	53.6
Time related underemployment rate (%)	29.4	27.3	32.0	20.2	34.5	42.2	23.4
LU1 - Unemployment rate (%)	17.2	14.5	20.3	15.8	18.0	23.8	13.7
LU2 - Combined rate of unemployment and time-related underemployment (%)	41.6	37.9	45.8	32.8	46.3	56.0	33.9
LU3 - Combined rate of unemployment and potential labour force (%)	35.4	28.1	42.5	28.7	38.5	48.7	26.3
LU4 - Composite measure of labour underutilization (%)	54.4	47.7	60.9	43.1	59.7	70.3	43.5
Youth unemployment rate (16-30 yrs) (%)	20.8	16.9	25.2	19.6	21.5	29.6	17.5
Median monthly earnings at main job	26,000	39,000	26,000	60,000	26,000	26,000	37,500

Table C. 2: Population by sex and age group, RLFS 2023

	Total	Male	Female	Urban	Rural
Population	**13,362,858**	**6,433,442**	**6,929,416**	**3,908,583**	**9,454,275**
0-4 yrs	1,695,679	830,187	865,492	490,525	1,205,154
5-9 yrs	1,738,168	880,858	857,310	470,957	1,267,211
10-14 yrs	1,551,930	792,203	759,727	395,494	1,156,436
15-19 yrs	1,509,921	763,957	745,964	431,259	1,078,662
20-24 yrs	1,168,907	560,113	608,794	402,962	765,944
25-29 yrs	946,470	434,061	512,409	344,946	601,524
30-34 yrs	895,685	431,424	464,261	328,406	567,279
35- 39 yrs	860,154	416,719	443,434	286,546	573,607
40-44 yrs	771,441	377,188	394,253	242,474	528,967
45-49 yrs	516,411	224,460	291,950	151,651	364,759
50-54 yrs	407,356	179,751	227,605	110,322	297,034
55-59 yrs	346,379	144,316	202,063	78,324	268,055
60-64 yrs	357,712	157,917	199,796	65,030	292,683
65-69 yrs	226,754	96,994	129,760	40,570	186,184
70-74 yrs	164,304	69,544	94,761	27,365	136,939
75+	205,588	73,751	131,837	41,750	163,838

Table C. 3: Households by household size, sex of head of household and urban/rural area, RLFS 2023

Household size	Total number households	Head of household		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
	3,299,815	2,405,806	894,009	994,226	2,305,589	1,389,827	1,909,988
1	363,633	193,337	170,296	166,139	197,495	93,386	270,247
2	415,299	212,556	202,743	121,807	293,492	162,513	252,786
3	622,387	425,502	196,885	177,151	445,236	267,967	354,420
4	625,341	494,811	130,531	160,445	464,896	276,988	348,353
5	528,981	430,903	98,078	141,720	387,261	248,479	280,502
6	356,853	306,710	50,143	101,189	255,663	169,691	187,162
7	206,779	182,965	23,814	56,470	150,309	100,951	105,828
8	107,080	93,981	13,099	35,014	72,066	43,157	63,923
9	42,930	39,846	3,083	19,462	23,468	16,928	26,001
10+	30,532	25,195	5,337	14,829	15,703	9,767	20,765

Table C. 4: Disabled persons by sex, age group, urban/rural area, and type of disability, RLFS 2023

Type of disability	Total	Male	Female	Urban	Rural	5-15 yrs	16+ yrs
Total disabled persons	**254,527**	**125,629**	**128,898**	**53,287**	**201,240**	**39,025**	**215,503**
- Seeing	54,790	24,938	29,852	10,260	44,531	6,126	48,664
- Hearing	44,776	19,662	25,114	8,103	36,672	10,189	34,587
- Walking	115,081	61,049	54,033	24,514	90,567	11,545	103,536
- Remembering	51,051	24,970	26,081	10,928	40,123	12,404	38,647
- Washing, dressing	45,651	27,556	18,095	10,928	40,123	11,788	33,863
- Communicating	25,669	16,380	9,288	8,685	16,984	13,545	12,123

Table C. 5: Disabled working age persons by labour force status and type of disability, RLFS 2023

Type of disability	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Disabled working age persons (16+ yrs)	**215,503**	**35,596**	**8,323**	**171,584**	**20.4**	**16.5**	**19.0**
- Seeing	48,664	10,316	1,509	36,839	24.3	21.2	12.8
- Hearing	34,587	8,442	2,423	23,722	31.4	24.4	22.3
- Walking	103,536	13,210	1,974	88,353	14.7	12.8	13.0
- Remembering	38,647	2,973	1,858	33,816	12.5	7.7	38.5
- Washing, dressing	33,863	1,182	707	31,975	5.6	3.5	37.4
- Communicating	12,123	2,588	258	9,277	23.5	21.3	9.1

Note: Details may not add to totals because disabled persons may be reporting more than one type of disability.

Table C. 6: Population 16 years old and over by education status and urban/rural area, RLFS 2023

Currentry studying	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	**8,071,962**	**3,783,020**	**4,288,942**	**2,472,784**	**5,599,178**	**3,063,360**	**5,008,602**
Currently studying	795,267	406,370	388,898	322,505	472,763	44,677	750,590
Not Currently studying	7,276,694	3,376,650	3,900,044	2,150,279	5,126,415	3,018,682	4,258,012

Table C. 7: Population 16 years old and over by sex, level of educational attainment and urban/rural area, RLFS 2023

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	**8,071,962**	**3,783,020**	**4,288,942**	**2,472,784**	**5,599,178**	**3,063,360**	**5,008,602**
None	3,756,574	1,699,328	2,057,246	741,695	3,014,879	1,728,842	2,027,732
Primary	2,598,974	1,266,373	1,332,600	740,871	1,858,102	1,034,507	1,564,467
Lower secondary	738,699	336,062	402,636	321,732	416,966	157,479	581,220
Upper secondary	663,548	307,407	356,141	400,573	262,975	118,622	544,927
University	314,167	173,849	140,318	267,913	46,255	23,911	290,257

Table C. 8: Population 16 years old and over with respective field of education by sex, urban/rural area, RLFS 2023

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	8,071,962	3,783,020	4,288,942	2,472,784	5,599,178	3,063,360	5,008,602
General program	5,775,396	2,800,901	2,974,495	1,489,916	4,285,480	2,397,310	3,378,086
Education	124,431	59,707	64,724	57,855	66,575	24,770	99,660
Humanities and arts	107,373	52,825	54,548	45,540	61,832	17,779	89,594
Social sciences, business, and law	281,881	108,015	173,866	231,957	49,923	25,032	256,848
Science	491,103	215,951	275,152	257,875	233,228	81,029	410,075
Engineering, manufacturing, and construction	181,044	140,128	40,915	124,190	56,853	19,122	161,922
Agriculture	43,592	23,901	19,691	20,469	23,123	8,867	34,725
Health and welfare	50,357	21,558	28,799	38,780	11,577	3,029	47,329
Services	50,207	19,646	30,561	45,064	5,143	2,960	47,247
No Education	966,578	340,388	626,191	161,136	805,443	483,462	483,117

Table C. 9: Population 16 years old and over in trade/attended or training courses by sex, duration of training, and urban/rural area, RLFS 2023

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	**1,197,804**	**640,750**	**557,054**	**557,667**	**640,137**	**361,836**	**835,967**
Less than One month	4,401	3,083	1,319	2,210	2,191	1,009	3,392
1-3 months	133,197	60,926	72,271	56,027	77,169	42,666	90,531
3-6 Months	299,642	129,280	170,362	136,432	163,209	93,614	206,027
One Year	372,748	201,613	171,135	172,788	199,960	116,685	256,063
Two Years	123,264	74,139	49,125	51,569	71,695	43,046	80,218
Three years or more	264,552	171,710	92,842	138,639	125,912	64,815	199,737

Table C. 10: Population 16 year old in/attended trade and technical training by sex, technical skills, and urban/rural area, RLFS 2023

Technical skills learned	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
	1,197,804	**640,750**	**557,054**	**557,667**	**640,137**	**361,836**	**835,967**
Masonry	218,507	206,732	11,775	85,988	132,519	69,941	148,566
Carpentry	79,887	78,060	1,827	28,098	51,790	28,479	51,409
Automotive technology.	30,434	28,488	1,947	17,695	12,740	5,511	24,923
Culinary arts	61,306	17,409	43,897	46,012	15,294	7,119	54,187
Domestic Electricity	28,498	23,222	5,276	16,819	11,679	3,816	24,681
Welding	38,819	38,122	697	14,922	23,897	11,743	27,077
Plumbing	7,400	5,792	1,608	4,844	2,556	970	6,431
Food processing	2,864	1,280	1,584	2,048	816	547	2,317
Animal health	1,877	1,695	182	124	1,753	1,436	441
Auto- Electricity	2,963	2,833	130	1,434	1,529	723	2,241
Automotive body repair	60,384	57,954	2,430	39,421	20,963	10,851	49,533
Computer maintenance	5,492	4,325	1,167	5,461	31	140	5,352
Crop production	2,369	1,305	1,064	617	1,751	607	1,761
Engine mechanics	5,613	5,429	185	4,270	1,343	532	5,081
Music	386	386	0	386	0	0	386
Painting and decoration	3,874	3,555	319	2,724	1,150	22	3,852
Multimedia	2,487	1,827	660	1,598	889	889	1,598
Networking	2,953	2,389	564	2,168	785	15	2,938
Tailoring	400,728	31,387	369,341	143,362	257,366	165,674	235,053
Industrial electricity	5,020	3,789	1,231	4,378	642	0	5,020
Civil engineering	2,494	2,022	471	2,494	0	0	2,494
Nursery growing	2,212	1,039	1,174	72	2,141	1,317	896
Milk processing	59	0	59	59	0	0	59
Livestock	2,527	230	2,297	424	2,104	808	1,719
Horticulture production	498	498	0	498	0	0	498
Food & Beverage services	2,607	1,105	1,502	873	1,735	928	1,680

Technical skills learned	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Front office	4,815	2,122	2,693	3,334	1,481	407	4,409
House keeping	1,906	152	1,754	1,090	816	833	1,073
Concrete masonry	1,521	934	588	223	1,299	1,132	390
Leather craft	4,553	3,676	877	1,207	3,346	1,047	3,506
Hairdressing	70,026	18,230	51,797	41,512	28,514	16,440	53,587
Biding and Jewelries	4,710	733	3,977	2,153	2,556	760	3,950
Software Development	4,975	2,688	2,287	3,989	986	0	4,975
NCDs and Palliative Care Community Health	1,003	479	524	266	737	0	1,003
Agriculture Mechanization	133	0	133	0	133	133	0
Agri-Business	4,040	2,326	1,714	1,405	2,636	1,563	2,478
Manicure and Pedicure	2,057	469	1,588	1,792	266	266	1,792
Beauty therapy	2,517	852	1,665	1,362	1,155	678	1,839
Screen printing	1,653	1,220	433	1,372	281	0	1,653
Sport and Medical Massage	1,260	1,260	0	209	1,051	0	1,260
Crochet embroidery	22,345	1,335	21,010	7,779	14,566	13,070	9,275
Pottery	2,427	1,628	799	1,947	480	793	1,634
Motor vehicle engine mechanics	17,671	17,671	0	9,866	7,805	1,014	16,657
Film making	2,384	2,243	141	2,384	0	160	2,224
Collagraphy	921	516	405	516	405	405	516
Typing(dactylography)	2,796	1,044	1,752	1,946	850	912	1,883
Driving	53,348	49,905	3,443	35,262	18,086	7,419	45,929
Other	18,481	10,393	8,088	11,262	7,219	2,737	15,744

Table C. 11: Population 16 years old and over who received trade and technical training by sex, place of the training, main sponsor, Outcome of the Training and urban/rural area, RLFS 2023

Place of Technical skills	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
What happened after completion of the training							
Nothing	246996	108292	138704	111248	135748	81347	165650
Starting own business	311990	214132	97858	172272	139718	83516	228474
I was able to get a job	1571	1571	0	1193	378	0	1571
I was promoted at work	13132	7903	5229	7008	6125	5269	7863
My job skills have improved	15009	6642	8368	7072	7938	5321	9689
Got internship/traineeship with a company	94700	35861	58839	40023	54677	31205	63495
Other specify	1319	678	641	532	788	579	740

Table C. 12: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, RLFS 2023

	Total	Labour force status				Labour force participation rate	Employment-population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Total Population 16 yrs and over	**8,071,962**	**4,783,414**	**3,958,817**	**824,597**	**3,288,548**	**59.3%**	**49.0%**	**17.2%**
16-24 yrs	2,373,709	1,106,898	852,018	254,880	1,266,810	46.6%	35.9%	23.0%
25-34 yrs	1,842,155	1,421,505	1,171,079	250,426	420,649	77.2%	63.6%	17.6%
35-54 yrs	2,555,361	1,840,904	1,566,757	274,147	714,456	72.0%	61.3%	14.9%
55-64 yrs	704,091	316,055	279,377	36,678	388,036	44.9%	39.7%	11.6%
65+ yrs	596,646	98,049	89,584	8,465	498,597	16.4%	15.0%	8.6%
Male Pop. 16+ yrs	**3,783,020**	**2,546,471**	**2,176,709**	**369,762**	**1,236,549**	**67.3%**	**57.5%**	**14.5%**
		-						
16-24 yrs	1,176,896	597,467	476,197	121,270	579,428	50.8%	40.5%	20.3%
25-34 yrs	865,484	743,012	651,384	91,628	122,472	85.8%	75.3%	12.3%
35-54 yrs	1,198,119	983,003	851,281	131,722	215,116	82.0%	71.1%	13.4%
55-64 yrs	302,232	164,669	144,411	20,258	137,564	54.5%	47.8%	12.3%
65+ yrs	240,289	58,320	53,436	4,884	181,968	24.3%	22.2%	8.4%
Female Pop. 16+ yrs	**4,288,942**	**2,236,943**	**1,782,108**	**454,835**	**2,051,999**	**52.2%**	**41.6%**	**20.3%**
16-24 yrs	1,196,813	509,431	375,821	133,610	687,382	42.6%	31.4%	26.2%
25-34 yrs	976,670	678,493	519,695	158,798	298,177	69.5%	53.2%	23.4%
35-54 yrs	1,357,242	857,902	715,477	142,425	499,340	63.2%	52.7%	16.6%
55-64 yrs	401,859	151,387	134,967	16,420	250,472	37.7%	33.6%	10.8%
65+ yrs	356,358	39,729	36,148	3,581	316,629	11.1%	10.1%	9.0%
Urban Pop. 16+ yrs	**2,472,784**	**1,662,343**	**1,399,480**	**262,863**	**810,441**	**67.2%**	**56.6%**	**15.8%**

	Total	Labour force status				Labour force participation rate	Employment-population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
16-24 yrs	755,399	357,187	280,042	77,145	398,212	47.3%	37.1%	21.6%
25-34 yrs	673,352	557,601	469,513	88,088	115,752	82.8%	69.7%	15.8%
35-54 yrs	790,994	647,496	562,191	85,305	143,497	81.9%	71.1%	13.2%
55-64 yrs	143,354	80,446	70,661	9,785	62,908	56.1%	49.3%	12.2%
65+ yrs	109,685	19,614	17,073	2,541	90,072	17.9%	15.6%	13.0%
Rural Pop. 16+ yrs	**5,599,178**	**3,121,071**	**2,559,337**	**561,734**	**2,478,107**	**55.7%**	**45.7%**	**18.0%**
16-24 yrs	1,618,310	749,711	571,976	177,735	868,598	46.3%	35.3%	23.7%
25-34 yrs	1,168,802	863,906	701,567	162,339	304,897	73.9%	60.0%	18.8%
35-54 yrs	1,764,367	1,193,408	1,004,566	188,842	570,959	67.6%	56.9%	15.8%
55-64 yrs	560,738	235,609	208,716	26,893	325,129	42.0%	37.2%	11.4%
65+ yrs	486,961	78,437	72,512	5,925	408,525	16.1%	14.9%	7.6%

Table C. 13: Population 16 years old and over by labour force status, sex, educational attainment, and urban/rural area, RLFS 2023

	Total	Labour force status				Labour force participation rate	Employment-to population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Population 16 yrs and over	**8,071,962**	**4,783,414**	**3,958,817**	**824,597**	**3,288,548**	**59.3**	**49.0**	**17.2**
None	3,756,574	2,204,139	1,857,068	347,071	1,552,434	58.7	49.4	15.7
Primary	2,598,974	1,516,973	1,249,319	267,654	1,082,000	58.4	48.1	17.6
Lower secondary	738,699	324,067	260,304	63,763	414,632	43.9	35.2	19.7
Upper secondary	663,548	462,955	355,801	107,154	200,593	69.8	53.6	23.1
University	314,167	275,279	236,324	38,955	38,888	87.6	75.2	14.2

Table C. 14 Population 16 years old and over by labour force status, sex, marital status, and urban/rural area, RLFS 2023

	Total	Labour force status				Labour force participation rate	Employment-population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Population 16 yrs and over	**8,071,962**	**4,783,414**	**3,958,817**	**824,597**	**3,288,548**	**59.3**	**49.0**	**17.2**
Married	3,003,186	1,843,690	1,565,648	278,042	1,159,496	61.4	52.1	15.1
Living together	1,435,190	1,081,475	906,556	174,919	353,715	75.4	63.2	16.2
Divorced/separeted	287,765	209,746	174,171	35,575	78,019	72.9	60.5	17.0
Single	2,801,637	1,462,942	1,145,266	317,676	1,338,695	52.2	40.9	21.7
Widow/widower	544,184	185,562	167,176	18,386	358,623	34.1	30.7	9.9

Table C. 15: Employed population by sex, age group, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Employed population 16+	**3,958,817**	**2,176,709**	**1,782,108**	**1,399,480**	**2,559,337**	**1,274,992**	**2,683,824**
16-19 yrs	286,391	158,295	128,097	84,119	202,272	57,641	228,750
20-24 yrs	565,627	317,903	247,724	195,923	369,704	138,769	426,858
25-29 yrs	587,055	320,385	266,670	228,712	358,343	150,919	436,136
30-34 yrs	584,025	331,000	253,025	240,801	343,224	177,658	406,367
35- 39 yrs	563,313	315,218	248,096	213,115	350,198	191,784	371,529
40-44 yrs	479,279	270,379	208,901	175,503	303,776	180,580	298,700
45-49 yrs	301,571	156,595	144,977	108,264	193,308	119,577	181,995
50-54 yrs	222,593	109,090	113,504	65,309	157,284	100,150	122,444
55-59 yrs	154,852	77,793	77,060	46,816	108,037	60,737	94,116
60-64 yrs	124,525	66,618	57,907	23,845	100,680	59,004	65,521
65-69 yrs	53,991	31,568	22,423	10,773	43,218	24,816	29,176
70-74 yrs	25,227	16,244	8,984	4,570	20,658	10,858	14,370
75+	10,366	5,625	4,742	1,730	8,636	2,501	7,865

Table C. 16: Employed population by sex, occupation group, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Occupation group (ISCO High level)	**3,958,817**	**2,176,709**	**1,782,108**	**1,399,480**	**2,559,337**	**1,274,992**	**2,683,824**
Managers	39,482	24,547	14,935	35,769	3,712	2,167	37,315
Professionals	243,383	140,966	102,417	135,615	107,767	40,036	203,347
Technicians and associate professionals	33,303	24,638	8,664	28,352	4,951	2,404	30,899
Clerical support workers	32,898	15,015	17,883	26,897	6,002	4,238	28,661
Service and sales workers	707,268	323,688	383,580	390,848	316,420	166,615	540,653
Skilled agricultural, forestry and fishing	224,477	117,456	107,021	33,246	191,231	19,771	204,706
Craft and related trades workers	311,432	231,256	80,176	149,790	161,642	82,705	228,727
Plant and machine operators and assemble	107,060	105,506	1,553	69,929	37,131	9,990	97,070
Elementary occupations	2,259,514	1,193,636	1,065,878	529,034	1,730,480	947,067	1,312,446

Table C. 17: Employed population by sex, current education attendance, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Employed population	3,958,817	2,176,709	1,782,108	1,399,480	2,559,337	1,274,992	2,683,824
Currently studying	60,969	37,766	23,203	36,100	24,869	4,422	56,547
Not currently studying	3,897,847	2,138,943	1,758,904	1,363,380	2,534,468	1,270,570	2,627,278

Table C. 18: Employed population by sex, educational attainment, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Employed population	3,958,817	2,176,709	1,782,108	1,399,480	2,559,337	1,274,992	2,683,824
None	1,857,068	978,924	878,144	430,251	1,426,817	741,805	1,115,263
Primary	1,249,319	719,735	529,584	424,855	824,464	408,046	841,274
Lower secondary	260,304	147,601	112,702	131,115	129,188	57,668	202,636
Upper secondary	355,801	193,462	162,339	212,072	143,729	49,786	306,016
University	236,324	136,986	99,338	201,186	35,138	17,688	218,636

Table C. 19: Employed population by sex, occupation group and level of educational attainment, RLFS 2023

Occupation group	Total	Educational attainment				
		None	Primary	Lower secondary	Upper secondary	University
Employed population	3,958,817	1,857,068	1,249,319	260,304	355,801	236,324
Managers	39,482	481	1,116	161	6,340	31,384
Professionals	243,383	6,639	14,117	10,602	100,210	111,816
Technicians and Associate Professionals	33,303	1,377	4,455	567	8,875	18,028
Clerical Support Workers	32,898	1,144	3,506	2,492	10,799	14,958
Service and Sales Workers	707,268	214,830	251,770	73,330	124,030	43,308
Skilled Agricultural, Forestry and Fishery Workers	224,477	103,309	93,827	13,366	10,924	3,053
Craft and Related Trades Workers	311,432	105,424	119,074	43,401	35,241	8,291
Plant and Machine Operators and Assemblers	107,060	25,446	47,393	12,585	18,814	2,821
Elementary Occupations	2,259,514	1,398,418	714,060	103,801	40,569	2,666
Employed population (Male)	2,176,709	978,924	719,735	147,601	193,462	136,986
Managers	24,547	420	516	141	3,935	19,535
Professionals	140,966	3,186	9,238	7,893	49,161	71,488
Technicians and Associate Professionals	24,638	1,377	4,093	268	6,797	12,103
Clerical Support Workers	15,015	617	2,344	1,018	5,622	5,414
Service and Sales Workers	323,688	97,987	121,587	33,445	55,600	15,070
Skilled Agricultural, Forestry and Fishery Workers	117,456	50,672	55,103	6,187	3,665	1,828
Craft and Related Trades Workers	231,256	82,188	90,513	25,513	25,997	7,045
Plant and Machine Operators and Assemblers	105,506	25,153	46,548	12,480	18,503	2,821
Elementary Occupations	1,193,636	717,323	389,792	60,656	24,182	1,682
Employed population (Female)	1,782,108	878,144	529,584	112,702	162,339	99,338
Managers	14,935	61	601	20	2,404	11,848
Professionals	102,417	3,453	4,879	2,709	51,049	40,327
Technicians and Associate Professionals	8,664	0	362	299	2,078	5,926
Clerical Support Workers	17,883	527	1,163	1,474	5,177	9,543
Service and Sales Workers	383,580	116,843	130,184	39,884	68,430	28,238
Skilled Agricultural, Forestry and Fishery Workers	107,021	52,636	38,723	7,179	7,258	1,225
Craft and Related Trades Workers	80,176	23,236	28,561	17,888	9,244	1,246
Plant and Machine Operators and Assemblers	1,553	293	845	105	311	0
Elementary Occupations	1,065,878	681,094	324,268	43,145	16,387	984

Table C. 20: Employed population by sex, branch of economic activity, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural		

					Participated in subsistence agriculture	Not participated in subsistence agriculture
Employed population	**3,958,817**	**2,176,709**	**1,782,108**	**1,399,480**	**2,559,337**	**1,274,992**	**2,683,824**
Agriculture, forestry and fishing	1,720,078	781,372	938,705	193,689	1,526,389	814,433	905,644
Mining and quarrying	49,968	44,703	5,265	5,863	44,105	11,826	38,143
Manufacturing	217,799	122,699	95,100	90,752	127,047	57,881	159,918
Electricity, gas, steam and air conditioning supply	5,377	3,749	1,628	4,222	1,155	495	4,883
Water supply, sewerage and waste management	2,693	1,512	1,181	1,748	945	727	1,966
Construction	386,365	338,939	47,426	177,298	209,067	102,592	283,773
Wholesale, retail trade, repair of motor vehicles, motorcycles	515,948	216,654	299,295	305,135	210,814	124,025	391,924
Transportation and storage	231,489	222,008	9,481	107,561	123,928	38,046	193,444
Accommodation and food service activities	122,162	65,806	56,356	63,946	58,216	30,144	92,018
Information and communication	11,279	7,957	3,322	9,410	1,869	635	10,644
Financial and insurance activities	36,775	18,007	18,768	25,255	11,520	3,754	33,021
Real estate activities	4,977	4,113	864	4,228	749	570	4,407
Professional, scientific and technical activities	25,247	16,261	8,986	19,207	6,041	1,594	23,653
Administrative and support service activities	77,547	51,493	26,054	41,312	36,236	12,686	64,861
Public administration and defense	56,093	40,720	15,372	45,617	10,475	3,098	52,994
Education	164,997	83,928	81,069	66,775	98,221	37,437	127,560
Human health and social work activities	43,905	21,698	22,207	32,778	11,127	5,007	38,898
Arts, entertainment and recreation	9,452	6,577	2,875	7,572	1,880	621	8,831
Other service activities	109,800	65,433	44,367	64,750	45,050	21,978	87,822
Activities of households as employers	162,606	59,892	102,714	128,486	34,120	6,930	155,676
Activities of extraterritorial organizations and bodies	4,259	3,187	1,072	3,876	383	516	3,743

Table C. 21: Employed population by sex, branch of economic activity and level of educational attainment, RLFS 2023

	Total	None	Primary	Lower secondary	Upper secondary	University
Employed population	**3,958,817**	**1,857,068**	**1,249,319**	**260,304**	**355,801**	**236,324**
Agriculture, forestry and fishing	1,720,078	1,119,825	513,729	56,209	24,474	5,840
Mining and quarrying	49,968	26,818	16,888	4,072	1,476	715
Manufacturing	217,799	77,017	82,979	28,797	20,368	8,638
Electricity, gas, steam and air conditioning supply	5,377	407	1,207	799	669	2,296
Water supply, sewerage and waste management	2,693	920	443	259	790	281
Construction	386,365	172,734	139,281	35,471	27,360	11,520
Wholesale, retail trade, repair of motor vehicles, motorcycles	515,948	172,406	176,317	50,022	82,824	34,379
Transportation and storage	231,489	104,105	85,448	19,278	17,263	5,397
Accommodation and food service activities	122,162	37,702	43,026	11,756	23,993	5,684
Information and communication	11,279	469	1,362	624	3,393	5,431
Financial and insurance activities	36,775	2,460	7,164	3,231	11,979	11,940
Real estate activities	4,977	1,450	1,991	175	686	676
Professional, scientific and technical activities	25,247	628	3,232	906	6,972	13,510
Administrative and support service activities	77,547	24,924	27,680	6,807	11,717	6,419
Public administration and defense	56,093	3,276	6,967	6,448	14,056	25,346
Education	164,997	9,844	14,653	4,398	79,588	56,513
Human health and social work activities	43,905	2,196	3,618	1,868	8,371	27,851
Arts, entertainment and recreation	9,452	1,541	1,298	253	4,572	1,788
Other service activities	109,800	37,133	40,405	12,962	10,606	8,694
Activities of households as employers	162,606	61,215	81,247	15,335	4,643	166
Activities of extraterritorial organizations and bodies	4,259	0	383	633	0	3,242
Employed population (Male)	**2,176,709**	**978,924**	**719,735**	**147,601**	**193,462**	**136,986**
agriculture forestry and fishing	781,372	491,858	248,770	25,651	11,204	3,890
mining and quarrying	44,703	24,698	14,726	3,706	1,322	251
manufacturing	122,699	47,528	48,300	11,434	10,584	4,853
electricity gas stream and air conditioning supply	3,749	74	699	542	648	1,786
water supply, gas and remediation services	1,512	458	229	209	425	192
construction	338,939	146,488	124,742	32,528	25,810	9,371
whole sale and retail trade; repair of motor vehicles and motorcycles	216,654	72,404	74,765	22,973	35,901	10,611
transportation and storage	222,008	99,723	83,570	18,479	16,423	3,814
accommodation and food services activities	65,806	20,308	24,010	5,397	11,822	4,269
information and communication	7,957	343	938	624	2,266	3,786
financial and insurance activities	18,007	1,560	4,683	1,339	5,585	4,840
Real estate activities	4,113	1,291	1,782	175	686	179
professional, scientific and technical activities	16,261	479	2,490	407	4,255	8,630
administrative and support activities	51,493	15,006	19,553	4,870	7,810	4,254

	Total	None	Primary	Lower secondary	Upper secondary	University
public administration and defense; compulsory social security	40,720	2,595	6,748	5,636	9,935	15,807
education	83,928	4,459	6,337	1,780	33,292	38,060
human health and social work activities	21,698	885	2,282	844	4,162	13,525
arts, entertainment and recreation	6,577	560	1,175	0	3,687	1,154
other services	65,433	23,529	24,780	5,965	6,294	4,863
activities of house13holds as employers	59,892	24,677	29,156	4,542	1,352	166
activities of extraterritorial organizations and bodies	3,187	0	0	500	0	2,686
Employed population (Female)	**1,782,108**	**878,144**	**529,584**	**112,702**	**162,339**	**99,338**
Agriculture, forestry and fishing	938,705	627,967	264,959	30,558	13,270	1,950
Mining and quarrying	5,265	2,119	2,162	365	154	464
Manufacturing	95,100	29,489	34,679	17,363	9,784	3,785
Electricity, gas, steam and air conditioning supply	1,628	332	508	257	22	510
Water supply, sewerage and waste management	1,181	463	214	50	365	89
Construction	47,426	26,245	14,539	2,943	1,550	2,148
Wholesale, retail trade, repair of motor vehicles, motorcycles	299,295	100,002	101,552	27,049	46,923	23,768
Transportation and storage	9,481	4,382	1,878	799	840	1,583
Accommodation and food service activities	56,356	17,395	19,016	6,359	12,171	1,415
Information and communication	3,322	126	424	0	1,127	1,644
Financial and insurance activities	18,768	899	2,481	1,892	6,394	7,101
Real estate activities	864	159	209	0	0	496
Professional, scientific and technical activities	8,986	149	742	498	2,717	4,880
Administrative and support service activities	26,054	9,917	8,128	1,937	3,907	2,165
Public administration and defense	15,372	681	220	812	4,121	9,539
Education	81,069	5,386	8,316	2,618	46,297	18,453
Human health and social work activities	22,207	1,310	1,337	1,024	4,209	14,326
Arts, entertainment and recreation	2,875	981	123	253	885	634
Other service activities	44,367	13,603	15,624	6,997	4,312	3,830
Activities of households as employers	102,714	36,538	52,091	10,793	3,291	0
Activities of extraterritorial organizations and bodies	1,072	0	383	133	0	556

Table C. 22: Employed population by sex, status in employment, and urban/rural area, RLFS 2023

	Total	Sex		Area of Residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	3,958,817	2,176,709	1,782,108	1,399,480	2,559,337	1,274,992	2,683,824
Employee, Paid apprentice/intern	2,726,348	1,514,945	1,211,403	879,997	1,846,352	991,744	1,734,604
Employer	50,632	29,685	20,947	30,237	20,395	9,058	41,573
Own-account worker	1,067,575	606,842	460,733	451,168	616,407	256,901	810,674
Member of cooperative	6,252	4,002	2,250	2,804	3,448	615	5,637
Contributing family worker	108,009	21,235	86,774	35,273	72,736	16,673	91,336

Table C. 23 Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, RLFS 2023

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employed population	3,958,817	2,176,709	1,782,108	1,399,480	786,622	612,858	2,559,337	1,390,087	1,169,249
less than 24 hours	998,233	465,572	532,661	225,568	105,812	119,756	772,666	359,760	412,905
25-34 hours	543,566	268,443	275,123	120,868	67,926	52,942	422,698	200,517	222,180
35-40 hours	1,090,771	579,511	511,260	312,374	165,011	147,364	778,397	414,500	363,897
41-48 hours	552,077	344,947	207,130	274,606	159,412	115,194	277,471	185,534	91,937
49-61 hours	484,113	320,225	163,887	286,463	173,554	112,909	197,650	146,672	50,978
62-79 hours	229,299	150,383	78,917	139,075	84,254	54,820	90,225	66,128	24,096
80 hours+	60,757	47,628	13,129	40,526	30,653	9,873	20,230	16,975	3,255

Table C. 24 Employees by sex, duration of employment contract at main job and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Total employees/paid apprentices 16 +	2,726,348	1,514,945	1,211,403	879,997	1,846,352	879,997	1,846,352
Permanent (without a known limited duration)	656,006	371,335	284,671	384,588	271,418	111,031	544,975
Temporary contract	2,070,342	1,143,610	926,732	495,408	1,574,934	880,713	1,189,629
- Day	1,780,499	964,042	816,457	341,688	1,438,812	833,768	946,732
- Week	27,214	19,586	7,627	8,542	18,672	7,870	19,344
- Month	157,280	94,302	62,978	84,413	72,867	22,262	135,019
- Less than one year	34,341	21,910	12,431	16,425	17,916	6,439	27,902
- One year or more	71,008	43,770	27,238	44,341	26,666	10,375	60,633

Table C. 25: Employed population by sex, formal/informal sector employment, status in employment at main job and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Employed population 16+ in formal and informal sector	3806935	2123186	1683749	1276771	2530164	75638	466489
Formal sector	542,126	334,109	208,017	336,582	205,544	72,495	424,567
Employee	497,062	308,286	188,775	298,190	198,872	1,016	12,562
Employer (with regular employees)	13,578	8,829	4,749	12,360	1,218	1,497	22,190
Own-account worker(without regular employment	23,687	14,005	9,683	20,381	3,306	63	3,449
Member of cooperative	3,511	2,015	1,496	1,897	1,614	567	3,722
Contributing family worker	4,289	974	3,315	3,754	535	75,638	466,489
Informal sector	3,264,809	1,789,077	1,475,732	940,189	2,324,620	1,195,102	2,069,707
- Employee	2,078,038	1,153,346	924,692	459,520	1,618,518	915,117	1,162,921
- Employer	37,054	20,856	16,199	17,878	19,176	8,042	29,012
- Own-account worker	1,043,256	592,628	450,629	430,365	612,891	255,284	787,973
- Member of cooperative	2,741	1,986	754	907	1,834	552	2,188
- Contributing family worker	103,720	20,261	83,459	31,519	72,201	16,107	87,614
Formal sector out of agriculture	517,009	317,811	199,198	331,836	185,173	64,613	452,396
Employee	475,285	294,154	181,131	294,394	180,891	61,470	413,814
Employer (with regular employees)	13,251	8,502	4,749	12,360	891	1,016	12,235
account worker(without regular employee)	23,101	13,445	9,656	20,321	2,780	1,497	21,603
Member of cooperative	1,177	829	348	1,100	77	63	1,114
Contributing family worker	4,196	881	3,315	3,661	535	567	3,629
Informal sector out of agriculture	1,569,849	1,024,003	545,847	751,246	818,603	391,693	1,178,156
- Employee	662,919	530,819	132,100	311,935	350,984	151,954	510,965
- Employer	24,811	14,523	10,288	12,800	12,010	5,849	18,961
- Own-account worker	834,348	466,376	367,973	402,922	431,426	220,191	614,158
- Member of cooperative	1,367	1,054	313	581	786	414	953
- Contributing family worker	46,405	11,232	35,173	23,007	23,397	13,285	33,120

Table C. 26: Formal and informal employment by sex, branch of economic activity, RLFS 2023

Economic activity	Total			Male		Female	
	Total	Formal employment	Informal employment	Formal employment	Informal employment	Formal employment	Informal employment
Total	3,958,817	360,803	3,598,014	221,428	1,955,281	139,375	1,642,733
Agriculture, forestry and fishing	1,720,078	4,645	1,715,433	3,584	777,788	1,061	937,644
Mining and quarrying	49,968	2,601	47,368	2,094	42,610	507	4,758
Manufacturing	217,799	19,738	198,061	14,472	108,227	5,266	89,834
Electricity, gas, steam and air conditioning supply	5,377	2,044	3,334	1,533	2,216	510	1,118
Water supply, sewerage and waste management	2,693	1,361	1,332	1,132	380	229	951
Construction	386,365	5,609	380,756	4,303	334,637	1,306	46,119
Wholesale, retail trade, repair of motor vehicles, motorcycles	515,948	28,812	487,136	13,968	202,685	14,844	284,451
Transportation and storage	231,489	7,443	224,046	5,504	216,504	1,939	7,542
Accommodation and food service activities	122,162	11,454	110,708	9,053	56,754	2,402	53,954
Information and communication	11,279	5,062	6,217	3,663	4,294	1,400	1,923
Financial and insurance activities	36,775	12,828	23,947	6,589	11,418	6,238	12,529
Real estate activities	4,977	723	4,254	472	3,641	252	612
Professional, scientific and technical activities	25,247	11,289	13,959	7,906	8,355	3,382	5,604
Administrative and support service activities	77,547	18,381	59,167	13,749	37,745	4,632	21,422
Public administration and defense	56,093	51,352	4,740	38,221	2,499	13,131	2,241
Education	164,997	129,996	35,001	68,265	15,662	61,730	19,339
Human health and social work activities	43,905	30,913	12,992	15,251	6,447	15,662	6,545
Arts, entertainment and recreation	9,452	2,157	7,295	1,610	4,966	547	2,329
Other service activities	109,800	10,593	99,207	6,813	58,620	3,780	40,587
Activities of households as employers	162,606	59	162,547	59	59,833	0	102,714
Activities of extraterritorial organizations and bodies	4,259	3,743	516	3,187	0	556	516

Table C. 27 Formal and informal Sector by sex, branch of economic activity, RLFS 2023

	Total			Male		Female	
	Formal/Informal sector employment			**Formal/Informal sector employment**		**Formal/Informal sector employment**	
	Total	Informal sector	Formal sector	Informal sector	Formal sector	Informal sector	Formal sector
Total	3,806,936	3,264,809	542,126	1,789,077	334,109	1,475,732	208,017
Agriculture, forestry and fishing	1,720,078	1,694,960	25,118	765,074	16,298	929,886	8,819
Mining and quarrying	49,968	36,653	13,315	33,281	11,422	3,372	1,893
Manufacturing	217,799	166,302	51,497	91,548	31,150	74,753	20,347
Electricity, gas, steam and air conditioning supply	5,377	1,593	3,784	833	2,916	760	868
Water supply, sewerage and waste management	2,693	351	2,342	0	1,512	351	829
Construction	386,365	364,833	21,532	323,473	15,466	41,360	6,066
Wholesale, retail trade, repair of motor vehicles, motorcycles	515,948	461,967	53,981	187,829	28,824	274,138	25,157
Transportation and storage	231,489	218,830	12,660	211,639	10,369	7,191	2,290
Accommodation and food service activities	122,162	98,507	23,655	49,738	16,068	48,769	7,587
Information and communication	11,279	4,016	7,263	2,987	4,970	1,030	2,293
Financial and insurance activities	36,775	21,510	15,265	9,587	8,420	11,923	6,844
Real estate activities	4,977	3,924	1,053	3,312	801	612	252
Professional, scientific and technical activities	25,247	10,105	15,142	6,358	9,903	3,747	5,239
Administrative and support service activities	77,547	43,217	34,331	26,654	24,840	16,563	9,491
Public administration and defense	56,093	370	55,723	370	40,350	0	15,372
Education	164,997	20,999	143,998	7,189	76,738	13,809	67,259
Human health and social work activities	43,905	4,800	39,105	2,447	19,251	2,353	19,854
Arts, entertainment and recreation	9,452	4,394	5,058	3,025	3,552	1,370	1,506
Other service activities	109,800	96,639	13,161	57,130	8,303	39,509	4,858
Activities of households as employers	10,725	10,413	312	6,311	59	4,103	253
Activities of extraterritorial organizations and bodies	4,259	425	3,834	292	2,894	133	939

Table C. 28 Average number of hours usually worked per week at main job by sex, branch of economic activity, urban/rural area, RLFS 2023

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employed population	36.2	38.4	33.5	42.9	44.6	40.6	32.6	34.9	29.7
Agriculture, forestry and fishing	29.3	30.8	28.1	30.2	33.9	27.6	29.2	30.5	28.2
Mining and quarrying	39.7	40.2	35.1	38.8	38.4	39.7	39.8	40.4	33.1
Manufacturing	38.1	40.5	35.0	41.8	43.6	39.4	35.5	38.4	31.8
Electricity, gas, steam and air conditioning supply	43.9	47.0	36.9	41.3	43.2	34.7	53.4	73.3	40.0
Water supply, sewerage and waste management	49.9	49.0	51.0	50.2	49.5	51.2	49.3	48.0	50.7
Construction	36.3	37.0	31.6	38.2	38.5	35.6	34.8	35.7	28.3
Wholesale, retail trade, repair of motor vehicles, motorcycles	40.8	43.6	38.8	45.5	48.5	43.4	34.0	36.8	31.9
Transportation and storage	43.3	43.9	28.3	46.9	47.4	34.9	40.1	40.8	22.6
Accommodation and food service activities	43.3	46.4	39.7	49.9	53.4	45.5	36.1	38.3	33.8
Information and communication	42.7	45.7	35.5	44.8	44.9	44.2	32.3	51.4	12.7
Financial and insurance activities	46.5	47.6	45.4	48.4	49.6	47.4	42.3	43.8	40.7
Real estate activities	43.8	43.0	47.5	42.4	41.1	47.5	51.6	51.6	0.0
Professional, scientific and technical activities	39.7	37.9	43.0	43.3	43.2	43.4	28.4	22.9	41.5
Administrative and support service activities	48.3	55.0	35.1	49.3	53.9	41.7	47.1	56.0	24.8
Public administration and defense	51.4	54.7	42.6	50.5	53.4	42.9	55.2	60.2	41.0
Education	40.8	43.0	38.6	41.8	43.1	40.2	40.2	42.8	37.6
Human health and social work activities	44.4	46.6	42.3	44.6	46.9	42.5	43.9	45.7	41.7
Arts, entertainment and recreation	43.3	44.3	41.2	44.0	44.8	42.1	40.6	42.0	38.1
Other service activities	36.0	40.1	30.0	37.6	44.8	30.1	33.6	35.2	29.6
Activities of households as employers	52.7	50.5	54.0	53.1	51.4	53.9	51.1	48.7	54.2
Activities of extraterritorial organizations and bodies	38.1	40.8	30.2	40.3	40.8	38.1	16.0	0.0	16.0

Table C. 29: Average monthly cash income from employment of employees at main job by sex, age group, level of educational attainment, occupation group and urban/rural area, RLFS 2023

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (16+ yrs)	68,951	83,162	51,287	131,096	151,955	100,531	39,378	46,793	30,845
age group									
16-24 yrs	38,370	42,756	33,209	51,406	60,937	41,677	31,653	34,289	28,315
25-34 yrs	72,344	82,694	58,626	121,152	132,073	105,019	44,244	52,137	34,408
35-54 yrs	86,427	108,099	59,264	186,895	208,320	147,225	42,361	52,719	31,344
55-64 yrs	57,432	71,667	42,414	150,648	177,593	114,915	31,723	38,204	25,300
65+yrs	57,313	76,473	31,489	191,028	231,002	89,431	27,940	31,572	23,634
Education level									
None	33,557	39,758	27,003	48,190	59,611	34,671	29,877	34,417	25,212
Primary	45,955	58,285	28,373	67,722	87,665	33,439	36,279	43,750	26,456
Lower secondary	70,023	84,502	43,736	92,843	111,971	56,925	46,638	55,666	30,800
Upper secondary	110,585	123,072	93,418	121,451	136,418	97,488	96,278	102,690	89,027
University	371,027	404,460	319,699	402,382	447,229	339,778	221,632	238,373	179,663
Occupation group									
Managers	654,398	713,826	549,630	662,526	674,310	639,125	573,568	1,421,264	76,827
Professionals	216,029	247,085	176,087	288,287	324,924	237,205	126,558	142,783	107,655
Technicians and associate professions	305,410	316,891	278,455	343,450	356,123	313,667	121,808	127,188	109,242
Clerical support workers	165,239	149,770	177,000	183,107	176,786	186,934	82,821	81,165	86,419
Service and sales workers	74,399	69,724	85,182	95,540	89,651	106,864	40,995	42,481	36,280
Skilled agricultural, forestry and fishery workers	43,190	44,688	40,544	119,357	125,334	113,553	32,683	36,367	25,576
Craft and related trades workers	114,123	117,757	73,108	136,905	140,797	92,598	90,188	93,516	52,964
Plant and machine operators, and assemblers	161,681	163,346	51,298	177,329	179,844	51,298	112,146	112,146	-
Elementary occupations	32,956	38,415	27,462	45,256	56,638	33,948	29,406	33,200	25,574

Table C. 30 Median monthly cash income from employment of employees at main job by sex, age group, level of educational attainment, occupation group and urban/rural area, RLFS 2023

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (16+ yrs)	26,000	39,000	26,000	60,000	78,000	39,000	26,000	26,000	20,800
age group									
16-24 yrs	26,000	26,000	26,000	26,000	39,000	20,800	26,000	26,000	26,000
25-34 yrs	36,400	50,000	26,000	75,000	78,000	50,000	26,000	31,200	26,000
35-54 yrs	30,000	39,000	26,000	78,000	100,000	50,000	26,000	26,000	26,000
55-64 yrs	26,000	26,000	26,000	66,667	121,333	39,000	26,000	26,000	26,000
65+ yrs	26,000	26,000	20,800	39,000	55,000	26,000	26,000	26,000	20,800
Education level									
None	26,000	26,000	26,000	32,000	40,000	26,000	26,000	26,000	26,000
Primary	26,000	37,500	26,000	40,000	65,000	26,000	26,000	30,000	26,000
Lower secondary	40,150	52,000	26,000	60,000	70,000	39,000	31,200	39,000	26,000
Upper secondary	100,000	103,000	100,000	100,000	104,000	80,000	100,000	100,000	100,000
University	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	180,000
Occupation group									
Managers	200,000	250,000	200,000	250,000	200,000	300,000	120,000	1,500,000	90,000
Professionals	150,000	190,000	120,000	200,000	200,000	190,000	114,000	120,000	108,000
Technicians and associate professions	200,000	200,000	200,000	200,000	200,000	200,000	106,000	100,000	112,000
Clerical support workers	130,000	108,333	150,000	170,000	200,000	150,000	91,000	100,000	91,000
Service and sales workers	50,000	50,000	50,000	60,000	60,000	66,667	30,000	30,000	30,000
Skilled agricultural, forestry and fishery workers	26,000	26,000	26,000	100,000	100,000	50,000	26,000	26,000	26,000
Craft and related trades workers	104,000	104,000	45,000	130,000	130,000	45,000	78,000	85,000	41,600
Plant and machine operators, and assemblers	130,000	130,000	40,000	150,000	150,000	40,000	100,000	100,000	0
Elementary occupations	26,000	26,000	26,000	31,200	40,000	26,000	26,000	26,000	26,000

Table C. 31 Size distribution of monthly cash income from employment of employees at main job by sex and urban/rural area, RLFS 2023

	Total	Rwanda			Urban			Rural		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	2,726,348	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 20,000 RWF	380,581	14.0	11.3	17.3	8.9	6.0	13.1	16.4	14.0	19.1
20,000 – 29,999 RWF	1,004,138	36.8	28.9	46.8	16.3	10.2	25.4	46.6	38.8	55.7
30,000 – 49,999 RWF	475,795	17.5	17.4	17.5	15.9	13.5	19.4	18.2	19.4	16.8
50,000 – 99,999 RWF	397,077	14.6	20.0	7.8	23.1	27.3	16.8	10.5	16.1	4.0
100,000 RWF and above	448,501	16.5	21.4	10.2	35.0	42.0	24.7	7.6	10.5	4.2
Not stated	20,256	0.7	1.0	0.4	0.8	1.0	0.7	0.7	1.0	0.3

Table C. 32: Median/Mean cash income from employment of employees at main job by Quintiles, sex and urban/rural area, RLFS 2023

Median	Total	Rwanda			Urban			Rural		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	2,706,093	26,000	31,330	26,000	60,000	78,000	39,000	26,000	26,000	26,000
Quintile1	639,129	18,200	18,200	18,200	15,000	15,000	15,000	18,200	18,200	18,200
Quintile2	754,596	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000
Quintile3	488,580	36,000	37,500	34,667	37,500	35,000	37,500	34,667	39,000	31,200
Quintile4	425,666	65,000	65,000	62,400	65,000	65,000	65,000	62,400	64,000	58,500
Quintile5	398,123	180,000	156,000	198,000	200,000	200,000	200,000	130,000	130,000	129,000
Mean	**Total**	**Rwanda**			**Urban**			**Rural**		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	24,970	68,950	83,162	51,287	131,096	151,955	100,531	39,378	46,793	30,845
Quintile1	639,129	17,146	16,897	17,336	16,813	16,443	17,047	17,237	17,005	17,423
Quintile2	754,596	25,988	25,997	25,981	26,123	26,108	26,132	25,970	25,985	25,958
Quintile3	488,580	36,872	37,756	35,706	37,711	38,304	37,070	36,546	37,567	35,087
Quintile4	425,666	69,699	69,999	68,812	70,424	71,483	67,957	68,889	68,550	70,248
Quintile5	398,123	272,111	271,671	273,274	312,981	311,303	317,183	170,991	178,599	147,822

Table C. 33: Youth and Young Population by sex, and residential area, RLFS 2023

	Age Group	Sex			Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Total	Male	Female	Urban	Rural		
Young Population 16-30yrs		3,495,825	1,692,395	1,803,429	1,171,723	2,324,102	891,741	2,604,083
Employed	16-24 yrs	852,018	476,197	375,821	280,042	571,976	196,410	655,608
	16-30 yrs	1,555,238	859,099	696,139	561,477	993,761	380,126	1,175,112
Unemployed	16-24 yrs	254,880	121,270	133,610	77,145	177,735	93,107	161,773
	16-30 yrs	408701	174,706	233,995	473,582	1,058,304	159,528	249,173
Outside Labour Force	16-24 yrs	1,266,810	579,428	687,382	398,212	868,598	229,994	1,036,816
	16-30 yrs	1,531,886	658,591	873,295	473,582	1,058,304	352,088	1,179,798

Table C. 34: Young population 16–30 years old by sex, level of educational attainment, labour force status and urban/rural area, RLFS 2023

	Total	Labour force status				Labour force participation rate	Employment-to population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Young population 16-30 yrs	3495825	1963939	1555238	408701	1531886	56.2	44.5	20.8
None	1134402	737934	610378	127556	396469	65.1	53.8	17.3
Primary	1307538	703458	557893	145565	604081	53.8	42.7	20.7
Lower secondary	566789	201918	157252	44666	364871	35.6	27.7	22.1
Upper secondary	395055	246764	172651	74113	148291	62.5	43.7	30.0
University	92040	73866	57064	16802	18174	80.3	62.0	22.7
Young population 16-30 yrs (Male)	1692395	1033805	859099	174706	658591	61.1	50.8	16.9
None	617604	417022	354093	62929	200582	67.5	57.3	15.1
Primary	616763	371595	309540	62055	245168	60.2	50.2	16.7
Lower secondary	243124	96126	81109	15017	146998	39.5	33.4	15.6
Upper secondary	167424	111237	84300	26937	56188	66.4	50.4	24.2
University	47480	37825	30057	7768	9655	79.7	63.3	20.5
Young population 16-30 yrs (Female)	1803429	930134	696139	233995	873295	51.6	38.6	25.2
None	516799	320912	256285	64627	195886	62.1	49.6	20.1
Primary	690775	331863	248353	83510	358913	48.0	36.0	25.2
Lower secondary	323665	105791	76143	29648	217873	32.7	23.5	28.0
Upper secondary	227631	135527	88351	47176	92104	59.5	38.8	34.8
University	44560	36041	27007	9034	8519	80.9	60.6	25.1
Young population 16-30 yrs (Urban)	1171723	698141	561477	136664	473582	59.6	47.9	19.6

	Total	Labour force status				Labour force participation rate	Employment-to population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
None	238822	168810	142681	26129	70012	70.7	59.7	15.5
Primary	372371	220825	187654	33171	151546	59.3	50.4	15.0
Lower secondary	234936	90892	73891	17001	144044	38.7	31.5	18.7
Upper secondary	245283	151174	106305	44869	94109	61.6	43.3	29.7
University	80312	66441	50946	15495	13871	82.7	63.4	23.3
Young population 16-30 yrs (Rural)	2324102	1265798	993761	272037	1058304	54.5	42.8	21.5
None	895581	569124	467697	101427	326457	63.5	52.2	17.8
Primary	935167	482633	370239	112394	452535	51.6	39.6	23.3
Lower secondary	331853	111026	83361	27665	220827	33.5	25.1	24.9
Upper secondary	149772	95590	66346	29244	54182	63.8	44.3	30.6
University	11728	7425	6118	1307	4303	63.3	52.2	17.6

Table C. 35: Youth Unemployed by sex, duration of seeking employment, and urban/rural area, RLFS 2023

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Youth Unemployed (16-24 yrs) who searched for job	245,130	116,441	128,690	30,349	44,458	86,092	84,232
0 – less than 3 months	115,715	57,991	57,725	15,763	13,740	42,227	43,985
3 – less than 6 months	57,613	27,468	30,145	5,252	12,397	22,216	17,748
6 – less than 12 months	29,308	13,391	15,917	4,130	7,089	9,261	8,828
1 – less than 2 years	22,727	9,399	13,328	2,067	6,542	7,331	6,786
2 years or more	19,767	8,193	11,574	3,137	4,690	5,056	6,884

Table C. 36: Young Unemployed by sex, duration of seeking employment, and urban/rural area, RLFS 2023

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Young Unemployed (16-30 yrs)	394,762	169,188	225,574	48,937	84,063	120,250	141,512
0 – less than 3 months	186,575	86,031	100,544	23,735	25,552	62,296	74,992
3 – less than 6 months	87,166	37,091	50,075	8,762	22,078	28,329	27,997
6 – less than 12 months	45,134	18,187	26,947	6,031	12,584	12,156	14,363
1 – less than 2 years	40,253	15,151	25,101	4,523	13,726	10,628	11,375
2 years or more	35,634	12,727	22,907	5,885	10,122	6,842	12,785

Table C. 37: Youth not in employment and not currently in education or training by sex, age group, and urban/rural area, RLFS 2023

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Young not in employment nor in education (16-30 yrs)	1,148,779	437,762	711,017	95,613	207,726	342,149	503,291
16-19 yrs	353,827	181,702	172,125	29,306	43,167	152,397	128,958
20-24 yrs	403,775	139,762	264,013	36,944	73,757	102,818	190,256
25-30 yrs	391,177	116,298	274,879	29,363	90,802	86,935	184,077
None	436,431	209,288	227,143	28,866	45,382	180,422	181,761
Primary	427,809	146,121	281,688	23,690	61,979	122,431	219,709
Lower secondary	121,787	32,925	88,862	9,728	30,887	23,198	57,975
Upper secondary	142,134	41,071	101,064	26,087	58,999	14,984	42,065
University	20,617	8,357	12,260	7,242	10,479	1,115	1,781

Table C. 38: Unemployed population by sex, broad age group and urban/rural area, RLFS 2023

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Unemployed population 16+	824,597	369,762	454,835	262,863	561,734	397,843	426,754
16-24 yrs	254,880	121,270	133,610	77,145	177,735	93,107	161,773
25-34 yrs	250,426	91,628	158,798	88,088	162,339	115,707	134,719
35-54 yrs	274,147	131,722	142,425	85,305	188,842	161,381	112,767
55-64 yrs	36,678	20,258	16,420	9,785	26,893	23,674	13,003
65+ yrs	8,465	4,884	3,581	2,541	5,925	3,973	4,492

Table C. 39: Unemployed population by sex, level of educational and urban/rural area, RLFS 2023

	Total	sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Unemployed population 16+	824,597	369,762	454,835	262,863	561,734	397,843	426,754
None	347,071	157,469	189,603	71,265	275,806	190,987	156,085
Primary	267,654	125,810	141,844	65,129	202,525	146,833	120,822
Lower secondary	63,763	24,508	39,255	25,554	38,209	27,124	36,639
Upper secondary	107,154	43,476	63,677	65,580	41,574	30,191	76,963
University	38,955	18,500	20,455	35,335	3,620	2,709	36,246

Table C. 40 Unemployed population (who looked for a job) by sex, method of seeking employment, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Unemployed population who looked for a job	766,777	344,315	422,462	240,341	526,437	372,854	393,924
Arranging for financial resources, applying for permits, licenses	135,256	47,920	87,336	54,195	81,061	63,154	72,101
Looking for land, premises, machinery, supplies, farming inputs	17,704	8,712	8,992	4,320	13,384	8,034	9,670
Seeking the assistance of friends, relatives or other types of intermediaries	246,942	125,345	121,597	77,424	169,518	118,144	128,798
Registering with or contacting public or private employment services	43,328	20,334	22,994	20,177	23,151	21,192	22,136
Applying to employers directly, checking at worksites, farms, factory gates, markets	295,030	131,527	163,503	65,771	229,260	155,594	139,436
Placing or answering newspaper or online job advertisements	19,607	7,888	11,718	12,496	7,110	5,293	14,314
Placing and updating resumes on professional or social networking sites online	8,800	2,588	6,211	5,847	2,952	1,332	7,468
Other method	110	-	110	110	-	110	-

Note: Details may not add to totals because unemployed persons may be using more than one method of seeking employment during the reference period on job search.

Table C. 41: Unemployed population (who looked for a job) by sex, duration of seeking employment, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Unemployed population 16+	790,748	357,499	433,249	253,662	537,086	380,972	409,776
Less than 3 months	417,310	193,195	224,115	105,902	311,409	221,792	195,518
Less than 6 months	167,850	81,432	86,418	52,355	115,496	76,663	91,188
Less than 12 months	71,568	31,076	40,492	29,420	42,148	29,537	42,031
1 year to less than 2 years	68,586	26,840	41,746	32,020	36,566	28,500	40,086
2 years and above	65,433	24,955	40,478	33,965	31,468	24,480	40,953

Table C. 42: Time related under employment by age group sex and area of residence, RLFS 2023

Age group		Sex		Residence area	
	Total	Male	Female	Urban	Rural
Total	**1,165,285**	**595,034**	**570,251**	**282,416**	**882,869**
16-24 yrs	247,533	137,423	110,110	55,950	191,583
25-34 yrs	365,387	182,303	183,083	96,618	268,769
35-54 yrs	462,426	234,139	228,287	114,736	347,691
55-64 yrs	72,267	31,231	41,036	13,163	59,105
65+ yrs	17,672	9,938	7,734	1,949	15,723

Table C. 43: Time-related underemployed persons by sex, main branch of economic activity and urban-rural areas, RLFS 2023

ISIC High level	Total	Sex		Residence area	
		Male	Female	Urban	Rural
Total	1,165,285	595,034	570,251	282,416	882,869
Agriculture forestry and fishing	659,830	286,165	373,665	79,680	580,150
Mining and quarrying	12,369	10,564	1,805	1,834	10,535
Manufacturing	53,532	25,815	27,718	17,132	36,400
Electricity gas stream and air conditioning supply	824	671	153	798	26
Construction	116,790	116,790	16,396	59,081	74,104
Whole sale and retail trade; repair of motor vehicles and motorcycles	48,224	48,224	82,280	50,223	80,281
Transportation and storage	56,422	56,422	4,462	22,477	38,406
Accommodation and food services activities	11,815	11,815	14,099	8,412	17,502
Information and communication	649	649	880	649	880
Financial and insurance activities	1,029	1,029	1,732	648	2,113
Real estate activities	654	654	228	781	101
Professional, scientific and technical activities	4,092	4,092	1,047	1,898	3,241
Administrative and support activities	4,455	4,455	7,944	5,389	7,010
Public administration and defense; compulsory social security	-	-	879	424	455
Education	3,490	3,490	9,888	3,562	9,816
Human health and social work activities	969	969	1,792	1,583	1,179
Arts, entertainment and recreation	1,056	1,056	419	1,299	177
Other services	17,431	17,431	21,282	21,348	17,365
Activities of households as employers	4,357	4,357	3,199	4,812	2,745
Activities of extraterritorial organizations and bodies	386	386	383	386	383

Table C. 44: Population outside the labour force by sex, degree of labour market attachment, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Population outside the labour force (16+)	3,288,548	1,236,549	2,051,999	810,441	2,478,107	1,390,525	1,898,023
Seeking but not available	16,472	6,337	10,135	4,680	11,792	6,620	9,852
Not seeking but available	1,324,006	473,260	850,746	295,916	1,028,090	803,845	520,161
Neither seeking nor available but want employment	124,486	41,215	83,271	33,265	91,221	41,674	82,812
Neither seeking nor available who do not want employment	1,823,584	715,737	1,107,847	476,580	1,347,005	538,386	1,285,199

Table C. 45: Population outside the labour force by sex, main source of livelihood, and urban/rural area, RLFS 2023

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Population outside the labour force (16+)	3,284,762	1,235,263	2,049,499	810,263	2,474,499	1,388,901	1,895,861
Parents	1,103,026	543,789	559,237	343,730	759,296	165,432	937,593
Husband/wife	425,623	53,850	371,772	160,649	264,973	160,224	265,399
Child	117,168	24,836	92,332	40,747	76,421	20,987	96,180
Other family members	189,794	73,084	116,710	85,033	104,762	27,406	162,388
Pension	14,062	9,796	4,266	7,505	6,557	3,857	10,206
Own production	1,210,373	448,403	761,970	102,212	1,108,162	939,633	270,740
Assistance received [VUP]	66,922	15,690	51,233	7,077	59,845	18,765	48,158
Assistance received [FARG]	9,220	1,764	7,456	1,439	7,782	2,653	6,568
Assistance received [Church, Other NGO]	5,165	2,302	2,864	817	4,348	1,581	3,584
Assistance from friends	34,990	11,237	23,753	13,802	21,189	6,133	28,858
Revenue from own property/savings	66,870	27,189	39,681	28,590	38,281	31,043	35,828
Past work	28,454	15,446	13,008	11,754	16,700	10,136	18,318
Scholarship	9,646	5,622	4,023	5,117	4,529	254	9,392
Other	3,449	2,255	1,194	1,793	1,656	799	2,650

Table C. 46: Working age population, by self-reported situation status

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Total	8,071,474	3,782,874	4,288,600	1,183,155	1,289,141	2,599,719	2,999,459
Working for pay or profit	2,271,538	1,306,457	965,081	543,548	397,449	762,909	567,632
Unemployed	2,643,213	1,261,944	1,381,270	368,858	471,249	893,086	910,020
Studying, in training	850,207	429,628	420,579	168,689	162,748	260,940	257,831
Household, family responsibilities	611,593	115,030	496,563	19,433	110,143	95,597	386,420
Farming or fishing mainly for household or family consumption	911,135	367,275	543,860	29,767	48,717	337,509	495,143
Long-term illness, injury or disability	340,444	144,190	196,254	24,531	36,294	119,659	159,960
Retired, pensioner, too old to work	434,332	153,462	280,870	26,866	61,425	126,596	219,445
Participated in National service activities (Urugerero)	3,964	1,471	2,493	159	870	1,312	1,623
Other(Specify)	5,047	3,416	1,631	1,305	246	2,111	1,385

Table C. 47: Average time spent in own-use production work by sex, type of own-use production and urban/rural area, RLFS 2023

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total own-use production	6,381,943	2,582,471	3,799,472	1,679,603	640,626	1,038,978	4,702,340	1,941,845	2,760,495
Collecting firewood for the household including travel time	4.800	4.400	5.100	5	4.500	5.300	4.800	4.400	5
Fetching water for the household, including travel time	4.200	4	4.300	4.100	3.600	4.300	4.200	4.100	4.200
Searching for fodder or grazing for the household's animals	9	10.10	8	8.300	9.400	7.400	9.100	10.20	8.100
Manufacturing household goods for own or family use	7.400	4.800	7.700	7.600	5.900	8.100	7.300	4.600	7.700
Constructing your dwelling, making major repairs on it, farm buildings, private roads, or wells	7.300	7.700	6.500	7.900	8.400	6.900	7.200	7.600	6.400
Doing household chores including shopping, preparing meals	10.30	5.800	12	10.90	6.800	12.80	10	5.300	11.70
Looking after children and elderly	7.400	4.500	8.200	9	5.300	10	6.800	4.100	7.500
Total number of persons(16+)	**8,071,962**	**3,783,020**	**4,288,942**	**2,472,784**	**1,183,301**	**1,289,483**	**5,599,178**	**2,599,719**	**2,999,459**
Collecting firewood for the household including travel time	1.800	1.200	2.300	0.700	0.400	1	2.300	1.500	2.900
Fetching water for the household, including travel time	1.800	1.500	2.100	1.100	0.800	1.300	2.200	1.900	2.500
Searching for fodder or grazing for the household's animals	3.100	3.500	2.800	0.700	0.800	0.700	4.200	4.800	3.700
Manufacturing household goods for own or family use	0.100	0	0.100	0	0	0	0.100	0	0.200
Constructing your dwelling, making major repairs on it, farm buildings, private roads, or wells	0.200	0.300	0.100	0.100	0.200	0.100	0.200	0.400	0.100
Doing household chores including shopping, preparing meals	6.400	2.100	10.20	6.400	2.500	9.900	6.400	1.900	10.40
Looking after children and elderly	2.200	0.600	3.700	2.600	0.700	4.300	2.100	0.600	3.400

Table C. 48 Average time spent per week on own-use production of goods of working age population by sex, age group, employment status, and urban/rural area, RLFS 2023

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (16+ yrs)	6.8	6.2	7.3	2.5	2	3	8.7	8.2	9.2
16-24 yrs	6.8	6.9	6.6	2.6	2.7	2.4	8.8	8.8	8.7
25-34 yrs	6.6	5.6	7.5	2.3	1.4	3.1	9.1	8	10.1
35-54 yrs	7.3	6.2	8.2	2.7	1.9	3.5	9.3	8.5	10.1
55-64 yrs	7.3	6.6	7.8	3	2.1	3.7	8.4	7.8	8.8
65+ yrs	5.1	4.6	5.4	2.2	2.1	2.3	5.7	5.1	6.1
Employed	6	5.1	7.1	2.1	1.6	2.6	8.2	7.1	9.5
Unemployed	8.6	9	8.3	3.5	2.7	4	11	11.6	10.6
Outside labour force	7.3	7.3	7.3	3	2.9	3.1	8.7	8.7	8.7

Table C. 49: Average time spent per week on own-use provision of services of working age population by sex, age group and urban/rural area, RLFS 2023

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (16+ years)	8.9	3	14	9.1	3.4	14.3	8.8	2.8	13.9
16-24 yrs	6.4	2.9	9.1	6.2	2.9	9.1	6.5	2.1	10.9
25-34 yrs	11.7	4.1	19.1	12.1	4.1	19.1	11.5	3.6	18.6
35-54 yrs	9.9	3.5	16.6	9.9	3.5	16.6	9.9	3.3	15.2
55-64 yrs	7.7	2.8	12	7.9	2.8	12	7.7	2.5	11.5
65-74 yrs	6.6	1.6	8.3	5.6	1.6	8.3	6.9	2.1	10.1
Employed	7.9	3.1	13.8	7.5	3.4	12.7	8.2	2.9	14.4
Unemployed	11.6	4.2	17.6	13.6	4.8	19.8	10.6	3.9	16.5
Outside labour force	9.3	2.5	13.4	10.3	2.8	14.5	9	2.4	13

Table C. 50: Internal and international migrants by labour force status, sex, urban/rural area, RLFS 2023

	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Total migrants (16+ yrs)	1,057,416	654,731	120,438	282,246	73.3	61.9	15.5
Male	496,392.0	372,022	41,233	83,138	83.3	74.9	10.0
Female	561,024.0	282,710	79,206	199,109	64.5	50.4	21.9
Urban	650,759	430186	69419	151154	119.1	100.6	15.5
Rural	406,657	224546	51020	131092	67.8	55.2	18.5
Internal migrants (16+ yrs)	996,149	623,715	113,097	259,337	74.0	62.6	15.3
Male	457,295	348,992	37,785	70,519	84.6	76.3	9.8
Female	538,854	274,724	75,312	188,818	65.0	51.0	21.5
Urban	619,276	414,287	65,311	139,677	77.4	66.9	13.6
Rural	376,873	209,428	47,786	119,660	68.2	55.6	18.6
International migrants (16+ yrs)	61,267	31,016	7,341	22,909	62.6	50.6	19.1
Male	39,096	23,030	3,448	12,619	67.7	58.9	13.0
Female	22,170	7,986	3,894	10,291	53.6	36.0	32.8
Urban	31,483	15,898	4,107	11,477	63.5	50.5	20.5
Rural	29,784	15,118	3,234	11,432	61.6	50.8	17.6

Table C. 51: Internal and international migrants by labour force status and main reason for migration, RLFS 2023

Main reason for migration	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Total migrants (16+ yrs)	1,057,416	654,731	120,438	282,246	73.3	61.9	15.5
Parents moved	70,403	20,160	7,871	42,372	39.8	28.6	28.1
To live with relatives	108,320	38,902	16,736	52,682	51.4	35.9	30.1
To attend school	40,464	12,084	6,537	21,843	46.0	29.9	35.1
Marriage	135,009	62,727	21,545	50,737	62.4	46.5	25.6
Family quarrel	12,755	4,485	2,211	6,059	52.5	35.2	33.0
Divorce	6,459	4,424	1,078	957	85.2	68.5	19.6
New job	117,939	109,937	3,721	4,281	96.4	93.2	3.3
Job transfer	18,013	16,619	690	704	96.1	92.3	4.0
To look for work	269,326	221,982	24,419	22,925	91.5	82.4	9.9
Looking for land to farm	27,911	14,214	4,532	9,165	67.2	50.9	24.2
Loss of employment	27,123	16,976	3,303	6,843	74.8	62.6	16.3
Employment of spouse	16,734	9,462	2,157	5,114	69.4	56.5	18.6
Coming back in country	202,986	120,756	25,566	56,663	72.1	59.5	17.5
Other	3,973	2,003	71	1,899	52.2	50.4	3.4
Internal migrants (16+ yrs)	996,149	623,715	113,097	259,337	74.0	62.6	15.3
Parents moved	66,543	18,797	7,682	40,065	39.8	28.2	29.0
To live with relatives	102,009	36,836	15,989	49,184	51.8	36.1	30.3
To attend school	36,166	11,719	5,364	19,083	47.2	32.4	31.4
Marriage	133,082	62,162	21,545	49,375	62.9	46.7	25.7
Family quarrel	12,475	4,205	2,211	6,059	51.4	33.7	34.5
Divorce	6,361	4,424	980	957	85.0	69.5	18.1
New job	112,771	104,864	3,721	4,187	96.3	93.0	3.4
Job transfer	17,853	16,459	690	704	96.1	92.2	4.0

Main reason for migration	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
To look for work	260,377	214,550	23,799	22,028	91.5	82.4	10.0
Looking for land to farm	27,532	14,214	4,153	9,165	66.7	51.6	22.6
Loss of employment	25,588	15,604	3,141	6,843	73.3	61.0	16.8
Employment of spouse	16,538	9,287	2,137	5,114	69.1	56.2	18.7
Coming back in country	175,255	108,754	21,616	44,885	74.4	62.1	16.6
Other	3,599	1,840	71	1,688	53.1	51.1	3.7
International migrants (16+ yrs)	61,267	31,016	7,341	22,909	62.6	50.6	19.1
Parents moved	3,860	1,363	190	2,307	40	35	12
To live with relatives	6,311	2,066	747	3,498	45	33	27
To attend school	4,298	365	1,174	2,760	36	8	76
Marriage	1,927	565	0	1,362	29	29	0
Family quarrel	281	281	0	0	100	100	0
Divorce	98	0	98	0	100	0	100
Found job	5,168	5,073	0	95	98	98	0
Job transfer	160	160	0	0	100	100	0
To look for work	8,949	7,432	620	897	90	83	8
Looking for land to farm	380	0	380	0	100	0	100
Loss of employment	1,535	1,372	163	0	100	89	11
Employment of spouse	195	175	20	0	100	90	0
Coming back in country	27,731	12,002	3,950	11,778	58	43	25
Other	374	163	0	212	44	44	0

Table C. 52: Migrant workers by sex, urban/rural area, prior place of residence and branch of economic activity, RLFS 2023

	Total	Male	Female	Urban	Rural	Internal migrants	External migrants
Total migrant workers (employed migrants)	654,731	372,022	282,710	430,186	224,546	623,715	31,016
Agriculture, forestry and fishing	140,325	73,368	66,958	27,553	112,772	133,305	7,020
Manufacturing	4,428	3,555	873	1,905	2,522	4,101	326
Mining and quarrying	32,535	18,361	14,173	22,504	10,030	30,393	2,142
Electricity, gas stream and air condition	1,577	1,264	313	1,545	32	1,401	175
Water supply, gas and remediation services	678	516	163	485	194	678	-
Construction	69,656	63,119	6,538	48,287	21,369	67,558	2,098
Wholesale and retail trade, repair of motor vehicles ...	100,407	48,778	51,628	80,755	19,652	96,253	4,154
Transportation and storage	35,670	34,380	1,290	23,281	12,389	32,672	2,998
Accommodation and food services	23,888	11,803	12,085	18,444	5,443	23,441	446
Information and communication	3,835	2,555	1,281	3,592	243	3,690	146
Financial and insurance activities	11,857	5,217	6,640	9,634	2,223	11,790	67
Real estate activities	482	482	-	482	-	297	185
Professional, scientific and technical activities	7,126	5,658	1,468	7,089	37	6,279	847
Administrative and support activities	17,690	12,571	5,119	15,267	2,423	17,168	522
Public administration and defence, compulsory ...	17,493	12,492	5,001	16,239	1,254	15,949	1,544
Education	37,503	20,428	17,075	23,058	14,445	36,023	1,480
Human health and social work activities	12,141	5,712	6,429	10,946	1,195	10,894	1,248
Arts, entertainment and recreation	2,526	2,040	486	2,043	482	2,104	422
Other services	22,263	10,111	12,153	16,210	6,053	21,446	818
Activities of households as employers	111,301	38,532	72,768	99,514	11,786	107,129	4,172
Activities of extraterritorial organizations	1,350	1,081	269	1,350	-	1,145	206

Table C. 53: Summary labour force indicators by District, RLFS 2023

	Employed	Unemployed	Outside labour force	Labour force participation rate	Employment-to-population ratio	LU1 - Unemployment rate	LU2 - Combined rate of unemployment and time-related underemployment	LU3 - Combined rate of unemployment and potential labour force	LU4 - Composite measure of labour underutilization
City of Kigali	726,895	144,711	375,067	69.9	58.3	16.6	30.2	27.8	39.7
Nyarugenge	158,403	31,474	88,358	68.2	56.9	16.6	34.2	28.5	43.5
Gasabo	343,159	74,999	177,601	70.2	57.6	17.9	31	29.4	40.6
Kicukiro	225,333	38,237	109,108	70.7	60.5	14.5	26.3	24.8	35.2
South province	**812,614**	**166,075**	**890,322**	**52.4**	**43.5**	**17**	**41.9**	**39.8**	**57.9**
Nyanza	89143	14488	109007	48.7	41.9	14	41.4	38.8	58.3
Gisagara	107818	28601	102199	57.2	45.2	21	55.6	41.2	67
Nyaruguru	78447	20044	95777	50.7	40.4	20.4	44	45.2	61.4
Huye	104015	28249	104592	55.8	43.9	21.4	48.1	42.4	62
Nyamagabe	93398	15136	100527	51.9	44.7	13.9	35.7	39.1	54.5
Ruhango	98587	15440	116134	49.5	42.8	13.5	46.9	38.8	62.4
Muhanga	89788	14431	120517	46.4	40	13.8	29.9	39.7	50.9
Kamonyi	151416	29686	141569	56.1	46.9	16.4	33.6	35.4	48.7
West Province	**740,229**	**161,818**	**694,399**	**56.5**	**46.4**	**17.9**	**50.6**	**37.9**	**62.7**
Karongi	89,788	23,857	96,732	54	42.7	21	55	44	68.1
Rutsiro	82,706	14,031	85,318	53.1	45.4	14.5	46.4	39.8	62.2
Rubavu	172,830	27,161	119,818	62.5	54	13.6	40.9	28.2	50.9
Nyabihu	121,497	19,476	74,399	65.5	56.4	13.8	57.4	27.5	64.2
Ngororero	105,467	20,423	79,967	61.2	51.2	16.2	48.6	34.5	59.8
Rusizi	90,515	32,130	130,481	48.5	35.8	26.2	51.4	49.3	66.7
Nyamasheke	77,427	24,740	107,685	48.7	36.9	24.2	61	47.3	72.9

	Employed	Unemployed	Outside labour force	Labour force participation rate	Employment-to-population ratio	LU1 - Unemployment rate	LU2 - Combined rate of unemployment and time-related underemployment	LU3 - Combined rate of unemployment and potential labour force	LU4 - Composite measure of labour underutilization
North Province	**618,209**	**145,257**	**537,541**	**58.7**	**47.5**	**19**	**46.5**	**37.7**	**58.9**
Rulindo	137,435	20,064	94,105	62.6	54.6	12.7	36.6	28.3	47.9
Gakenke	107,371	23,642	114,266	53.4	43.8	18	49.7	41.3	64
Musanze	148,452	40,237	112,369	62.7	49.3	21.3	53.4	38.6	63.6
Burera	108,823	24,874	99,450	57.3	46.7	18.6	47.5	37	59.4
Gicumbi	116,128	36,440	117,351	56.5	43	23.9	44.7	42.9	58.5
East province	**1,060,869**	**206,736**	**791,220**	**61.6**	**51.5**	**16.3**	**39.8**	**32.9**	**51.7**
Rwamagana	138,131	26,948	105,030	61.1	51.1	16.3	40.8	33.8	53.2
Nyagatare	187,320	40,944	153,627	59.8	49.1	17.9	38.8	33.7	50.6
Gatsibo	153,165	30,149	109,650	62.6	52.3	16.4	30.5	34.2	45.3
Kayonza	129,386	21,902	102,424	59.6	51	14.5	33.5	34	48.7
Kirehe	139,789	24,753	92,920	63.9	54.3	15	49.7	29.8	58.5
Ngoma	113,385	24,144	84,276	62	51.1	17.6	48.3	33.8	58.5
Bugesera	199,693	37,896	143,294	62.4	52.4	16	39.5	31.2	50.4

Table C. 54: Employment by sex, urban/rural area and branch of economic activity (City of Kigali), RLFS 2023

	City of kigali			Nyarugenge	Gasabo	Kicukiro
	Total	Male	Female			
Employed population 16 years old and over	726,895	414,114	312,782	158,403	343,159	225,333
Agriculture, forestry and fishing	45,262	19,281	25,981	8,368	24,660	12,234
Mining and quarrying	4,976	3,837	1,139	1,409	2,988	578
Manufacturing	56,010	31,647	24,363	11,755	31,809	12,445
Electricity, gas stream and air condition	2,405	1,457	948	913	975	518
Water supply, gas and remediation services	827	249	579	188	326	313
Construction	100,410	88,590	11,820	16,845	54,190	29,375
Wholesale and retail trade, repair of motor vehicles ...	163,376	70,741	92,635	47,545	68,447	47,384
Transportation and storage	56,004	53,490	2,515	12,777	27,244	15,983
Accommodation and food services	36,923	20,698	16,225	11,693	14,756	10,474
Information and communication	7,489	5,434	2,054	1,493	3,057	2,938
Financial and insurance activities	16,288	8,558	7,731	3,085	7,910	5,293
Real estate activities	3,011	2,147	864	1,081	909	1,021
Professional, scientific and technical activities	15,251	9,602	5,649	2,369	6,336	6,545
Administrative and support activities	26,756	17,225	9,531	6,148	13,240	7,368
Public administration and defense, compulsory ...	25,024	16,051	8,973	3,139	10,155	11,730
Education	20,566	8,947	11,619	3,169	10,466	6,931
Human health and social work activities	14,543	6,764	7,778	2,681	6,225	5,637
Arts, entertainment and recreation	5,633	4,192	1,441	1,260	2,609	1,764
Other services	39,439	16,648	22,791	9,300	19,295	10,844
Activities of households as employers	84,690	27,054	57,636	12,979	36,717	34,993
Activities of extraterritorial organizations	2,013	1,502	512	204	844	965

Table C. 55: Employment by sex, urban/rural area and branch of economic activity (Southern Province), RLFS 2023

	South Province			Nyanza	Gisagara	Nyaruguru	Huye	Nyamagabe	Ruhango	Muhanga	Kamonyi
	Total	Male	Female								
Employed population 16 years old and over	812,614	447,784	364,829	89,143	107,818	78,447	104,015	93,398	98,587	89,788	151,416
Agriculture, forestry and fishing	429,951	203,493	226,457	57,218	73,302	46,395	39,944	67,198	47,761	37,532	60,601
Mining and quarrying	9,880	9,763	117	0	0	951	1,063	387	1,675	2,600	3,204
Manufacturing	45,047	24,869	20,178	2,740	5,059	3,748	6,555	8,046	6,094	2,958	9,846
Electricity gas stream and air conditioning supply	640	307	332	0	332	0	307	0	0	0	0
Water supply, gas and remediation services	183	183	0	0	0	0	0	0	51	0	131
Construction	71,992	59,180	12,812	6,373	5,022	5,095	11,452	1,274	9,675	9,206	23,896
Wholesale and retail trade, repair of motor vehicles ...	72,558	35,518	37,040	8,796	5,477	4,982	15,411	2,937	10,751	10,228	13,976
Transportation and storage	34,743	34,692	51	3,555	4,810	477	5,525	471	6,824	5,372	7,710
Accommodation and food services	20,512	11,296	9,216	1,074	2,417	1,421	6,163	516	1,339	3,369	4,214
Information and communication	556	259	297	0	0	0	340	0	41	176	0
Financial and insurance activities	6,592	3,443	3,149	186	778	130	725	238	2,263	176	2,097
Real estate activities	200	200	0	0	0	138	0	0	62	0	0
Professional, scientific and technical activities	2,605	1,462	1,143	207	395	0	445	0	321	0	1,236
Administrative and support activities	15,407	10,595	4,812	982	2,393	1,429	2,289	78	1,234	1,684	5,318
Public administration and defense, compulsory ...	6,087	3,604	2,483	1,146	17	0	815	161	1,022	1,398	1,527
Education	41,319	19,490	21,829	2,793	4,333	8,125	4,611	7,361	2,180	6,984	4,933
Human health and social work activities	8,347	3,998	4,349	374	350	1,263	1,730	1,453	307	2,174	696
Arts, entertainment and recreation	1,719	1,256	464	0	0	0	967	0	39	289	424
Other services	15,402	9,813	5,590	1,425	2,419	866	1,393	700	2,251	2,710	3,638
Activities of households as employers	27,712	13,763	13,949	2,125	714	3,427	3,652	2,578	4,314	2,932	7,969
Activities of extraterritorial organizations	1,160	600	561	150	0	0	628	0	383	0	0

Table C. 56: Employment by sex, urban/rural area and branch of economic activity (Western Province), RLFS 2023

	Western Province			Karongi	Rutsiro	Rubavu	Nyabihu	Ngororero	Rusizi	Nyamasheke
	Total	Male	Female							
Employed population 16 years old and over	740,229	406,102	334,128	89,788	82,706	172,830	121,497	105,467	90,515	77,427
Agriculture forestry and fishing	352,856	156,073	196,783	51,243	41,772	63,097	68,439	52,352	39,072	36,880
Mining and quarrying	13,102	11,493	1,609	75	4,344	395	1,980	5,090	758	460
Manufacturing	44,904	30,657	14,247	4,953	9,162	5,231	4,404	8,295	5,063	7,797
Electricity gas stream and air conditioning supply	513	513	0	194	0	319	0	0	0	0
Water supply, gas and remediation services	50	0	50	50	0	0	0	0	0	0
Construction	63,269	58,045	5,224	7,577	6,278	14,152	10,372	9,719	10,247	4,925
Whole sale and retail trade; repair of motor vehicles and motorcycles	107,260	38,765	68,495	9,199	7,981	36,189	19,174	10,203	14,861	9,652
Transportation and storage	48,364	42,829	5,535	5,650	3,323	12,036	7,439	8,405	6,057	5,454
Accommodation and food services activities	20,883	14,290	6,593	3,150	1,851	5,449	2,320	3,905	2,732	1,476
Information and communication	1,277	1,260	17	0	169	284	0	35	359	430
Financial and insurance activities	4,690	1,485	3,205	635	986	1,467	135	54	1,330	81
Real estate activities	1,242	1,242	0	0	0	1,242	0	0	0	0
Professional, scientific and technical activities	2,095	1,217	879	0	223	389	0	717	467	299
Administrative and support activities	9,465	6,757	2,708	1,549	435	2,973	566	1,219	1,504	1,218
Public administration and defense; compulsory social security	9,047	8,145	902	402	64	4,700	2,317	214	754	596
Education	25,136	12,467	12,669	2,041	2,227	7,838	3,819	3,303	2,306	3,603
Human health and social work activities	4,718	2,310	2,408	644	120	3,332	0	82	186	353
Arts, entertainment and recreation	127	127	0	0	17	110	0	0	0	0
Other services	16,873	12,096	4,777	1,513	2,480	5,347	135	1,387	2,781	3,231
Activities of house13holds as employers	13,661	5,634	8,027	717	1,277	7,774	396	487	2,037	972
Activities of extraterritorial organizations and bodies	699	699	0	194	0	505	0	0	0	0

Table C. 57: Employment by sex, urban/rural area and branch of economic activity (Northern Province), RLFS 2023

	Total	Male	Female	Rulindo	Gakenke	Musanze	Burera	Gicumbi
Employed population 16 years old and over	618,209	338,955	279,254	137,435	107,371	148,452	108,823	116,128
Agriculture forestry and fishing	286,584	125,337	161,247	64,668	60,503	37,441	56,149	67,824
Mining and quarrying	14,544	13,181	1,363	5,712	5,726	419	70	2,617
Manufacturing	35,607	15,431	20,176	7,603	5,272	13,299	5,285	4,149
Electricity gas stream and air conditioning supply	1,347	1,021	326	297	0	642	407	0
Water supply, gas and remediation services	575	422	153	0	0	153	212	210
Construction	60,565	51,292	9,272	14,120	11,379	21,325	6,960	6,780
Whole sale and retail trade; repair of motor vehicles and motorcycles	70,608	30,502	40,105	14,391	6,929	31,788	10,501	6,998
Transportation and storage	37,744	36,797	947	9,905	4,105	13,126	6,585	4,023
Accommodation and food services activities	17,758	8,991	8,767	2,689	1,334	5,629	2,940	5,167
Information and communication	968	258	711	258	0	0	212	498
Financial and insurance activities	3,163	1,787	1,376	1,036	1,056	405	342	324
Professional, scientific and technical activities	1,511	1,137	375	0	228	641	247	396
Administrative and support activities	12,234	8,553	3,680	1,525	1,868	4,517	3,212	1,112
Public administration and defense; compulsory social security	6,373	4,963	1,410	1,031	113	1,651	1,708	1,870
Education	35,148	20,306	14,842	7,023	3,092	7,851	9,989	7,192
Human health and social work activities	7,508	3,513	3,994	534	923	2,783	490	2,778
Arts, entertainment and recreation	798	75	723	47	0	677	75	0
Other services	12,293	9,141	3,153	3,355	2,297	3,005	2,020	1,617
Activities of house13holds as employers	12,880	6,246	6,634	3,243	2,545	3,101	1,418	2,573

Table C. 58: Employment by sex, urban/rural area and branch of economic activity (Eastern Province), RLFS 2023

	Total	Male	Female	Rwamagana	Nyagatare	Gatsibo	Kayonza	Kirehe	Ngoma	Bugesera
Employed population 16 years old and over	1,060,869	569,753	491,115	138,131	187,320	153,165	129,386	139,789	113,385	199,693
Agriculture forestry and fishing	605,425	277,187	328,237	52,540	120,734	109,528	74,712	92,043	76,884	78,984
Mining and quarrying	7,467	6,429	1,038	1,589	0	2,635	1,657	0	1,160	427
Manufacturing	36,231	20,093	16,137	11,021	5,898	2,975	6,040	4,953	1,131	4,213
Electricity gas stream and air conditioning supply	473	451	22	0	0	180	229	63	0	0
Water supply, gas and remediation services	1,057	659	398	0	89	0	400	389	0	180
Construction	90,129	81,832	8,297	18,507	16,042	8,551	6,511	10,471	7,767	22,281
Whole sale and retail trade; repair of motor vehicles and motorcycles	102,147	41,128	61,019	19,879	15,293	7,036	16,710	8,488	10,401	24,340
Transportation and storage	54,634	54,200	434	12,181	5,106	6,012	6,282	3,245	4,155	17,653
Accommodation and food services activities	26,086	10,532	15,554	1,489	6,788	3,071	3,849	1,864	1,005	8,019
Information and communication	989	746	243	243	0	0	73	0	0	673
Financial and insurance activities	6,041	2,734	3,307	255	2,217	594	1,320	55	0	1,600
Real estate activities	524	524	0	0	524	0	0	0	0	0
Professional, scientific and technical activities	3,785	2,844	941	246	867	228	218	160	234	1,832
Administrative and support activities	13,686	8,363	5,322	1,825	1,521	1,138	854	2,576	2,548	3,225
Public administration and defense; compulsory social security	9,562	7,957	1,605	2,668	888	1,411	447	1,052	392	2,705
Education	42,828	22,718	20,110	4,664	4,354	3,550	4,300	10,251	2,728	12,982
Human health and social work activities	8,789	5,112	3,677	1,447	1,095	306	446	1,154	732	3,609
Arts, entertainment and recreation	1,175	927	248	620	0	0	346	0	0	209
Other services	25,793	17,735	8,058	3,908	3,399	3,207	2,704	2,289	2,598	7,688
Activities of households as employers	23,663	7,195	16,468	5,049	2,506	2,744	2,290	736	1,649	8,688
Activities of extraterritorial organizations and bodies	386	386	0	0	0	0	0	0	0	386

Table C. 59: Labour market indicators and educational type (general and Technical), RLFS 2023

Attainemnt status of vocational and general trainings	LFPR	Empl/pop ratio	Unemployment rate	Labour underutilisation rate	Working age population
Rwanda	59.3	49.0	17.2	54.4	8,071,962
No level completed	58.1	48.9	15.9	58.1	3,637,028
Completed general	57.0	46.4	18.7	52.4	3,750,216
Completed TVET	77.5	64.6	16.7	46.9	684,718
Urban	67.2	56.6	15.8	43.1	2,472,784
No level completed	66.6	57	14.5	50	692,933
Completed general	63.5	53	16.6	41	1,440,504
Completed TVET	84.2	71.2	15.4	38.5	339,347
Rural	55.7	45.7	18	59.7	5,599,178
No level completed	56.1	47	16.3	60.1	2,944,095
Completed general	53	42.3	20.3	59.9	2,309,712
Completed TVET	70.8	58	18.1	55.5	345,371
Male	67.3	57.5	14.5	47.7	3,783,020
No level completed	66.2	57.1	13.8	53.4	1,628,563
Completed general	64.6	54.8	15.2	44.3	1,779,377
Completed TVET	84.9	72.6	14.6	39.7	375,080
Female	52.2	41.6	20.3	60.9	4,288,942
No level completed	51.5	42.2	18.1	62.4	2,008,465
Completed general	50.2	38.8	22.8	60.3	1,970,838
Completed TVET	68.4	54.8	19.8	56.2	309,639

Table C. 60: Labour force participation rate by District from RLFS 2017- 2023

	2017	2018	2019	2020	2021	2022	2023
Total	53.4	54.2	53.4	56.4	54.0	56.0	59.3
Nyarugenge	66.4	66.3	66.5	67.1	64.4	66.2	68.2
Gasabo	65.3	65.8	66.8	66.2	62.9	66.8	70.2
Kicukiro	67.0	70.7	70.2	68.7	62.9	68.9	70.7
Nyanza	47.7	45.2	42.5	48.1	47.7	49.4	48.7
Gisagara	53.1	49.4	54.5	62.0	51.6	54.0	57.2
Nyaruguru	32.1	34.1	39.7	55.9	41.4	43.8	50.7
Huye	52.5	52.5	54.5	65.4	54.8	57.7	55.8
Nyamagabe	54.9	53.9	44.2	59.9	53.0	52.3	51.9
Ruhango	54.4	54.0	49.3	48.3	47.5	51.3	49.5
Muhanga	41.9	42.1	41.3	52.3	54.7	55.4	46.4
Kamonyi	55.1	51.6	50.4	47.7	49.5	51.8	56.1
Karongi	55.6	49.2	49.5	46.9	45.4	51.2	54.0
Rutsiro	54.6	52.0	52.6	50.4	56.7	55.3	53.1
Rubavu	61.5	53.7	55.8	56.1	57.6	60.9	62.5
Nyabihu	61.9	57.0	55.6	58.6	57.3	58.4	65.5
Ngororero	38.9	44.5	47.3	43.0	52.9	56.5	61.2
Rusizi	49.6	50.1	42.8	49.8	46.8	50.4	48.5
Nyamasheke	45.1	45.2	47.0	55.6	49.8	45.4	48.7
Rulindo	49.4	56.9	52.3	44.4	51.6	54.6	62.6
Gakenke	45.0	50.8	53.3	47.0	46.9	51.8	53.4
Musanze	52.6	53.3	61.5	65.2	61.5	60.6	62.7
Burera	38.3	50.9	51.3	56.0	51.3	59.2	57.3
Gicumbi	48.8	49.5	45.4	45.9	53.4	54.8	56.5
Rwamagana	52.1	54.0	48.7	45.9	53.2	54.0	61.1
Nyagatare	59.3	68.7	60.0	60.4	57.8	53.2	59.8
Gatsibo	49.0	55.0	55.7	61.5	53.1	60.0	62.6
Kayonza	54.4	54.5	51.3	64.1	51.1	49.6	59.6
Kirehe	53.7	51.7	49.0	61.1	53.0	52.8	63.9
Ngoma	49.5	51.4	49.0	48.8	52.3	59.1	62.0
Bugesera	57.1	52.9	49.0	54.5	53.3	54.2	62.4

Annex D: Standard errors, 95 % Confidence intervals, coefficient of variation and design effects for selected main labour force indicators.

Table D. 1: Unemployment rate according to sex, youth/adult, urban/rural and district of residence

	Estimate (%)	Std. error (%)	95%CI lower bound	95%CI upper bound	CV	Design effect
Rwanda	**17.2**	**0.4**	**16.4**	**18.1**	**2.4**	**3.3**
Sex						
Male	14.521	0.501	13.537	15.504	3.448	2.851
Female	20.333	0.565	19.222	21.443	2.781	2.448
Age (Youth/Adult)						
16-30	20.810	0.618	19.596	22.025	2.971	2.527
31+	14.751	0.513	13.743	15.759	3.480	3.276
Education level attained						
None	15.746	0.531	14.704	16.788	3.370	2.594
Primary	17.644	0.691	16.286	19.002	3.919	2.768
Lower secondary	19.676	1.424	16.880	22.472	7.236	2.305
Upper secondary	23.146	1.187	20.814	25.477	5.128	2.033
University	14.151	1.212	11.771	16.532	8.565	1.846
Area of residence						
Urban	15.813	0.562	14.710	16.916	3.551	2.183
Rural	17.998	0.575	16.870	19.126	3.192	3.870
District of residence						
Nyarugenge	16.576	1.332	13.960	19.192	8.035	1.351
Gasabo	17.936	1.113	15.750	20.121	6.204	1.951
Kicukiro	14.507	0.868	12.804	16.211	5.980	0.887
Nyanza	13.980	3.048	7.994	19.966	21.805	4.440
Gisagara	20.966	3.322	14.442	27.489	15.844	5.037
Nyaruguru	20.351	2.898	14.659	26.043	14.242	2.830
Huye	21.358	2.415	16.615	26.101	11.308	2.547
Nyamagabe	13.946	2.457	9.121	18.771	17.617	3.027
Ruhango	13.540	1.540	10.517	16.564	11.371	1.280
Muhanga	13.846	2.605	8.730	18.963	18.815	3.288
Kamonyi	16.392	2.686	11.117	21.667	16.386	5.286
Karongi	20.993	3.649	13.827	28.158	17.380	5.057
Rutsiro	14.504	3.564	7.505	21.504	24.575	5.495
Rubavu	13.581	1.523	10.591	16.571	11.212	2.191
Nyabihu	13.815	2.077	9.735	17.895	15.037	2.833
Ngororero	16.223	2.255	11.795	20.651	13.898	2.611
Rusizi	26.198	2.888	20.527	31.868	11.022	2.932
Nyamasheke	24.215	2.350	19.600	28.830	9.705	1.705
Rulindo	12.739	2.353	8.119	17.360	18.469	4.349
Gakenke	18.045	2.488	13.159	22.931	13.787	3.040
Musanze	21.325	1.852	17.687	24.962	8.686	2.140
Burera	18.605	1.774	15.120	22.089	9.537	1.541
Gicumbi	23.885	2.801	18.384	29.386	11.728	3.651
Rwamagana	16.324	1.705	12.976	19.672	10.443	1.947
Nyagatare	17.937	1.662	14.673	21.201	9.265	2.375
Gatsibo	16.447	2.529	11.480	21.414	15.378	4.732
Kayonza	14.477	1.873	10.799	18.156	12.938	2.377
Kirehe	15.043	1.943	11.228	18.859	12.916	2.695
Ngoma	17.556	2.610	12.430	22.681	14.866	3.588
Bugesera	15.950	2.524	10.994	20.907	15.824	6.260

Table D. 2: Labour force participation rate according to sex, youth/adult, urban/rural and district of residence

	Estimate (%)	Std. error (%)	95%CI lower bound	95%CI upper bound	CV	Design effect
Rwanda	**59.260**	**0.553**	**58.174**	**60.345**	**0.933**	**5.492**
Sex						
Male	67.313	0.664	66.010	68.616	0.986	4.073
Female	52.156	0.652	50.876	53.437	1.250	3.931
Age (Youth/Adult)						
16-30	56.180	0.659	54.886	57.473	1.172	3.314
31+	61.613	0.721	60.197	63.028	1.170	5.408
Education level attained						
None	58.674	0.764	57.174	60.175	1.302	4.865
Primary	58.368	0.726	56.943	59.794	1.244	3.031
Lower secondary	43.870	1.154	41.603	46.137	2.631	2.150
Upper secondary	69.770	1.104	67.602	71.937	1.582	2.061
University	87.622	0.992	85.673	89.571	1.133	1.534
Area of residence						
Urban	67.226	0.703	65.846	68.606	1.045	2.981
Rural	55.742	0.671	54.424	57.060	1.204	5.499
District of residence						
Nyarugenge	68.244	1.385	65.523	70.964	2.030	1.325
Gasabo	70.189	1.148	67.934	72.444	1.636	2.020
Kicukiro	70.723	1.094	68.575	72.871	1.547	1.158
Nyanza	48.736	3.517	41.829	55.643	7.217	5.663
Gisagara	57.170	2.487	52.286	62.055	4.351	3.243
Nyaruguru	50.699	4.435	41.989	59.408	8.748	8.223
Huye	55.842	3.275	49.411	62.272	5.864	5.540
Nyamagabe	51.915	2.786	46.444	57.387	5.367	3.497
Ruhango	49.542	3.045	43.562	55.522	6.146	4.592
Muhanga	46.374	4.726	37.094	55.654	10.190	10.854
Kamonyi	56.126	3.846	48.574	63.678	6.852	10.423
Karongi	54.020	2.746	48.627	59.412	5.083	3.435
Rutsiro	53.136	4.463	44.372	61.900	8.399	7.832
Rubavu	62.534	2.175	58.263	66.805	3.478	3.473
Nyabihu	65.455	4.646	56.331	74.579	7.098	11.059
Ngororero	61.154	3.454	54.371	67.937	5.648	5.560
Rusizi	48.452	2.690	43.170	53.735	5.551	3.944
Nyamasheke	48.685	2.872	43.046	54.325	5.899	3.726
Rulindo	62.598	3.497	55.731	69.465	5.586	7.068
Gakenke	53.414	1.689	50.097	56.731	3.162	1.513
Musanze	62.675	2.079	58.593	66.758	3.317	2.991
Burera	57.344	2.261	52.905	61.784	3.942	2.620
Gicumbi	56.524	2.644	51.331	61.717	4.678	4.131
Rwamagana	61.116	2.512	56.182	66.050	4.111	3.859
Nyagatare	59.772	2.589	54.688	64.856	4.331	5.726
Gatsibo	62.572	1.922	58.799	66.346	3.071	2.484
Kayonza	59.630	1.706	56.280	62.979	2.860	1.649
Kirehe	63.909	2.617	58.770	69.049	4.095	4.112
Ngoma	62.004	3.182	55.755	68.254	5.132	5.128
Bugesera	62.378	1.622	59.193	65.564	2.601	2.297

Table D 3: Employment to population ratio according to sex, youth/adult, urban/rural and district of residence

	Estimate (%)	Std. error (%)	95%CI lower bound	95%CI upper bound	CV	Design effect
Rwanda	**49.044**	**0.532**	**47.999**	**50.089**	**1.085**	**4.916**
Sex						
Male	57.539	0.671	56.221	58.856	1.166	3.748
Female	41.551	0.626	40.322	42.781	1.507	3.725
Age (Youth/Adult)						
16-30	44.488	0.633	43.246	45.731	1.422	3.048
31+	52.524	0.707	51.135	53.914	1.347	4.941
Education level attained						
None	49.435	0.741	47.979	50.891	1.500	4.443
Primary	48.070	0.745	46.606	49.534	1.551	3.112
Lower secondary	35.238	1.131	33.018	37.458	3.208	2.225
Upper secondary	53.621	1.301	51.066	56.176	2.426	2.429
University	75.222	1.356	72.559	77.886	1.803	1.668
Area of residence						
Urban	56.595	0.786	55.052	58.139	1.389	3.344
Rural	45.709	0.630	44.472	46.947	1.379	4.819
District of residence						
Nyarugenge	56.931	1.653	53.685	60.178	2.904	1.668
Gasabo	57.600	1.228	55.190	60.011	2.131	1.977
Kicukiro	60.463	1.254	58.000	62.926	2.074	1.319
Nyanza	41.923	3.816	34.429	49.416	9.102	6.840
Gisagara	45.184	1.589	42.064	48.304	3.516	1.308
Nyaruguru	40.381	4.185	32.163	48.599	10.363	7.601
Huye	43.915	3.160	37.709	50.121	7.196	5.166
Nyamagabe	44.675	1.920	40.905	48.445	4.297	1.677
Ruhango	42.834	2.209	38.496	47.172	5.157	2.467
Muhanga	39.953	4.601	30.917	48.989	11.517	10.668
Kamonyi	46.926	4.173	38.731	55.120	8.892	12.133
Karongi	42.680	3.197	36.401	48.958	7.491	4.728
Rutsiro	45.429	3.116	39.310	51.548	6.859	3.835
Rubavu	54.042	2.251	49.621	58.463	4.166	3.510
Nyabihu	56.413	5.073	46.450	66.375	8.992	12.124
Ngororero	51.233	3.685	43.997	58.470	7.193	6.018
Rusizi	35.759	2.614	30.625	40.893	7.311	4.050
Nyamasheke	36.896	2.320	32.340	41.452	6.287	2.609
Rulindo	54.624	2.699	49.323	59.924	4.941	3.978
Gakenke	43.775	1.951	39.943	47.607	4.458	2.041
Musanze	49.310	1.881	45.615	53.005	3.815	2.293
Burera	46.676	2.004	42.740	50.612	4.294	2.024
Gicumbi	43.023	2.722	37.677	48.369	6.327	4.389
Rwamagana	51.139	2.162	46.894	55.384	4.227	2.717
Nyagatare	49.051	2.299	44.536	53.566	4.687	4.344
Gatsibo	52.281	1.925	48.500	56.062	3.682	2.341
Kayonza	50.997	1.708	47.644	54.350	3.348	1.592
Kirehe	54.295	2.706	48.981	59.609	4.984	4.086
Ngoma	51.119	3.553	44.141	58.097	6.951	6.029
Bugesera	52.429	1.951	48.598	56.260	3.721	3.126

Table D. 4: Labour underutilization rate according to sex, youth/adult, urban/rural and district of residence

	Estimate (%)	Std. error (%)	95%CI lower bound	95%CI upper bound	CV	Design effect
Rwanda	**47.732**	**0.791**	**46.178**	**49.285**	**1.658**	**4.108**
Sex						
Female	60.880	0.766	59.376	62.384	1.258	4.128
16-30	57.217	0.837	55.574	58.859	1.462	3.934
Age (Youth/Adult)						
31+	52.369	0.800	50.798	53.941	1.528	4.969
None	57.807	0.834	56.170	59.444	1.442	4.366
Education level attained						
Primary	55.382	0.920	53.575	57.189	1.661	3.687
Lower secondary	56.901	1.540	53.876	59.926	2.707	2.251
Upper secondary	48.117	1.436	45.296	50.938	2.985	2.576
University	23.338	1.343	20.701	25.975	5.754	1.609
Area of residence						
Urban	43.092	1.074	40.984	45.201	2.492	4.993
Rural	59.710	0.835	58.070	61.349	1.398	6.518
District of residence						
Nyarugenge	43.548	1.855	39.905	47.191	4.260	1.677
Gasabo	40.621	1.794	37.098	44.144	4.417	3.510
Kicukiro	35.197	1.670	31.918	38.476	4.744	1.982
Nyanza	58.341	4.036	50.416	66.267	6.917	5.283
Gisagara	66.963	2.933	61.203	72.723	4.380	3.855
Nyaruguru	61.419	4.536	52.511	70.327	7.386	6.719
Huye	61.953	3.413	55.250	68.656	5.509	4.828
Nyamagabe	54.484	3.621	47.372	61.595	6.646	4.384
Ruhango	62.390	3.539	55.439	69.341	5.673	4.650
Muhanga	50.928	5.777	39.584	62.273	11.343	10.760
Kamonyi	48.731	4.727	39.448	58.015	9.701	11.345
Karongi	68.110	3.310	61.610	74.609	4.859	4.378
Rutsiro	62.219	3.439	55.465	68.973	5.528	3.739
Rubavu	50.874	3.002	44.979	56.769	5.900	4.693
Nyabihu	64.201	2.931	58.444	69.957	4.566	3.391
Ngororero	59.777	3.554	52.797	66.756	5.946	4.574
Rusizi	66.654	3.367	60.042	73.266	5.051	4.929
Nyamasheke	72.884	3.387	66.232	79.537	4.648	4.619
Rulindo	47.913	2.749	42.515	53.311	5.737	3.140
Gakenke	63.972	2.659	58.751	69.193	4.156	3.037
Musanze	63.637	3.183	57.386	69.887	5.001	5.723
Burera	59.397	3.013	53.480	65.313	5.072	3.517
Gicumbi	58.515	2.917	52.788	64.243	4.984	3.858
Rwamagana	53.174	1.839	49.563	56.786	3.458	1.533
Nyagatare	50.561	2.685	45.288	55.834	5.311	4.411
Gatsibo	45.279	3.278	38.843	51.716	7.239	5.461
Kayonza	48.678	5.064	38.733	58.624	10.404	10.882
Kirehe	58.487	2.709	53.167	63.806	4.632	3.257
Ngoma	58.491	3.652	51.320	65.662	6.243	5.091
Bugesera	50.429	3.686	43.190	57.667	7.309	8.529

Table D. 5: NEET according to sex, urban/rural and district of residence

	Estimate (%)	Std. error (%)	95%CI lower bound	95%CI upper bound	CV	Design effect
Rwanda	**32.861**	**0.609**	**31.665**	**34.058**	**1.854**	**3.193**
Sex						
Male	25.866	0.790	24.315	27.417	3.053	2.989
Female	39.426	0.829	37.799	41.053	2.102	2.815
Education level attained						
None	38.472	0.984	36.539	40.406	2.559	2.522
Primary	32.719	0.977	30.800	34.637	2.986	3.077
Lower secondary	21.487	1.154	19.220	23.754	5.372	2.431
Upper secondary	35.978	1.433	33.165	38.792	3.982	1.911
University	22.401	2.291	17.902	26.899	10.227	1.509
Area of residence						
Urban	25.888	0.752	24.412	27.364	2.903	1.873
Rural	36.377	0.809	34.788	37.966	2.225	3.571
District of residence						
Nyarugenge	26.581	1.762	23.122	30.041	6.627	1.212
Gasabo	26.424	1.576	23.329	29.518	5.963	1.935
Kicukiro	22.804	1.593	19.676	25.932	6.986	1.462
Nyanza	40.678	5.487	29.903	51.453	13.488	5.586
Gisagara	41.650	3.974	33.845	49.455	9.542	3.800
Nyaruguru	41.582	3.400	34.906	48.259	8.176	2.263
Huye	29.897	3.690	22.651	37.144	12.343	3.396
Nyamagabe	36.543	4.165	28.364	44.722	11.397	3.300
Ruhango	37.486	2.938	31.717	43.255	7.837	1.745
Muhanga	40.815	4.881	31.231	50.399	11.958	4.460
Kamonyi	34.601	4.129	26.492	42.710	11.934	4.917
Karongi	43.178	3.462	36.378	49.978	8.019	2.092
Rutsiro	32.490	3.283	26.044	38.937	10.103	1.880
Rubavu	24.425	1.881	20.732	28.118	7.699	1.547
Nyabihu	29.932	1.612	26.768	33.097	5.384	0.724
Ngororero	37.064	3.475	30.240	43.888	9.375	2.613
Rusizi	45.815	2.976	39.970	51.660	6.497	2.228
Nyamasheke	34.494	5.265	24.154	44.834	15.264	5.333
Rulindo	27.422	2.743	22.035	32.809	10.003	2.039
Gakenke	36.450	4.223	28.158	44.742	11.584	3.955
Musanze	36.401	2.243	31.996	40.806	6.162	1.573
Burera	35.573	2.658	30.354	40.792	7.471	1.737
Gicumbi	42.086	2.955	36.283	47.890	7.022	2.404
Rwamagana	29.526	2.172	25.261	33.791	7.355	1.339
Nyagatare	33.600	3.033	27.645	39.556	9.026	4.028
Gatsibo	34.137	3.368	27.523	40.751	9.866	3.613
Kayonza	34.504	3.581	27.472	41.536	10.378	3.534
Kirehe	25.705	2.791	20.224	31.186	10.858	2.374
Ngoma	32.548	4.129	24.440	40.657	12.686	3.557
Bugesera	24.883	3.221	18.557	31.209	12.945	5.063

Table D. 6: Population out of labour force rate according to sex, urban/rural and district of residence

	Estimate (%)	Std. error (%)	95%CI lower bound	95%CI upper bound	CV	Design effect
Rwanda	**40.740**	**0.553**	**39.655**	**41.826**	**1.356**	**5.492**
Sex						
Male	32.687	0.664	31.384	33.990	2.030	4.073
Female	47.844	0.652	46.563	49.124	1.363	3.931
Age (Youth/Adult)						
16-30	43.820	0.659	42.527	45.114	1.503	3.314
31+	38.387	0.721	36.972	39.803	1.878	5.408
Education level attained						
None	41.326	0.764	39.825	42.826	1.849	4.865
Primary	41.632	0.726	40.206	43.057	1.744	3.031
Lower secondary	56.130	1.154	53.863	58.397	2.057	2.150
Upper secondary	30.230	1.104	28.063	32.398	3.651	2.061
University	12.378	0.992	10.429	14.327	8.017	1.534
Area of residence						
Urban	32.774	0.703	31.394	34.154	2.144	2.981
Rural	44.258	0.671	42.940	45.576	1.517	5.499
District of residence						
Nyarugenge	31.756	1.385	29.036	34.477	4.363	1.325
Gasabo	29.811	1.148	27.556	32.066	3.852	2.020
Kicukiro	29.277	1.094	27.129	31.425	3.736	1.158
Nyanza	51.264	3.517	44.357	58.171	6.861	5.663
Gisagara	42.830	2.487	37.945	47.714	5.807	3.243
Nyaruguru	49.301	4.435	40.592	58.011	8.996	8.223
Huye	44.158	3.275	37.728	50.589	7.416	5.540
Nyamagabe	48.085	2.786	42.613	53.556	5.794	3.497
Ruhango	50.458	3.045	44.478	56.438	6.035	4.592
Muhanga	53.626	4.726	44.346	62.906	8.812	10.854
Kamonyi	43.874	3.846	36.322	51.426	8.765	10.423
Karongi	45.980	2.746	40.588	51.373	5.972	3.435
Rutsiro	46.864	4.463	38.100	55.628	9.523	7.832
Rubavu	37.466	2.175	33.195	41.737	5.805	3.473
Nyabihu	34.545	4.646	25.421	43.669	13.449	11.059
Ngororero	38.846	3.454	32.063	45.629	8.891	5.560
Rusizi	51.548	2.690	46.265	56.830	5.218	3.944
Nyamasheke	51.315	2.872	45.675	56.954	5.597	3.726
Rulindo	37.402	3.497	30.535	44.269	9.349	7.068
Gakenke	46.586	1.689	43.269	49.903	3.626	1.513
Musanze	37.325	2.079	33.242	41.407	5.570	2.991
Burera	42.656	2.261	38.216	47.095	5.300	2.620
Gicumbi	43.476	2.644	38.283	48.669	6.082	4.131
Rwamagana	38.884	2.512	33.950	43.818	6.461	3.859
Nyagatare	40.228	2.589	35.144	45.312	6.436	5.726
Gatsibo	37.428	1.922	33.654	41.201	5.134	2.484
Kayonza	40.370	1.706	37.021	43.720	4.225	1.649
Kirehe	36.091	2.617	30.951	41.230	7.251	4.112
Ngoma	37.996	3.182	31.746	44.245	8.375	5.128
Bugesera	37.622	1.622	34.436	40.807	4.312	2.297

Annex E: Officials involved in the Labour Force Survey 2023

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