



Republic of Rwanda



NATIONAL INSTITUTE OF  
STATISTICS OF RWANDA

# Labour Force Survey Trends



-November 2019 (Q4)-





The Republic of Rwanda



# Labour Force Survey Trends

November 2019 (Q4)

January 2020

Labour Force Survey Trends, November 2019 (Q4) report is produced by the National Institute of Statistics of Rwanda (NISR).

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## Foreword

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

The government of Rwanda needs updated information for monitoring progress on programmes and policies as stipulated in the first National Strategy for Transformation (NST1), Sustainable Development Goals (SDGs) as well as Vision 2020 and 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 to provide key stakeholders, Ministry of Public Service and Labour and Ministry of Finance and Economic Planning, the Ministry of Education, International Labour Organization and other users, with needed labour statistics.

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

The Labour Force survey programme begun with a pilot survey conducted in February 2016. The first round of the survey was conducted in August 2016, and continued on bi-annual basis until August 2018. Since the year 2019, the survey was re-designed to provide estimates of the labour market aggregates on quarterly basis. The present report is for the fourth quarter (Q4) of 2019 whose data collection was conducted in November 2019.

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

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

  
**Yusuf MURANGWA**  
Director General of NISR







## Executive summary

The sample design of labour force survey presents an advantage of estimating trend of labour market indicators with a higher precision due to its rotational design. In this report, the survey results are compared for February 2019(Q1), May 2019(Q2), August 2019(Q3) and November 2019(Q4). However, tables are presented in most cases with more data points including results of the labour force surveys in the previous year.

In November 2019(Q4), the working age population (16 years and above) was around 7.3 million and the population in the labour force constituted the majority of working age population. The proportion of population who were in the labour force has slightly increased from 52.3 percent in August 2019(Q3) to 55.0 percent in November 2019(Q4). The survey results of November 2019(Q4) showed that the youth (16-30 years old) constituted 43.9 percent of the population in the labour force and this proportion has slightly decreased as compared to 44.2 percent recorded in August 2019(Q3).

The employment-to-population ratio has increased in November 2019(Q4) as compared to August 2019(Q3). It was 44.9 percent in February 2019(Q1), 45.7 percent in May 2019(Q2), 43.9 in August 2019(Q3) and 46.5 percent in November 2019(Q4). As results of increase in employment, the labour force participation rate has as well increased from 52.3 percent in August 2019(Q3) to 55.0 percent in November 2019(Q4).

The proportion of the working age population outside the labour force slightly decreased in fourth quarter of 2019 as compared to third quarter of the same year. The population out of labour force was 47.7 in August 2019 and decreased to 45.0 percent in November 2019(Q4). Available non-job seekers constituted a substantial category of the population outside labour force. It has slightly increased from 21.9 percent of the working age population in August (Q3) to 22.0 percent in November 2019(Q4). The substantial proportion of available non-job seekers remained those involved in subsistence agriculture (68.5 percent) and the share of subsistence agriculture in population outside labour force was 52.8 percent in November 2019(Q4) as compared to 47.7 percent in August 2019(Q3).

The number of employed persons has increased from about 3,153,000 in August 2019(Q3) to about 3,406,000 in November 2019(Q4). The share of employment in manufacturing and construction has generally decreased as compared to the previous quarter. On the other hand, the share of employment in agriculture has generally increased. Broadly, employment in agriculture sector has increased by about 1.9 percentage points from August 2019(Q3) to November 2019(Q4), employment in the industry sector has decreased by 4.2 percentage points while employment in service sector slightly increased by 2.4 percentage points in the same period.

The full count of workers in the agriculture sector in November 2019(Q4) was around 53.8 percent of the total working age population including agriculture as secondary activity. The corresponding proportion for August 2019(Q3) was 50.0 percent.

The proportion of agricultural workers in market-oriented agriculture has slightly increased by 1.4 percentage points from August 2019(Q3) to November 2019(Q4) while the proportion of agricultural workers exclusively in subsistence agriculture has decreased by 1.4 percentage points during that period.

The share of agricultural workers in total workforce has decreased by 2.7 percentage points from 63.7 percent in February 2019(Q1) to 61.0 percent in November 2019(Q4). It has relatively declined

among both males (3 percentage points decrease) and female (2.5 percentage points decrease) in the same period.

The results of November 2019(Q4) labour force survey showed that employment decreased in most of economic activities between August 2019(Q3) and November 2019(Q4). The largest decrease was observed in construction with a decrease of 58,144 persons. On the other hand, the number of persons employed in agriculture forestry and fishing showed the highest increase of 153,112) persons. “Whole sale and retail trade; repair of motor vehicles and motorcycles” and “Transportation and storage” also increased by about 69,380 and 48,282 respectively as compared to the previous quarter.

The November 2019(Q4) results showed that the proportion of employees and the proportion of own account workers; both remained unchanged at around 67 percent and 27 percent respectively as compared to August 2019(Q3).

The results showed that the unemployment rate was 15.4 percent in November 2019(Q4). It has declined by 0.6 percentage point from 16.0 percent registered in August 2019(Q3).

The analysis of the unemployment rate dynamics for males and females between February 2019(Q1) and November 2019(Q4) reveals an increase of unemployment rate among females (1.7-percentage points) while it remained stable among males. On the other hand, August 2019(Q3)-to-November 2019(Q4) comparison showed that unemployment rate declined slightly among females (1.1 percentage points) while it has remained almost unchanged among females

Labour underutilization rate which accounts for unemployment, time-related underemployment and potential labour force has showed a 2.6 percentage points decrease in November 2019(Q4) as compared to August 2019(Q3) (from 57.0 percent to 54.4 percent ). The labour underutilization rate has been remarkably higher among females (62.8 percent) as compared to males (48.0 percent).

**Rwanda Labour force survey, November 2019(Q4): Summary labour force indicators**

Working age population 16 years old and over 7,320,999 persons							
Outside the labour force (Not employed nor unemployed) 3,295,007 persons			Labour force (The sum of employed and unemployed) 4,025,992 persons Labour force participation rate 55.0%				
Subsistence agriculture	Exclusively students	Other outside LF (Elderly, disable, discouraged job seekers...)	Employed (All who worked for pay or profit) 3,405,877 persons Employment to population ratio: 46.5%			Unemployed (All not employed but seeking and available to work for pay or profit) 620,115 persons Unemployment rate:15.4%	
			Agriculture excluding subsistence foodstuff production	Industry	Services	Unemployed but engaged in subsistence agriculture	Other unemployed
52.8%	19.5%	27.7%	37.3%	17.2 %	45.5%	53.3% 46.7%	
Potential labour force 1,547,202	Others 1,747,805		Time related underemployed 866,553	Other employed 2,539,325			
Labour underutilization (3,033,870 persons): Unemployed (620,115) + Time-related underemployed (866,557) + Potential labour force (1,547,202) Composite measure of labour underutilization (54.4%)							

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Surveys (LFSs), November 2019(Q4)



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## Chapter 1: Introduction

The Rwanda Labour Force Survey (LFS) started in 2016 with an annual sample spread into two rounds to provide bi-annual estimates of main labour market indicators at National level. From February 2019, the sample was spread into four rounds to provide estimates of labour market indicators at national level on quarterly basis. The main objective of the survey is to provide data on the structure and trends of labour force, employment and unemployment as well as other related labour market statistics for the implementation and evaluation of economic and social policies related to employment creation, income generation, skills development, and related decent work policies.

The current fourth quarterly Labour Force survey is designed according to a two-stage stratified design with a rotation scheme. At the first stage of sampling, a stratified sample of 288 census enumeration areas, called primary sampling units (PSUs) are drawn from the 2012 census-sampling frame with probabilities proportional to size measured in terms of number of households according to the latest census of population. The strata are composed of the 30 administrative districts of the country, sub-divided into urban and rural areas.

At the second stage of sampling 16 households were selected in three quarter of the PSUs and 24 households<sup>1</sup> were selected in a quarter of PSUs, with equal probabilities, after a fresh listing of the households in the new sample PSUs. All household members in the sample are then selected for survey interview.

According to the rotation scheme of the survey, the proposed rotation design is 1-1-1, that is each sample household is interviewed three times, once every two quarters. Accordingly, a sample household is in the sample in one quarter, leaves the sample in the next quarter, returns in the sample in the following quarter, leaves again the sample in the subsequent quarter, and finally returns in the sample for the third time before leaving the sample altogether. The main purpose of sample rotation is to control the variation of the sample and thus improve the precision of the estimates of change.

. In the present report, the survey results are mainly compared for February 2019(Q1), May 2019(Q2), August 2019(Q3), and November 2019(Q4). However, in some sections, the tables or figures are presented with the complete time series including results of February 2018 and August 2018 labour force surveys.

The resulting estimates of the main labour force indicators at the national level have standard errors of about 0.7 percent.

The focus of the present report is the analysis of trends of employment and labour underutilization including unemployment at the national level by selected demographic and socioeconomic characteristics such as sex, age group, educational attainment, occupation and industry.

The survey results analysed in this report are presented under seven chapters including this introduction. The other chapters deal with Trend of main indicators, labour force participation,

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<sup>1</sup> The intake of 24 households in one fourth of PSUs is a consequence of sample size adjustment caused by the transition from bi-annual sample design to quarterly sample design in August 2018.

employment, unemployment and labour underutilization, population outside labour force and work in agriculture.

## Chapter 2: Trends of main indicators

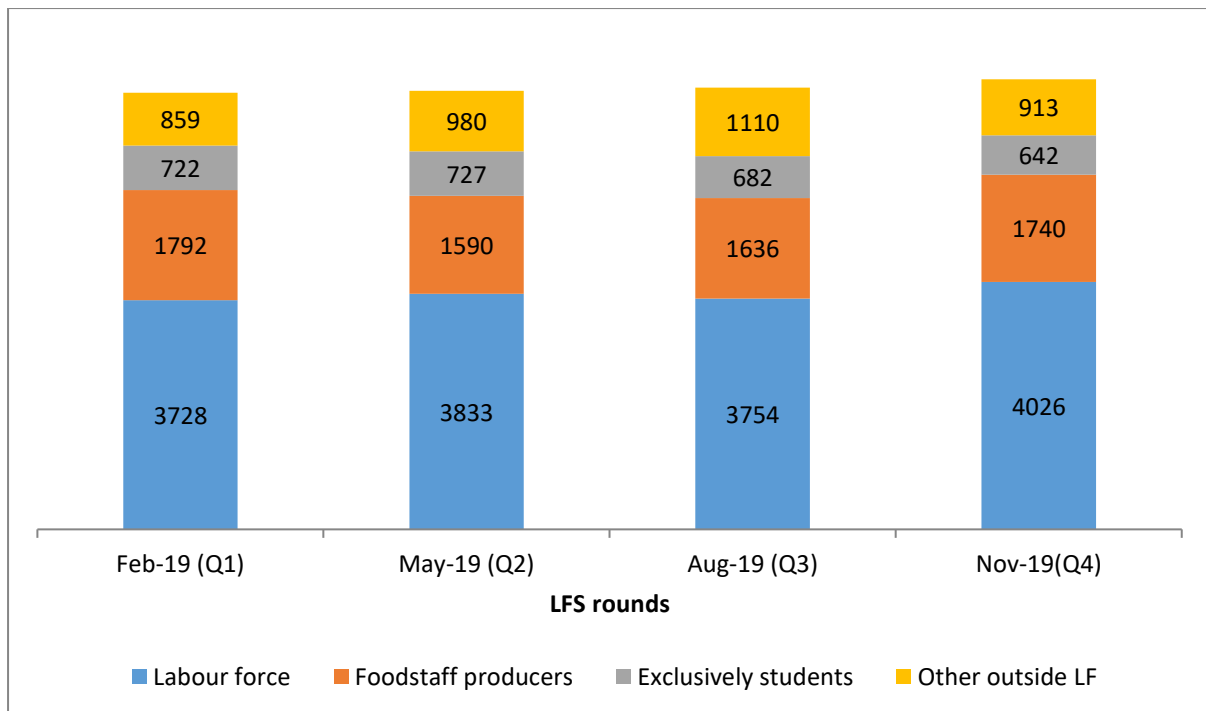
### 2.1 Working age population

The present chapter provides information on labour force trend of estimates of main indicators from the labour force surveys of February 2019(Q1), May 2019(Q2), August 2019(Q3) and November 2019(Q4). However, some figures are presented with more data points including results of the surveys conducted in the previous year.

In November 2019(Q4), the working age population (16 years old and above) was 7.3 million and the population in the labour force constituted the majority of the working age population. The proportion of the population in the labour force has increased compared to August 2019(Q3). In November 2019(Q4), the youth (16-30 years old) constituted 43.9 percent of the population in the labour force.

Among the population in working age who were outside the labour force, some were involved in subsistence agriculture, students and others were inactive or involved in other forms of work. As shown in Figure 2.1 below a substantial part of the population outside the labour force was involved in foodstuff production for own use.

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



<sup>2</sup>Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

<sup>2</sup> There has been a change in computing the components of working age population by including students in vocational education among “exclusively student” component.

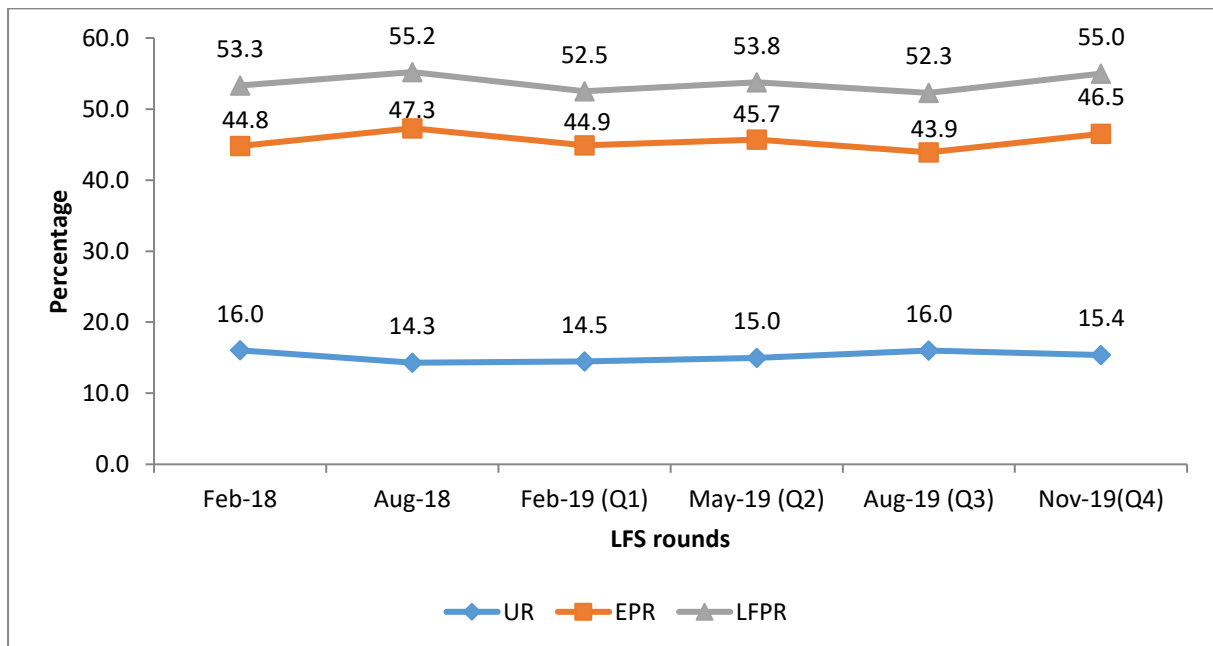
### 2.2 Labour force participation rate, employment to population ratio and unemployment rate

Figure 2.2 illustrates the trends of some of the key labour market indicators. In November 2019(Q4) the unemployment rate stood at 15.4 percent and has decreased from 16.0 percent in August 2019(Q3).

The employment-to-population ratio showed an increasing trend from 43.9 percent in August 2019(Q3) to 46.5 percent in November 2019(Q4).

The labour force participation rate increased to 55.0 percent in November 2019(Q4) as compared to 52.3 percent recorded in August 2019(Q3). The labour force participation rates in the second and first quarter of 2019 were 53.8 percent and 52.5 percent respectively.

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



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

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

### 2.3 Population outside labour force

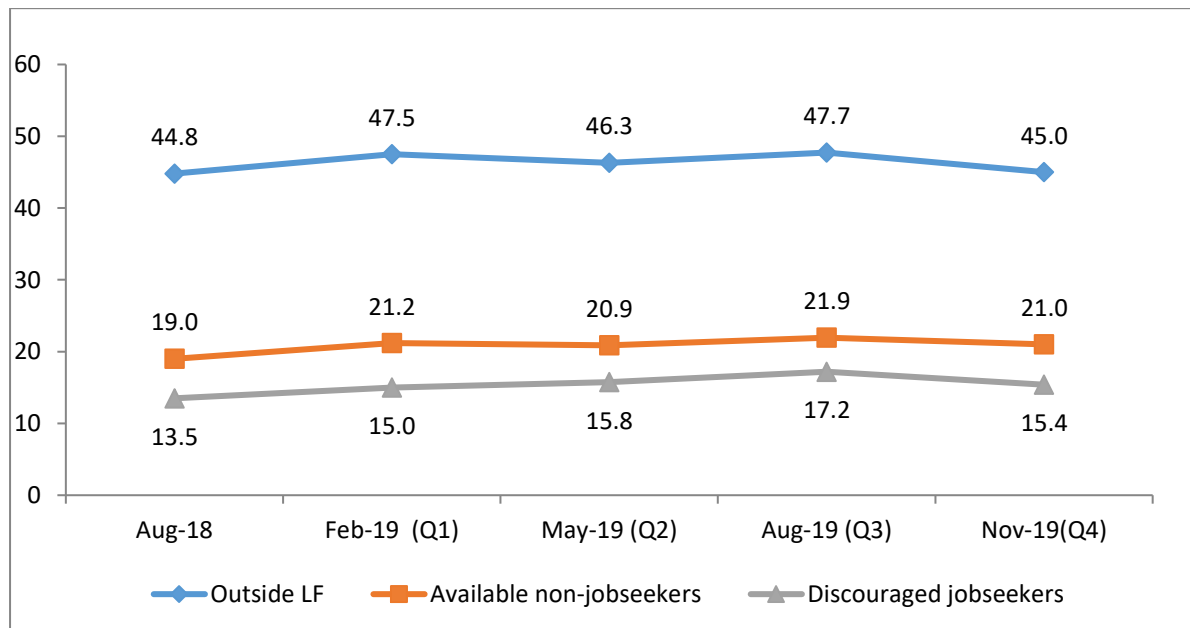
Figure 2.3 presents the trend of the proportion of the working age population who was outside the labour force according to different categories. The results showed that the proportion of the working age population outside the labour force had decreased to 45.0 percent in November 2019(Q4) as compared to 47.7 recorded percent in August 2019(Q3).. Available non-job seekers constituted a substantial category of the population outside labour force. It had slightly decreased to 21.0 percent of the working age population in November 2019(Q4) as compared to 21.9 percent in August 2019(Q3) and 21.2 percent in February 2019(Q1).

An important sub-category of the available non-job seekers is the discouraged jobseekers. i.e. those outside the labour force who did not “seek employment” for labour market-related reasons, 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. The proportion of discouraged jobseekers among the working age population outside the labour force has been showing an increasing trend but slightly decreased from August 2019(Q3) to November 2019(Q4). It was 15.4 percent in November 2019(Q4) as compared to 17.2 percent in August 2019(Q3), 15.8 percent in May 2019(Q2) and 15.0 percent in February 2019(Q1). It is also important to note that the level of education of the majority of discouraged job seekers is below lower secondary school (about 85 percent) and that most of them are involved in subsistence agriculture (around 73.3 percent).

Figure 2. 3: Trend of the ratio of population outside labour force to working age population



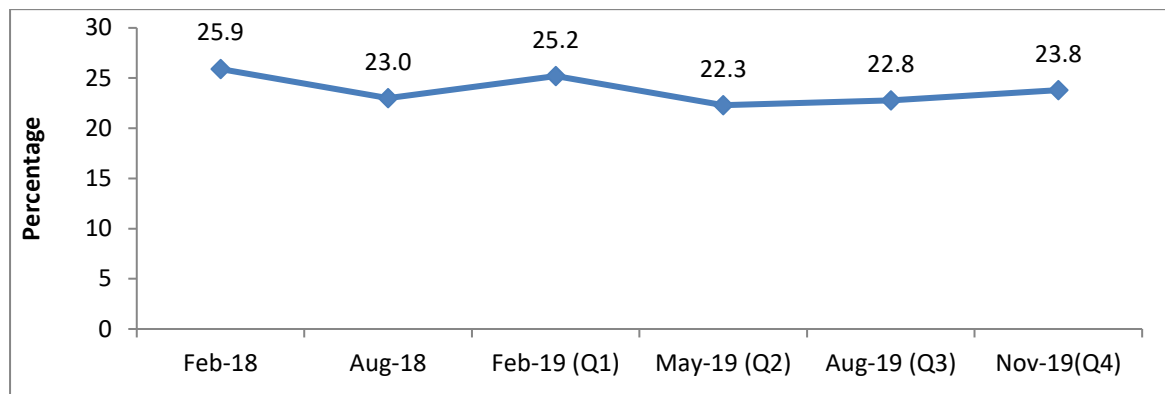
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

### 2.4 Subsistence foodstuff production participation rate

In Rwanda, there is a substantial number of working age persons who are involved in subsistence agriculture and consequently excluded from the count of the labour force according to the 2013 international standards on statistics of work, employment and labour underutilisation. The relatively low labour force participation reported in Figure 2.2 above reflects the relatively high share of subsistence foodstuff producers among persons outside labour force.

Figure 2.4 presents the trend of the proportion of the working age population who were outside the labour force but engaged in production of foodstuff for own use. It can be observed that the rate of participation in subsistence foodstuff production fluctuates across high and low seasons of agriculture; it is higher in February and November and lower in May and August.

Figure 2. 4: Trend of subsistence foodstuff production participation rate



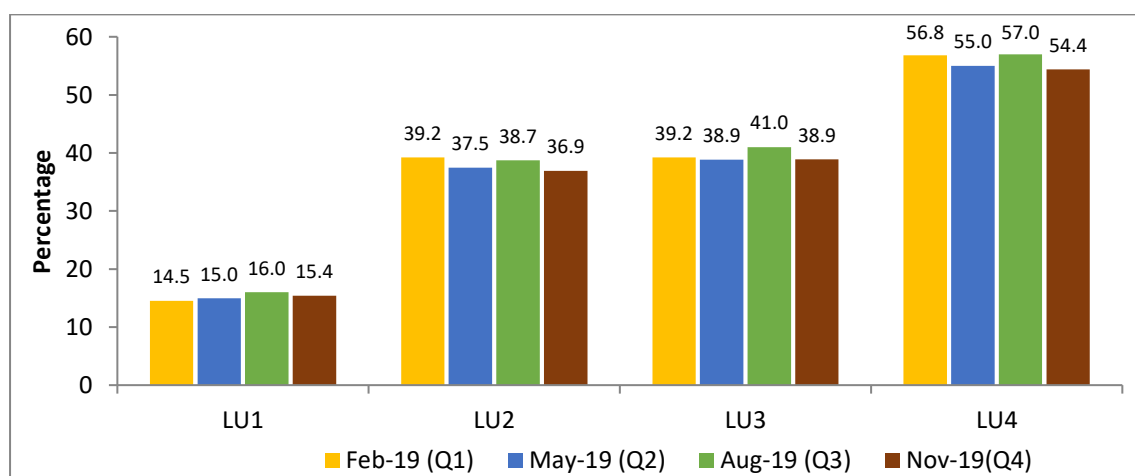
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

### 2.5 Labour underutilization rates

Labour underutilization consists of three components namely Unemployment, Time-related underemployment and Potential labour force. The Labour Force Survey results provide four indicators of labour underutilization: the unemployment rate (LU1); the combined rate of unemployment and time-related underemployment (LU2); the combined rate of unemployment and potential labour force (LU3); and the composite measure of labour underutilization (LU4), defined as the ratio of the sum of people in time-related underemployment, in unemployment and in the potential labour force to the extended labour force defined as the sum of labour force and potential labour force.

The results in figure 2.5 reveal that the underutilisation rate and its components have decreased between August 2019 and November 2019. LU1 has increased in November 2019(Q4) as compared to February 2019(Q1) while LU2,LU3 and LU4 have decreased in the same period. The unemployment rate (LU1) has slightly increased by 0.3 percentage points; LU2 has decreased by 2.3 percentage points; LU3 has decreased by 0.3 percentage points; while LU4 has decreased by 2.4 percentage points within the aforementioned period.

Figure 2. 5: Trend of the labour underutilization rate



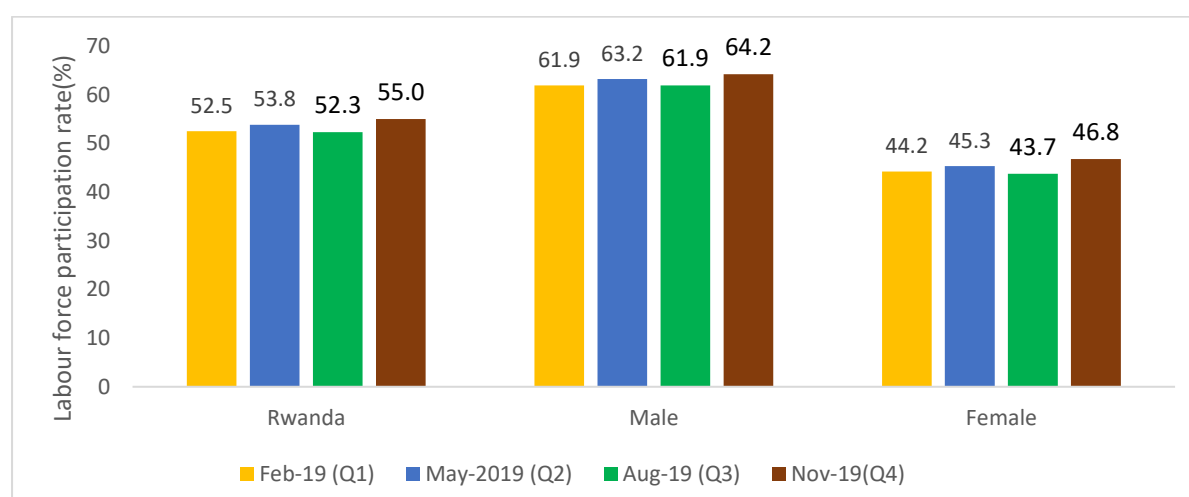
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

## Chapter 3: Labour Force Participation

### 3.1 Labour force participation among males and females

The labour force participation rate has decreased to 55.0 in November 2019(Q4) compared to 52.3 percent in August 2019(Q3). The results showed a slightly increasing trend of labour force participation rate in both male and female population. Labour force participation rate was higher for male population than the female population over time. The labour force participation rate gender gap was around 18.0 percentages points during the three first quarters of 2019 but slightly decreased to around 17.0 percentage point in November (Q4) 2019. The quarter-to-quarter comparison shows that the labour force participation rate has increased by 2.7 percentage points from August to November 2019, at the National level. The increase among males (2.3 percentages points) is slightly lower than the increase among females (3.1 percentage points).

Figure 3. 1: Labour force participation rate by sex

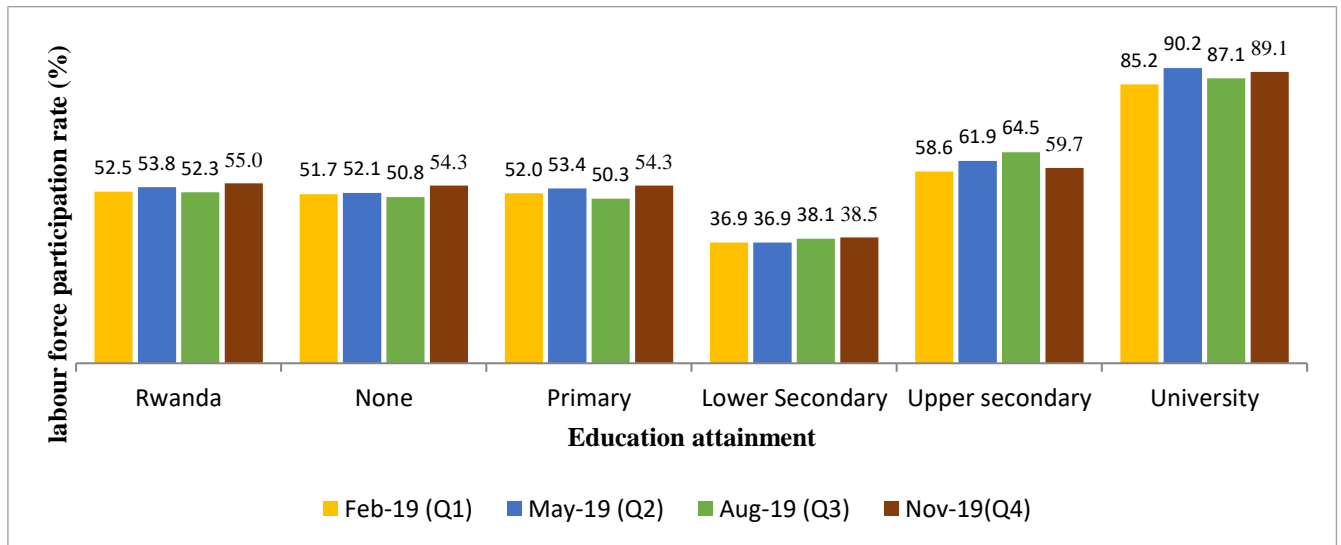


Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

### 3.2 Labour force participation and education

The analysis of the labour force participation rate (LFPR) by educational attainment of individuals shows that labour force participation rate was higher among those with relatively higher levels of education compared to those with lower levels of education. A comparison from August 2019(Q3) to November 2019(Q4) showed an increase in LFPR for none, primary and University levels of education while it had decreased for upper secondary level of education and remained unchanged for lower secondary level of education. A decrease of 4.8 percentage points was observed among upper secondary levels of education while there has been an increase of 3.5 percentage points among persons with no level of education, an increase of 4.0 percentage points among holders of primary level of education and an increase of 2.0 percentage points among University graduates.. Low rates of labour force participation rate among people with lower secondary education (38.5 percent in November 2019(Q4)) may be attributed to the fact that some of them were still enrolled in schools. The analysis of labour force participation rate after the exclusion of those who were enrolled in schools showed that the LFPR among lower secondary school holders was 66.9 percent and leads to the conclusion that the LFPR increases as the level of education increases.

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

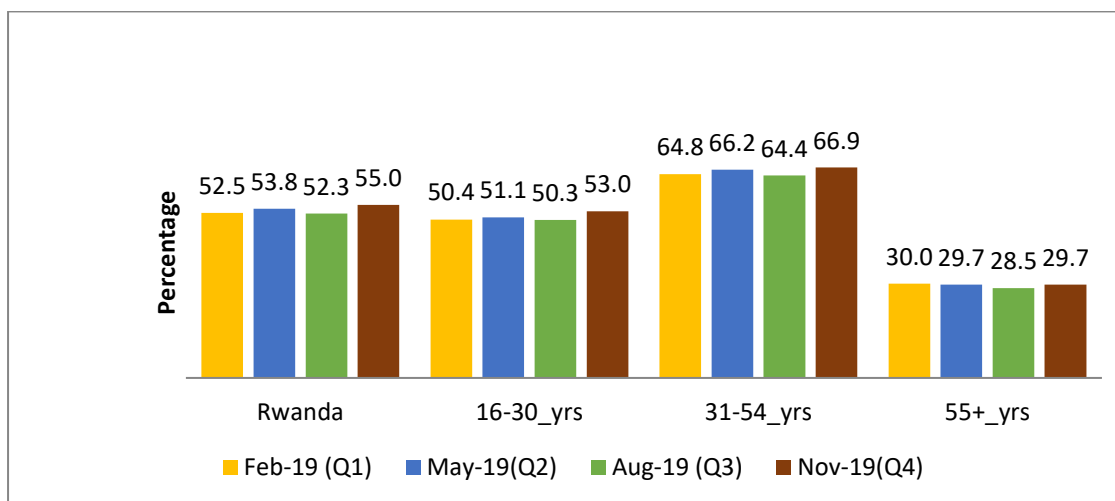


Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

### 3.3 Labour force participation by age group

The labour force participation rate among people in the age group (31 to 54 years old) was higher than the overall labour force participation rate in November 2019(Q4) (66.9 percent compared to 55.0 percent at the national level). The labour force participation rate among youth 16-30 years old was 53.0 percent, which is 2.0 percentage points lower than the national average and 2.7 percentage points higher than the rate observed in August 2019 (Q2). Among the population aged 31-54 years old, the labour force participation rate has increased by 2.5 percentage points in November 2019(Q4) compared to August 2019(Q3) and it has also increased among population aged 55 years and above by 1.2 percentage points in the same period. The observation of labour force participation rate in November 2019(Q4) and February 2019(Q1), revealed that it has increased with 2.5 percentage points at the national level and among age group presented in figure 3.3 below except among population aged 55 years and above where it has decreased by 0.3 percentage points.

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

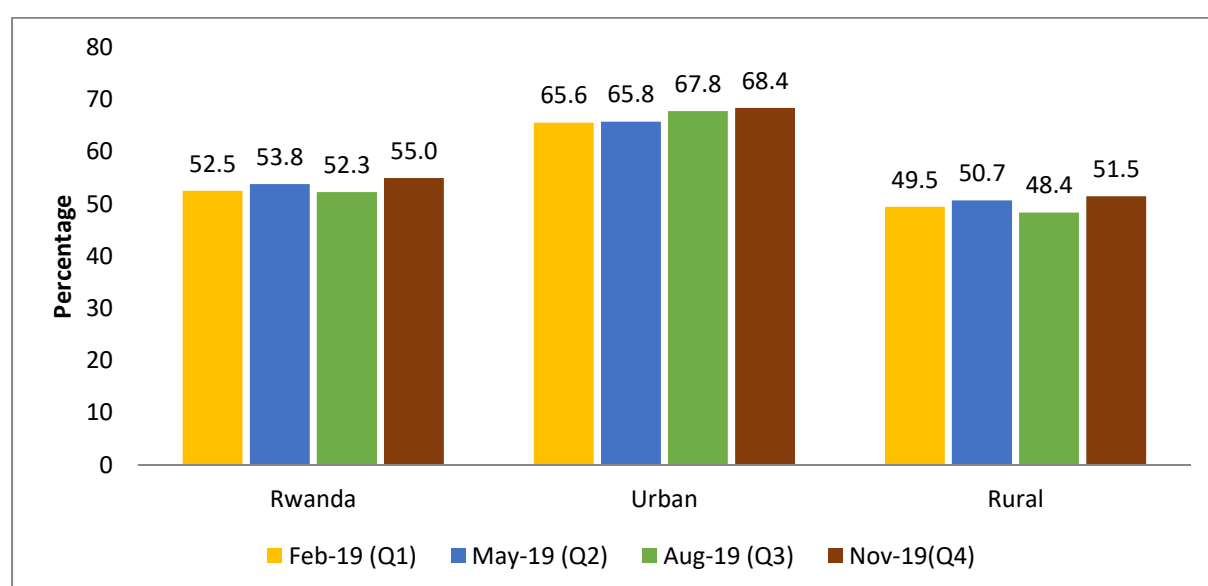


Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

### 3.4 Labour force participation and area of residence

The analysis of labour force participation rate by area of residence (urban and rural) showed that it was higher in urban areas as compared to rural areas. This may be attributed to the diversity of job opportunities in urban areas as compared to rural areas where the number of employment opportunities is limited and most people are involved in subsistence agriculture. Over the year, the highest gap of labour force participation rate between urban and rural areas was registered in August 2019 (19.4 percentage points) while the lowest was observed in May 2019 (15.1 percentage points). The comparison of November 2019(Q4) and August 2019(Q3) revealed that the labour force participation rate increased by 0.7 percentage points and by 3.1 percentage points respectively in urban and rural areas.

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



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019





## Chapter 4: Employment

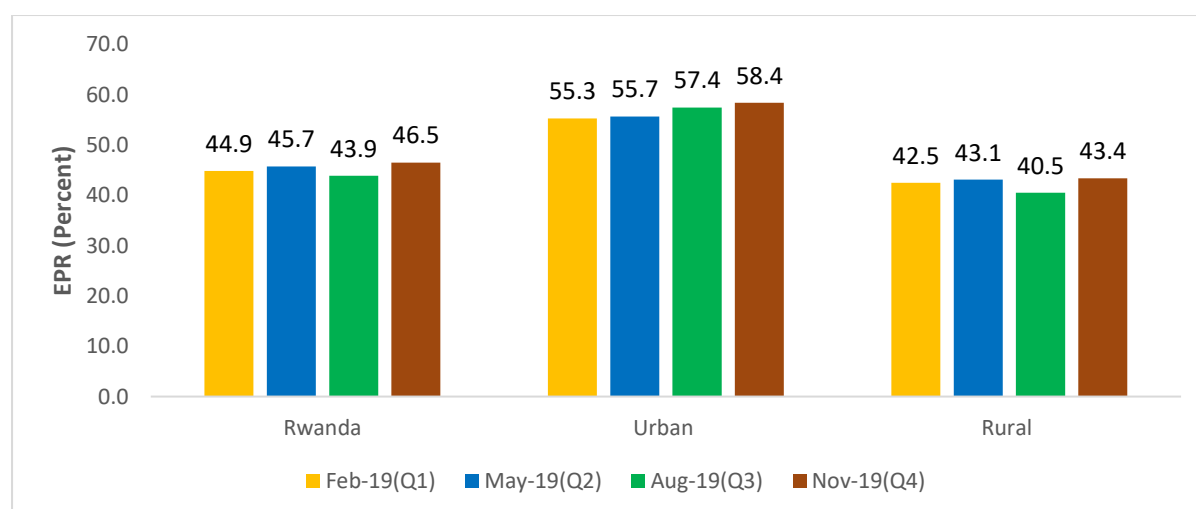
### 4.1 Employment to population ratio

The analysis of employment trends shows a slight increase of employed persons from around 3,153,000 in August 2019(Q3) to about 3,406,000 in November 2019(Q4). The employment-to-population ratio (EPR), i.e, the percentage of the working age population who is employed, is an indicator of the performance of the national economy in providing employment to its growing population.

Figure 4.1 presents the employment-to-population ratio by area of residence. It may be observed that it has slightly increased in November 2019(Q4) as compared to May 2019(Q2) at the national level as well as in rural areas and in urban area. The results showed that between August 2019(Q3) and November 2019(Q4) the employment-to-population ratio slightly increased by 2.6 percentage points at national level, while it has increased by 2.9 percentage points in rural areas, and has slightly increased by 1.0 percentage points in urban areas.

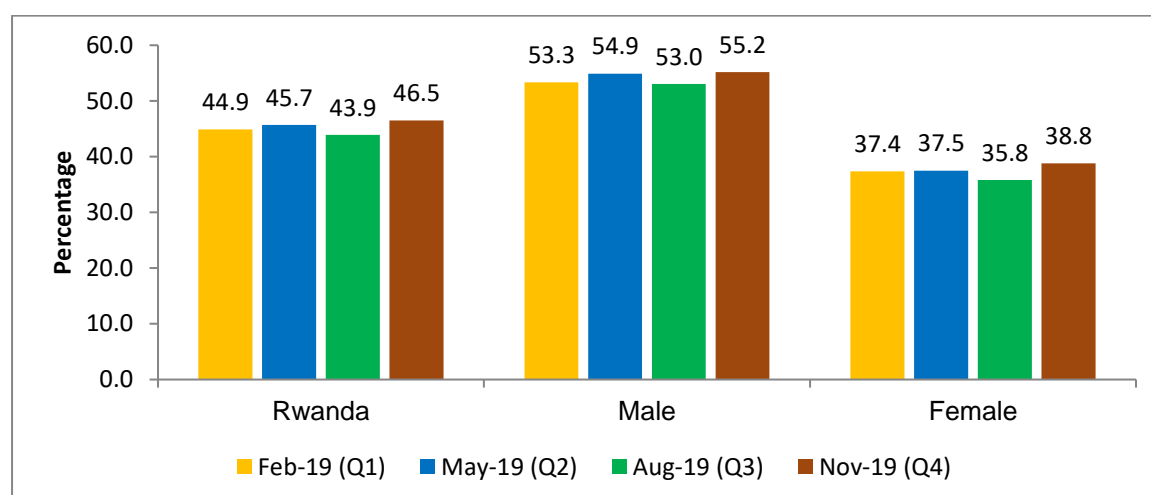
It may also be observed that the employment-to-population ratio was higher in urban areas when compared to rural areas in all rounds of labour force survey. The gap between the employment-to-population ratio between urban and rural areas remained significant in November 2019(Q4) (15.0 percentage points) but it has narrowed as compared to the previous quarter.

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



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

Figure 4.2 shows the trend in the employment-to-population ratio for the male and female populations separately. It is instructive to note that there is a high gap between the employment-to-population ratio of males and females. While in August 2019(Q3), the male employment-to-population ratio was 53.0 percent, the female rate was 35.8 percent, representing a gap of 17.2 percentage points. In November 2019(Q4), the male employment-to-population ratio has increased by 2.2 percentage points from 53.0 percent to 55.2 percent, while the female rate has increased by 3.0 percentage points from 35.8 percent in August 2019(Q3) to 38.8 percent in November 2019(Q4). The later resulted to the male and female gap of 16.4 percentage points in November 2019(Q4).

**Figure 4. 2: Employment to population ratio by sex**


Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

## 4.2 Status in employment

Table 4.1 below reveals that, in November 2019(Q4), employed population increased by about 253,000 persons as compared to August 2019(Q3) corresponding to an increase of about 8.0 percent. It is observed that the category of employees and paid apprentices recorded the highest share of employment across all rounds of the labour force survey followed by own-account workers, contributing family workers, employers, and member of cooperatives respectively.

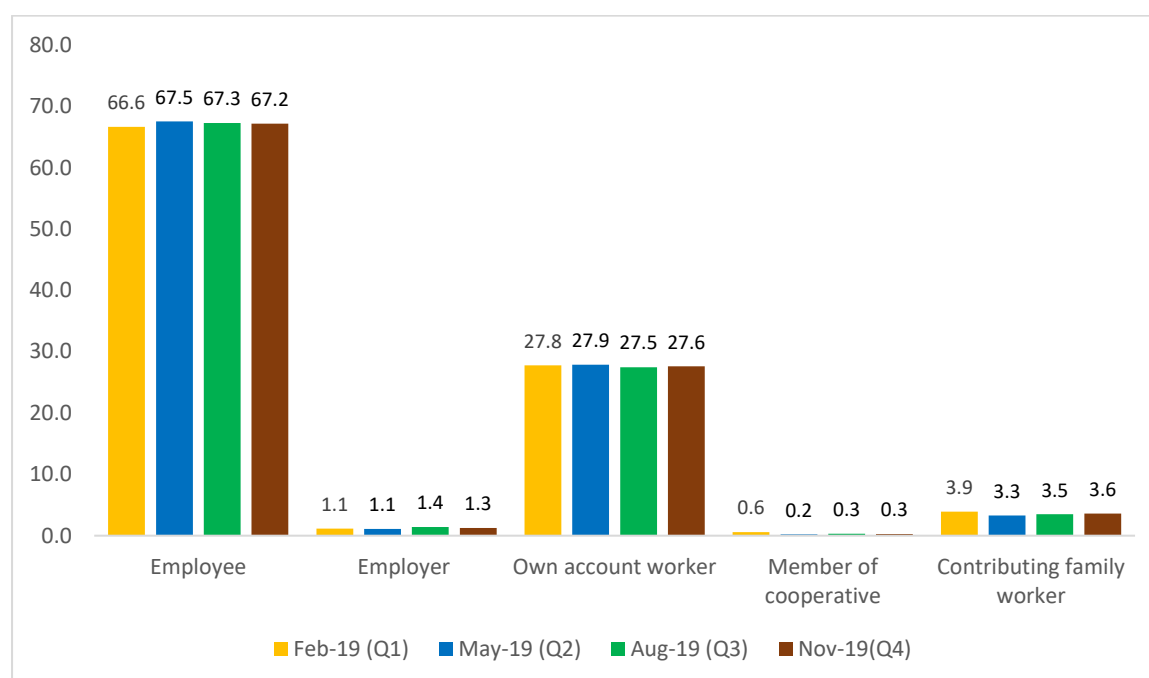
**Table 4. 1: Percentage distribution of employed population by status in employment**

Status in employment	Employed persons				Nov-19(Q4)
	Aug-18	Feb-19(Q1)	May-19(Q2)	Aug-19(Q3)	
Total(count)	3,321,598	3,186,051	3,258,935	3,152,832	3,405,877
<b>Total (percent)</b>	100	100	100	100	100
Employee and paid apprentice	66.8	66.6	67.5	67.3	67.2
Employer	1.6	1.1	1.1	1.4	1.3
Own-account worker	27.2	27.8	27.9	27.5	27.6
Member of cooperative	0.2	0.6	0.2	0.3	0.3
Contributing family worker	4.3	3.9	3.3	3.5	3.6

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

Figure 4.3 shows the shares of employed persons according to the status of employment. It reveals that the share of employees (around 67 percent) has essentially remained unchanged between August 2019(Q3) and November 2019(Q4). The share of own-account workers also remained stable (around 28 percent). The results also showed that other categories (employers, members of cooperatives, and contributing family workers) have not shown a significant change in the presented rounds of the survey results.

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



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

### 4.3 Main occupation

The distribution of employed persons by occupational category over the five consecutive rounds of the Labour Force Survey as presented in table 4.2 below shows that Elementary Occupations registered a highest share followed by Service and Sales Workers; and then Craft and Related Trades Workers among others. A comparison between August 2019(Q3) and November 2019(Q4) indicated that employment in Elementary Occupations remained unchanged while Services and sale workers recorded a slight increase of 1.7 percentage points. Other occupational categories has not shown significant changes in the same period.

**Table 4. 2: Percentage distribution of employed population by major occupation group.**

Major Occupation Group	Employed persons				
	Aug-18	Feb-19 (Q1)	May-19 (Q2)	Aug-19 (Q3)	Nov-19 (Q4)
<b>Total employed</b>	<b>3,321,598</b>	<b>3,186,051</b>	<b>3,258,935</b>	<b>3,152,832</b>	<b>3,405,877</b>
<b>Total (percent)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Legislators, Managers and Senior Officials	1.5	1.2	1.3	1.5	1.4
Professionals	6.3	5.7	6.4	6.0	5.8
Technicians and Associate Professionals	1.6	1.4	1.4	1.7	1.5
Clerical Support Workers	0.9	0.9	1.2	0.9	1.0
Service and Sales Workers	19.9	18.9	19.5	19.4	21.1
Skilled Agricultural, Forestry and Fishery Workers	7.5	7.5	7.2	6.3	5.9
Craft and Related Trades Workers	9.1	8.2	8.4	8.8	7.9
Plant and Machine Operators and Assemblers	3.0	2.9	2.9	3.0	3.2
Elementary Occupations	50.3	53.3	51.7	52.4	52.2

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

#### 4.4 Main Economic activity

According to the results presented in Table 4.3 below, the bulk of employed persons were engaged in Agriculture, forestry and fishing (37.3 percent) in November 2019(Q4). Other sectors that employed a substantial number of persons were wholesale and retail trade; repair of motor vehicles and motorcycles (15.7 percent), Construction (8.9 percent), Manufacturing (6.2 percent), Activities of households as employers (6.0 percent); transportation and storage (5.9 percent), , Education (3.6 percent), and Accommodation and food service activities (3.2 percent).

A comparison between August 2019(Q3) and November 2019(Q4) showed that only four economic activities had shown a change of at least 1 percentage point. These are Agriculture, forestry and fishing with an increase of 1.9 percentage points; Construction, which recorded a decline of 2.6 percentage points; Transportation and storage; which showed an increase of 1.1 percentage points; and wholesale and retail trade; repair of motor vehicles and motorcycles, which showed an increase of 1.0 percentage points. Manufacturing, Mining and quarrying have also shown a decline of 0.9 percentage points respectively

**Table 4. 3: Percentage distribution of employed population by branch of economic activity.**

Economic activities	Employed Persons				
	Aug-18	Feb-19 (Q1)	May-19 (Q2)	Aug-19 (Q3)	Nov-19 (Q4)
<b>Total employed</b>	<b>3,321,598</b>	<b>3,186,051</b>	<b>3,258,935</b>	<b>3,152,832</b>	<b>3,405,877</b>
<b>Total (Percent)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Agriculture forestry and fishing	36.4	39.8	38.0	35.4	37.3
Mining and quarrying	2.1	3.1	1.9	2.4	1.5
Manufacturing	6.6	6.4	5.9	7.1	6.2
Electricity gas steam and air conditioning supply	0.1	0.2	0.3	0.2	0.4
Water supply, gas and remediation services	0.2	0.2	0.3	0.2	0.2
Construction	10.9	9.2	9.1	11.5	8.9
Whole sale and retail trade; repair of motor vehicles and motorcycles	15.4	14.4	14.4	14.7	15.7
Transportation and storage	5.0	4.9	5.4	4.8	5.9
Accommodation and food service activities	2.5	2.4	3.2	3.1	3.2
Information and communication	0.4	0.2	0.4	0.3	0.5
Financial and insurance activities	1.0	1.2	1.0	1.1	1.0
Real estate activities	0.1	0.1	0.2	0.1	0.1
Professional, scientific and technical activities	0.9	0.6	1.0	0.8	0.9
Administrative and support activities	1.6	1.7	2.0	1.4	2.2
Public administration and defence; compulsory social security	2.0	1.8	2.2	2.1	2.2
Education	3.2	3.4	3.5	3.7	3.6
Human health and social work activities	1.5	1.4	1.4	1.4	1.2
Arts, entertainment and recreation	0.3	0.3	0.5	0.3	0.3
Other services	2.3	2.5	1.7	2.4	2.2
Activities of households as employers	6.8	5.9	7.0	6.2	6.0
Activities of extraterritorial organizations and bodies	0.5	0.4	0.7	0.7	0.6

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019



## Chapter 5: Unemployment and Labour Underutilization

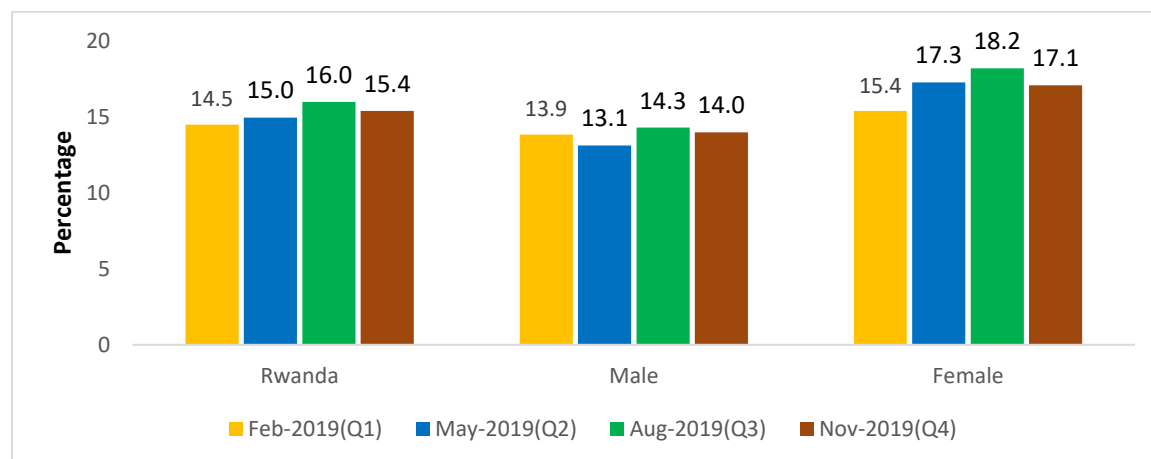
Unemployment is a particular form of labour underutilization. It reflects the pressure on the labour market. It is measured in terms of the number of persons without employment, actively seeking and available for employment. Labour underutilization is a more general concept. It refers to mismatches between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

### 5.1 Unemployment rate

The unemployment rate is defined as the ratio of the number of unemployed persons to the labour force. It is the most 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 Labour Force Survey results of the November 2019(Q4), the unemployment rate in Rwanda was 15.4 percent compared to 16.0 percent in August 2019(Q3) and 15.0 percent in May 2019(Q2). The unemployment rate has decreased by 0.3 percentage point among males as compared to an increase of 1.1 percentage points among females between August 2019(Q3) and November 2019(Q4). The analysis of the unemployment rate dynamics for males and females between February 2019(Q1) and November 2019(Q4) revealed an increase of unemployment rate among females (1.7-percentage points) as compared to an increase of 0.1 percentage points among male population.

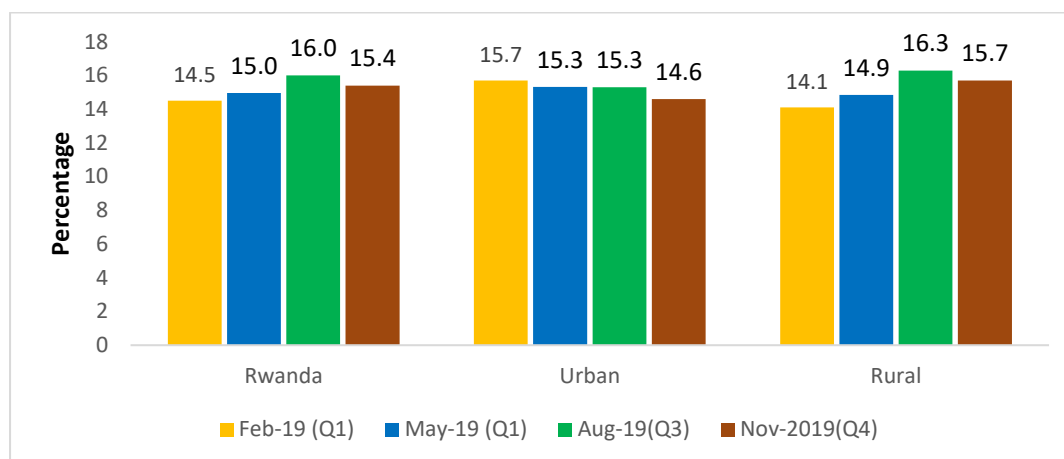
Figure 5. 1: Unemployment rate by sex.



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

In addition, the survey results of November 2019(Q4) showed that the unemployment rate was higher in rural as compared to urban areas of Rwanda (15.7 percent and 14.6 percent respectively). The November 2019(Q4) results showed a decline of unemployment rate in both rural areas and urban areas (0.6 percentage points and 0.7 percentage points respectively) as compared to the previous quarter.

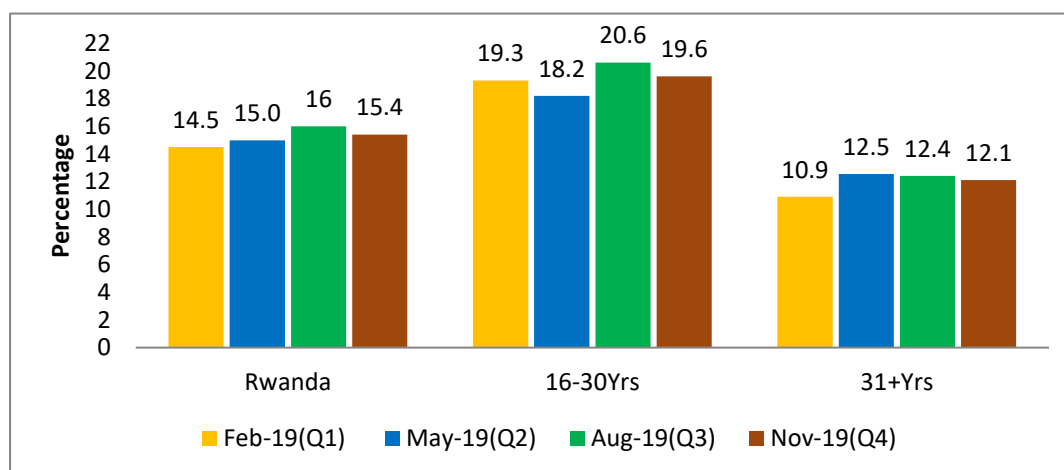
Figure 5. 2: unemployment rate by area of residence.



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

Figure 5.3 shows the trend in the unemployment rate among youth and adults population. In Rwanda, the youth population is defined as persons with 16 to 30 years of age. The results showed that the unemployment rate among the youth has been relatively higher than the unemployment rate among adults. The youth (16-30 years) unemployment rate has declined from 20.6 percent in August 2019(Q3) to 19.6 percent in November 2019(Q4) while the unemployment rate among adults (31+ years) has declined from 12.4 percent to 12.1 percent during the same period.

Figure 5. 3: Unemployment rate among youth and Adult

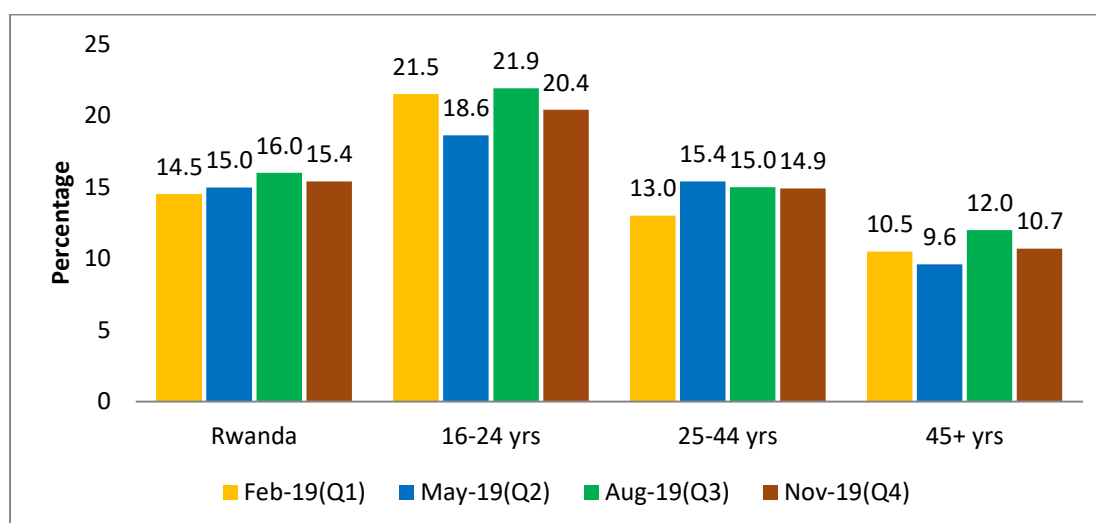


Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

The comparison from August 2019(Q3) to November 2019(Q4) showed a decrease of 1.5 percentage points in the unemployment rate among young age (16-24 years) and a decline by 1.3 percentage point among adults (aged 45+) as presented in figure 5.4 below. On the other hand, the unemployment rate slightly decreased by 0.1 percentage points among the age group 25-44 years old.



Figure 5. 4: Unemployment rate by selected age groups



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

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

Participation in employment, education or training is important for youth in their transition to the labour market and achieves self-sufficiency. In this report, two age groups (16 to 24 years old) and (16 to 30 years old) are separately used in presenting the results in table 5.1. The full count of young in the age group 16 to 24 years old, who were neither in employment nor in education or training, was 727,546 persons while for those aged between 16 and 30 years old, the total number was 1,149,817 persons in November 2019(Q4).

The share of young (16 to 24 years old) neither in employment nor in education or training (NEET) stood at 32.3 percent in November 2019(Q4), representing an decrease of 1.7 percent compared to August 2019(Q3) (34.0 percent). The August 2019(Q3) and November 2019(Q4) rounds comparison showed that, the decline of the NEET rate was essentially among young living in urban areas where it changed from 21.8 percent in August 2019(Q3) to 19.0 percent in November 2019(Q4). It had also showed a significant decline among females from 39.6 percent to 37.3 percent in the same period.

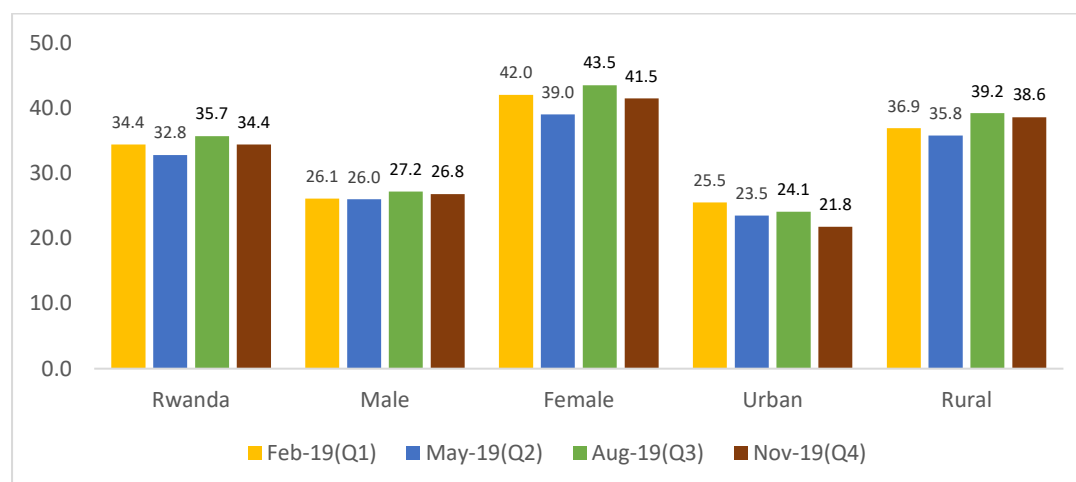
Table 5. 1: Share of youth Not in Employment, Education or Training (NEET) by sex and area of residence

Age group	sex	Estimate(NEET)						Percentage point change
		Feb-18	Aug-18	Feb-19 (Q1)	May-19 (Q2)	Aug-19 (Q3)	Nov-19 (Q4)	Aug-19 to Nov-19
16-24 yrs	Total	32	29.5	33.3	30.8	34.0	32.3	-1.7
	Male	25.3	23	26.8	26.4	28.1	27.0	-1.1
	Female	38.1	35.6	39.7	34.9	39.6	37.3	-2.3
	Urban	23.8	20.6	23.6	22.0	21.8	19.0	-2.8
	Rural	34.5	32.5	35.8	33.4	37.3	36.1	-1.2
16-30 yrs	Total	33.7	31.7	34.4	32.8	35.7	34.4	-1.3
	Male	25	22.8	26.1	26.0	27.2	26.8	-0.4
	Female	41.8	39.9	42	39.0	43.5	41.5	-2.0
	Urban	24.9	22.4	25.5	23.5	24.1	21.8	-2.3
	Rural	36.6	35	36.9	35.8	39.2	38.6	-0.6

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

The share of youth persons (16-30 years old) neither in employment nor in education or training was 34.4 percent in November 2019(Q4). It has shown a decline as compared to the previous Quarter of the survey where it stood at 35.7 percent. The results also showed that youth NEET rate was higher among females than males and higher in rural areas compared to urban areas.

Figure 5. 5: Trends in share of youth (16-30 years) not in employment nor in education or training (NEET) by sex and area of residence



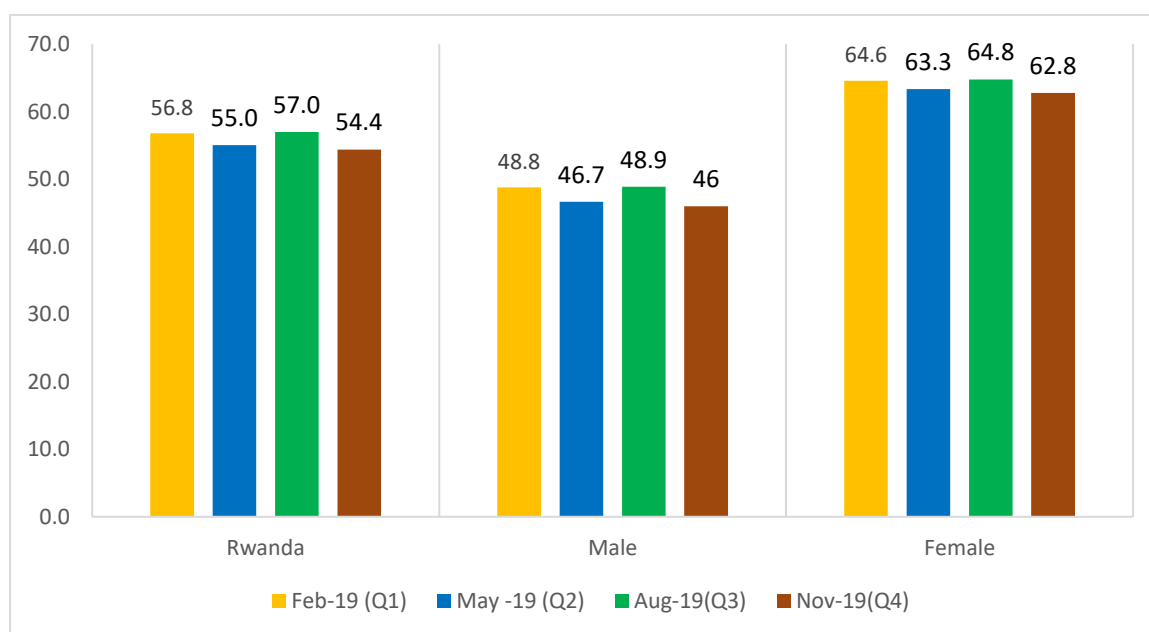
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

### 5.3. Labour Underutilization

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

Figure 5.6 showed that the composite measure of labour underutilization rate stood at 54.4 percent in November 2019(Q4) compared to 57.0 percent in August 2019 (Q2) equivalent to a decrease of 2.6 percentage points. The labour underutilization rate was higher among females than males. The August 2019(Q2) and November 2019(Q4) comparison showed that the labour underutilization rate decreased by 2.9 percentage points among males as compared to 2.0 percentage points decrease among females.

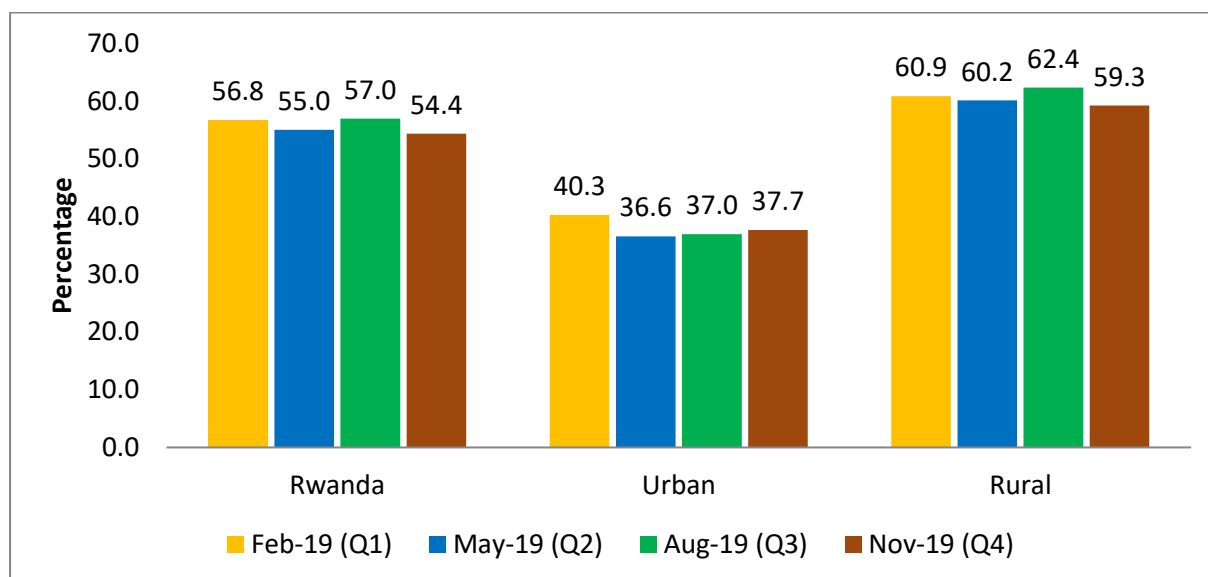
Figure 5. 6: Labour under-utilization rate by sex



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

The results presented in figure 5.7 below showed also that the labour under-utilization rate (LU4) was higher among people living in rural areas than those living in urban areas. The comparison of August 2019(Q3) and November 2019(Q4) revealed that the labour underutilization rate (LU4) slightly increased by 0.7 percentage points in urban areas whereas it has decreased by 3.1 percentage points in rural areas.

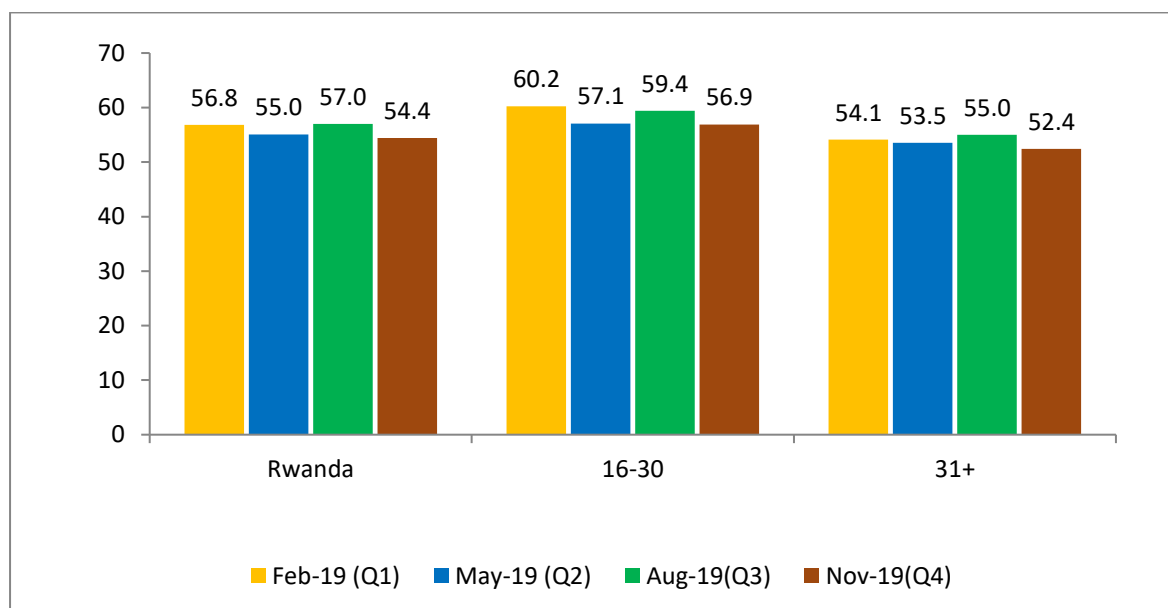
Figure 5. 7: Labour under-utilization rate by area of residence



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

Figure 5.8 presents the labour underutilization rate by age group. It is observed that the labour underutilization rate has decreased in both youth (16-30 years old) (2.5 percentage points decrease) as well as in adult population (2.6 percentage points decrease) between August 2019(Q3) and November 2019(Q4).

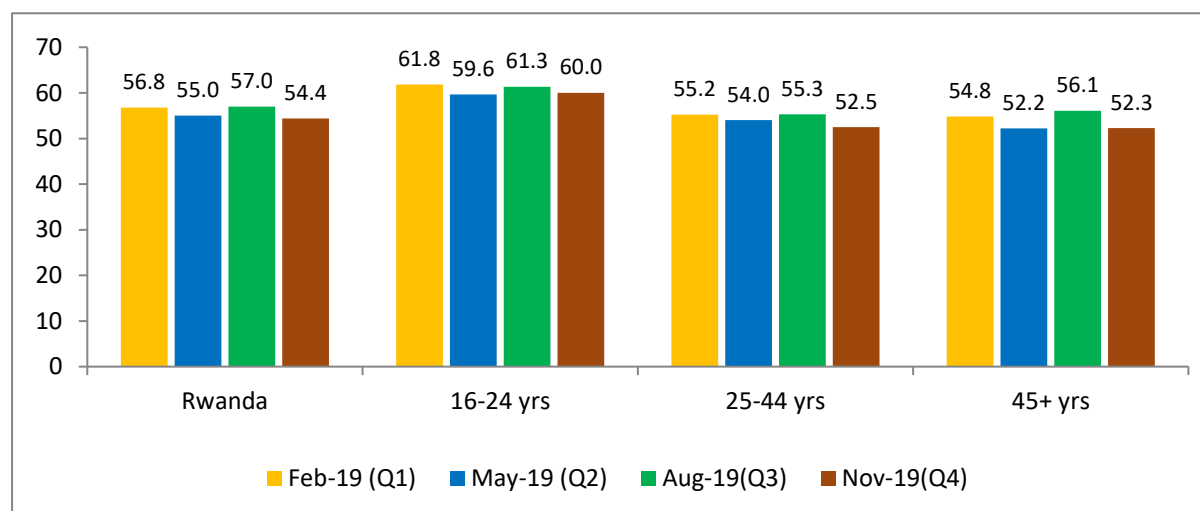
Figure 5. 8: Trend in labour underutilization rate by Youth and Adult



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

The labour under utilisation rate has generally decreased from August 2019(Q3) to November 2019(Q4) among all selected group of ages. The results presented on the figure 5.9 showed below that the labour underutilization rate decreased by 1.3 percentage points among people aged 16-24 years from August 2019(Q3) to November 2019(Q4); while it has declined by 2.8 percentage point and 3.8 percentage points for those aged 25-44 years and 45+years respectively, over the same period.

Figure 5. 9: Trend in labour underutilization rate by selected age group



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019



## Chapter 6: Population outside the Labour Force

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

The population outside labour force was 3,373,000 in February 2019(Q1), 3,298,000 in May 2019(Q2) and 3,428,000 in August 2019(Q3). The population outside labour force has decreased to 3,295,000 in November 2019(Q4), representing a decrease of 3.9 percent.

### 6.1 Main components of people outside the labour Force<sup>3</sup>

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

Table 6.1 presents the main components of persons outside labour force. The proportion of population outside labour force who were exclusively students, slightly decreased from 19.9 percent in August 2019(Q3) to 19.5 percent in November 2019(Q4). The results also showed an increase of 5.1 percentage points among persons involved in subsistence agriculture (from 47.7 to 52.8 percent) and a decrease of 4.7 percentage points among other persons outside labour force (from 32.4 to 27.7 percent) in the same period.

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

Main components	LFS rounds					% Change
	Aug-18	Feb-19 (Q1)	May-19 (Q1)	Aug-19 (Q3)	Nov-19 (Q4)	Aug-19(Q3) to Nov-19 (Q4)
<b>Count(,000)</b>	3,150	3,373	3,298	3,428	3,295	-3.9
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Exclusively student	21.0	21.4	22.1	19.9	19.5	-0.4
Subsistence agricultural farmers	51.3	53.1	48.2	47.7	52.8	5.1
Other outside LFS	27.7	25.5	29.7	32.4	27.7	-4.7

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

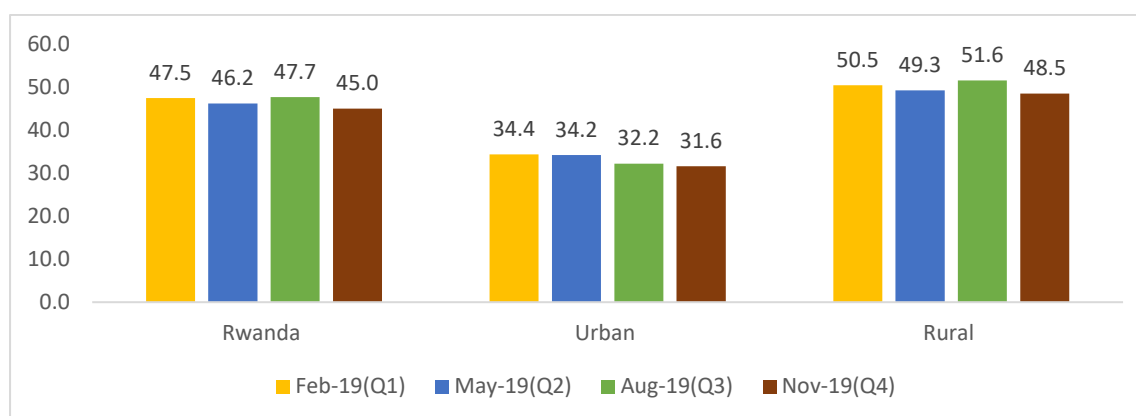
<sup>3</sup> There has been a change in computing the components of people outside the labour force by including students in vocational education among “exclusively student” component

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

It is observed from Figure 6.1 that the proportion of persons outside labour force among the working age population was higher in rural areas in relative to urban areas, and the urban-rural gap has decreased to 16.9 in November 2019 (Q4) as compared to 19.4 percentage points gap observed in August 2019(Q3).

The comparison between August 2019(Q3) and November 2019(Q4) showed that the proportion of persons outside labour force decreased from 47.7 percent to 45.0 percent at the national level. It has also declined in rural areas from 51.6 percent to 48.5 percent and has slightly decreased in urban areas from 32.2 percent in August 2019(Q3) to 31.6 percent in November 2019(Q4).

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



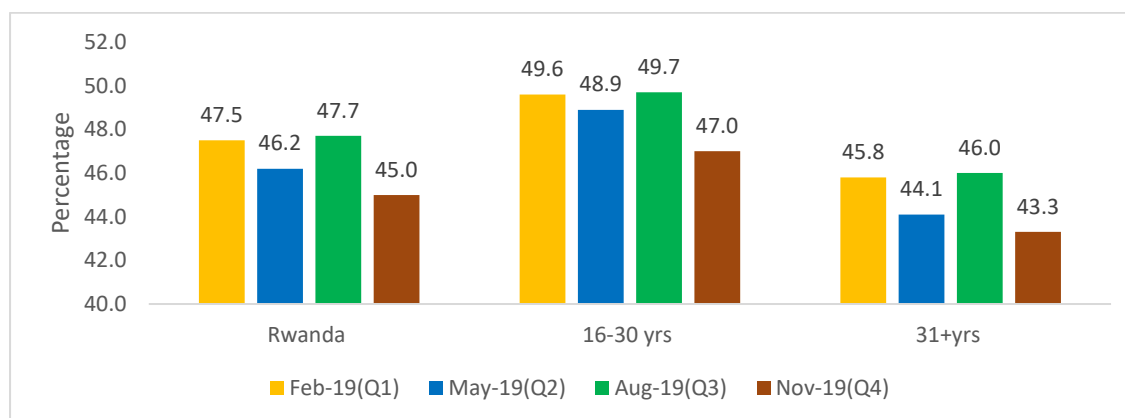
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

## 6.3 Population outside the labour force by age group

Figure 6.2 shows that the proportion of persons outside labour force among the working age population was higher among the youth than among adults in November 2019(Q4)

The comparison between August 2019 (Q3) and November 2019(Q4) showed that this proportion decreased from 49.7 percent to 47.0 percent among youth (16-30 years old) and from 46.0 percent to 43.3 percent among adults (31 years and above).

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



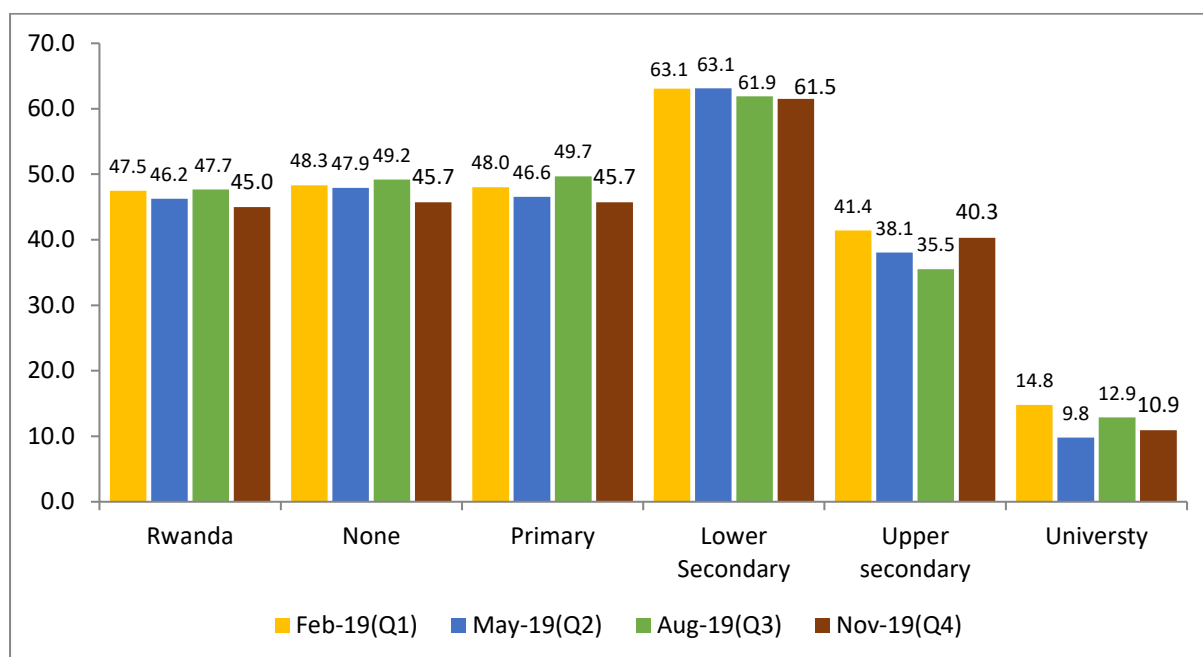
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019



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

The survey results reveal that the share of persons outside the labour force in the working age population was lower among people who hold higher educational attainment as compared to persons with lower education levels. The high rates among people with lower secondary education may be because many of them were still enrolled in schools. The proportion of working age people outside the labour force has generally declined in almost all levels of education attainment except for upper secondary education level. This proportion has shown an increase of almost 4.8 percentage point among those with upper secondary level of education in November 2019(Q4) as compared to August 2019(Q3).

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



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019



## Chapter 7: Work in agriculture

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

### 7.1 Agricultural status of workers

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

The full count of workers in the agriculture sector, as presented in table 7.1 below has been declining as from February 2019(Q1) where it was at 56.0 percent of the working age population involved in agriculture activity, 51.2 percent in May 2019(Q2), and 50.0 percent in August 2019(Q3). However, this proportion has shown an increase of 3.8 percentage points in November 2019(Q4) (53.8 percent), as compared to the previous quarter).

Workers engaged exclusively in subsistence agriculture constitute the majority of agricultural workers, followed by those engaged in market-oriented agriculture as their main job in all rounds of the LFS conducted.

The proportion of agricultural persons in market-oriented agriculture has increased by 1.2 percentage points from August 2019 (Q3) to November 2019(Q4), while the proportion of agricultural workers exclusively in subsistence agriculture has decreased by 1.8 percentage points during that period.

Table 7. 1: Works status in agriculture

Categories of agriculture	Aug-18	Feb-19 (Q1)	May-19 (Q2)	Aug-19 (Q3)	Nov-19 (Q4)
Market oriented agriculture as main job (a)	32.8	31.9	34.0	31.1	32.3
Subsistence agriculture exclusively (b)	51.3	52.8	51.8	53.8	52.6
Participated in Subsistence agriculture but have non agriculture main job (c)	15.5	14.6	13.6	14.6	14.6
Market oriented agriculture as secondary job (d)	0.5	0.6	0.7	0.5	0.5
<b>Total (100%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Count ('000s)</b>	<b>3,696</b>	<b>3,978</b>	<b>3,650</b>	<b>3,591</b>	<b>3,937</b>
<b>Proportion of working age population</b>	<b>52.6</b>	<b>56.0</b>	<b>51.2</b>	<b>50.0</b>	<b>53.8</b>

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

## 7.2 Characteristics of agricultural workers

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

The bulk of agricultural workers were involved in subsistence agriculture. The survey results show that market oriented agriculture was predominant among males as opposed to females. On the other hand, the number of people involved exclusively in the subsistence agriculture was higher among females than males.

The comparison of labour force surveys conducted in Feb 2019 (Q1), May 2019(Q2), August 2019(Q3) and November 2019(Q4) shows a fluctuation trend of the share of persons involved in market-oriented agriculture at national level and among both females and males.

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

		LFS rounds					Change Aug-19 (Q2) to Nov-19 (Q3)
		18-Aug	Feb-19 (Q1)	May_19 (Q2)	19-Aug (Q3)	Nov-19 (Q4)	
Both	Total	100	100	100	100	100	
	Market oriented agriculture	39	37.6	39.6	36.6	38.0	1.4
	Subsistence agriculture	61	62.4	60.4	63.4	62.0	-1.4
Male	Total	100	100	100	100	100	
	Market oriented agriculture	47	45	47.2	43.9	45.0	1.1
	Subsistence agriculture	53	55	52.8	56.1	55.0	-1.1
Female	Total	100	100	100	100	100	
	Market oriented agriculture	34.3	33	34.7	32.2	33.6	1.4
	Subsistence agriculture	65.7	67	65.3	67.8	66.4	-1.4

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

Table 7.3 below presents the trend of the share of market oriented and subsistence agricultural workers among young persons and adults, separately. The level of participation of young population involved in in subsistence agriculture was 61.6 percent while it was 66.2 percent among adult population in November2019.

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

Age group		LFS rounds					Change
		18-Aug	Feb-19 (Q1)	May-19 (Q2)	19-Aug	Nov-19 (Q4)	Aug-19 (Q3) to Nov-19 (Q4)
Both	Total	100	100	100	100	100	
	Market oriented agriculture	39	37.4	39.6	37	38	1.4
	Subsistence agriculture	61	62.6	60.4	63	62	-1.4
Young(16-30)	Total	100	100	100	100	100	
	Market oriented agriculture	41	39	42.5	38	38.4	0.6
	Subsistence agriculture	60	61	57.5	62	61.6	-0.6
Adults(31+)	Total	100	100	100	100	100	
	Market oriented agriculture	39	36.6	38.2	36	37.8	1.8
	Subsistence agriculture	61	63.4	61.8	64	62.2	-1.8

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

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

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

Level of educational attainment		LFS rounds					Change
		Aug-18	Feb-19 (Q1)	May-19 (Q2)	Aug-19 (Q3)	Nov-19 (Q4)	Aug-19 (Q3) to Nov-19 (Q4)
Total	Total	100	100	100	100	100	0
	None	63.9	62.3	64.5	62.8	61.1	-1.7
	Primary	29.1	30.8	29.7	30.7	32.0	1.3
	Lower secondary	3.7	3.6	3.1	3.6	4.3	0.7
	Upper secondary	2.8	3.0	2.4	2.7	2.5	-0.2
	University	0.5	0.3	0.3	0.3	0.2	-0.1
Market oriented agriculture	Total	100	100	100	100	100	0
	None	69.5	69.2	68.1	69.3	67.6	-1.7
	Primary	25.9	25.5	28.3	26.0	28.1	2.1
	Lower secondary	2.7	2.5	1.7	3.2	2.7	-0.5
	Upper secondary	1.1	2.4	1.5	1.3	1.3	0.0
	University	0.7	0.4	0.4	0.3	0.4	0.1
Subsistence agriculture	Total	100	100	100	100	100	0
	None	60.3	58.1	62.1	59.0	57.0	-2.0
	Primary	31.2	34.0	30.7	33.4	34.4	1.0
	Lower secondary	4.4	4.3	4.0	3.9	5.2	1.3
	Upper secondary	3.8	3.4	3.0	3.4	3.3	-0.1
	University	0.4	0.2	0.3	0.3	0.1	-0.2

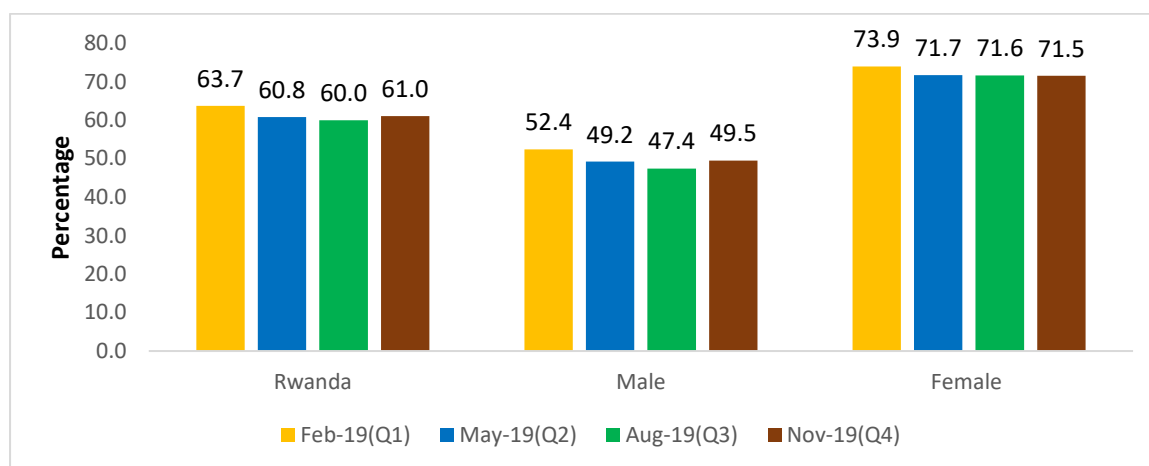
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

### 7.5 Share of agriculture in the total work force

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

Generally, the results presented in figure 7.1 below showed a decline in the share of workers in agriculture at national level and among almost all selected demographic characteristics From February 2019(Q1) to November 2019(Q4). The share of agricultural workers in total workforce decreased by 4.5 percentage points in February 2019(Q1) from 67.7 percent in February 2019(Q1) to 61.0 percent in November 2019(Q4). It has decreased by 2.9 percentage points among males (from 52.4 to 49.5 percent) and by 2.4 percentage points among females (from 73.9 to 71.5 percent) in the same period.

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

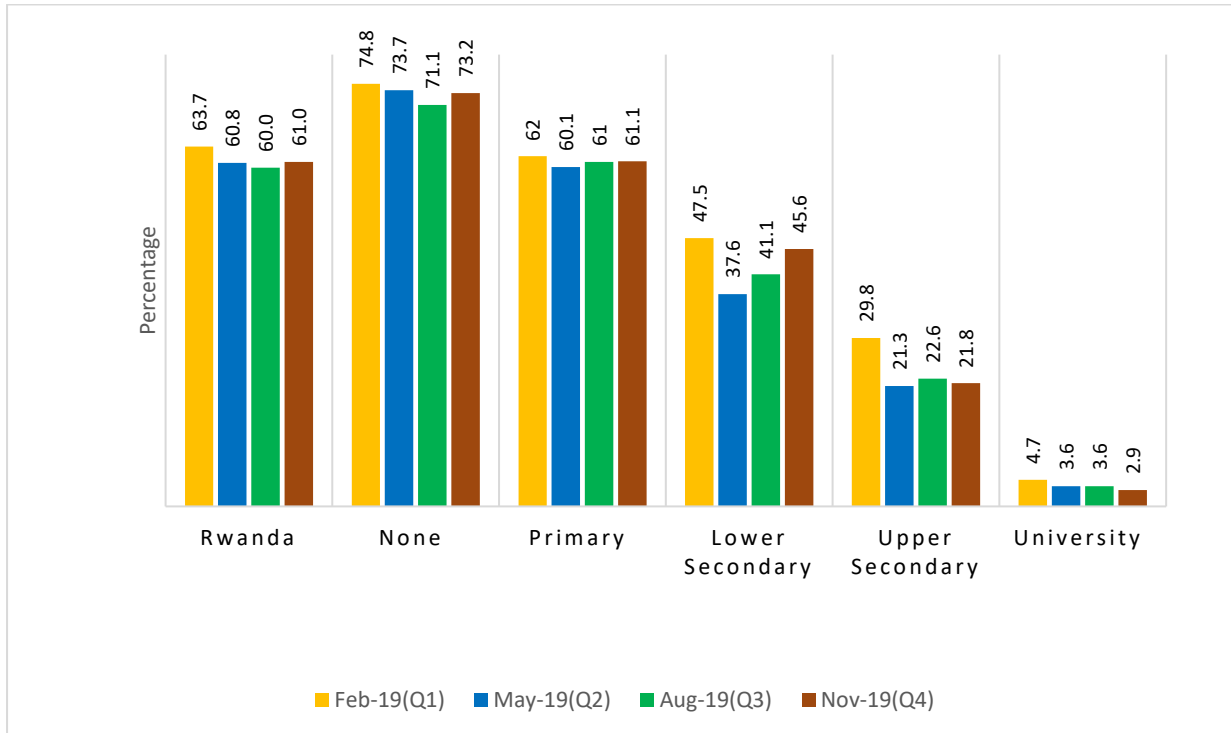


Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019

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

The results of quarterly LFS rounds conducted in 2019 revealed relatively stable of the share of agriculture workers in total workforce for almost all levels of educational attainment (Figure 7. 2 below) but tend to increase in November 2019(Q4). The share of workforce reduces as education attainment increases.

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



Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019





## Appendix A: Survey Methodology and Data quality

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

The strata are composed of the 30 administrative districts of the country, sub-divided into urban and rural areas. At the second stage of sampling; 16 households were selected in three quarter of the PSUs and 24 households<sup>4</sup> were selected in a quarter of PSUs, with equal probabilities after a fresh listing of the households in the new sample PSUs. Thereafter, all household members in the sample are then selected for survey interview.

The sample size in the current quarter is about 5,223 households, composed of three rotation groups marked with the symbol *r* in the table. The proposed rotation design is 1-1-1, that is each sample household is interviewed three times, once every two quarters. Accordingly, a sample household is in the sample in one quarter, leaves the sample in the next quarter, returns in the sample in the following quarter, leaves again the sample in the subsequent quarter, and finally returns in the sample for the third time before leaving the sample altogether.

- **Sample weights**

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

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

$$p_k = \eta \times N_k$$

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

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

$$p(hh_k) = \frac{16 \text{ or } 24}{N_k^1}$$

Where 16 or 24 is the fixed sample-take in enumeration area *k* and  $N_k$  is the listed or estimated number of households in the enumeration area *k*.

The designed sampling weights for the quarterly Labour Force Survey are labelled “Qweight”. They are calculated as a function of the weights calculated earlier for the bi-annual survey, called here “Oldweight”. The Qweight is obtained from the Oldweight as follows:

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<sup>4</sup> The intake of 24 households in one fourth of PSUs is a consequence of sample size adjustment caused by the transition from bi-annual sample design to quarterly sample design in August 2018.

$$Qweight = Oldweight \times \frac{3}{4} \times \frac{1}{\frac{144}{146}} \times \frac{1}{\frac{1}{3}} = Oldweight \times \frac{219}{96}$$

The old design calculated as,

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

The overall weight of the quarterly LFS,  $d_k$ , is calculated as

$$Qweight = d_x = \frac{1}{p_k} + \frac{1}{p(hh_k)} \times \frac{219}{96}$$

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  $r$  in enumeration area  $k$  is the percentage number of responding households among the total eligible households in the sample enumeration area.

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

The population projections were derived from the NISR census publication.<sup>5</sup> The projections were adjusted by deducting estimated values for the institutional population not living in private households. The calibration procedure followed the methodology of Deville and Sarndäl.<sup>6</sup> Accordingly, the final calibrated weights were obtained from the formula,

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

- **Data quality**

Like in all sample surveys, the results of the LFS November 2019(Q4) are subject to sampling and different forms of measurement errors. This section provides information on sampling errors.

- **Sampling errors**

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

<sup>5</sup> National Institute of Statistics of Rwanda, *Fourth Population and Housing Census, Rwanda, 2012, Thematic Report Population Projections*, January 2014.

<sup>6</sup> Deville, J.C., and Sarndäl, C.E., "Calibration Estimators in Survey Sampling," *Journal of the American Statistical Association*, Vol. 87, 1992, pp. 376-382.

## LABOUR FORCE SURVEY, NOVEMBER 2019 (Q4)

The table A.1 below gives the sampling errors of the main labour force estimates obtained from the LFS November 2019(Q4). They have been calculated based on the general principle that in multi-stage sample designs the variance contributed by the later stages of sampling is, under broad conditions, reflected in the observed variation among the 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<sup>7</sup>. The calculations took into account the fact that the sampling weights were calibrated and used the residual method proposed by Deville and Sarndäl p. 380.

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

Indicator	Estimate	Standard error	Relative Standard error	Confidence interval	
				Lower	Upper
Population 16+ yrs	7,320,999	248,223	3.4%	6,832,199	7,809,799
Employment	3,405,877	124,708	3.7%	3,160,301	3,651,453
Unemployment	620,115	35,576	5.7%	550,059	690,172
Labour force	4,025,992	148,382	3.7%	3,733,798	4,318,187
Outside labour force	3,295,006	121,771	3.7%	3,055,214	3,534,799

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019, November 2019(Q4)

As an illustration of the use of the table, consider the fourth row of the table on the labour force. The total labour force is 4,025,992 estimated with a relative standard error of 3.7 percent. The true value at 95 percent confidence level lies within the interval 3,733,798 and 4,318,187

The next table (Table A.2) gives the estimated sampling errors for the main labour force indicators expressed in rates or percentages. For example, the results indicate that the unemployment rate estimated at 15.4 percent has a standard error of 0.6 percentage points. This may be interpreted to mean that the true unemployment rate lies with 95 percent confidence within the interval, 14.2 percent to 16.6 percent.

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

Indicator	Estimate	Standard error	Confidence interval	
			Lower	Upper
Labour Force Participation Rate	55.0	0.7%	53.6	56.4
Employment-Population Ratio	46.5	0.8%	45.0	48.0
Unemployment rate	15.4	0.6%	14.2	16.6

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), 2019, August 2019(Q2)

<sup>7</sup> Verma, Vijay, *Sampling Methods*, Manual for Statistical Trainers Number 2, Statistical Institute for Asia and the Pacific (SIAP), Tokyo, Revised 2002.



## Appendix B: Statistical Tables

LABOUR FORCE SURVEY, NOVEMBER 2019 (Q4)

Table B. 1: Summary labour force indicators, Nov-19 (Q4)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Population 16 years old and over	7,320,999	3,438,059	3,882,941	1,525,696	5,795,304	3,424,669	3,896,330
Labour force	4,025,992	2,207,995	1,817,998	1,043,774	2,982,219	1,684,325	2,341,667
- Employed	3,405,877	1,898,636	1,507,241	891,494	2,514,383	1,353,570	2,052,307
- Unemployed	620,115	309,359	310,757	152,280	467,836	330,755	289,360
Outside labour force	3,295,007	1,230,064	2,064,943	481,922	2,813,085	1,740,344	1,554,663
Labour underutilization	3,033,870	1,275,443	1,758,428	476,138	2,557,733	1,921,080	1,112,789
- Unemployed	620,115	309,359	310,757	152,280	467,836	330,755	289,360
- Time-related underemployed	866,553	401,104	465,449	104,836	761,717	532,672	333,880
- Potential labour force	1,547,202	564,980	982,222	219,022	1,328,180	1,057,653	489,549
Labour force participation rate (%)	55.0	64.2	46.8	68.4	51.5	49.2	60.1
Employment-to-population ratio (%)	46.5	55.2	38.8	58.4	43.4	39.5	52.7
Time related underemployment rate (%)	25.4	21.1	30.9	11.8	30.3	39.4	16.3
LU1 - Unemployment rate (%)	15.4	14.0	17.1	14.6	15.7	19.6	12.4
LU2 - Combined rate of unemployment and time-related underemployment (%)	36.9	32.2	42.7	24.6	41.2	51.3	26.6
LU3 - Combined rate of unemployment and potential labour force (%)	38.9	31.5	46.2	29.4	41.7	50.6	27.5
LU4 - Composite measure of labour underutilization (%)	54.4	46.0	62.8	37.7	59.3	70.1	39.3
Youth unemployment rate (16-30 yrs) (%)	19.6	17.4	22.2	18.4	19.6	27.1	15.8
Median monthly earnings at main job	21,667	26,000	18,200	52,000	20,000	18,200	31,200

LABOUR FORCE SURVEY, NOVEMBER 2019 (Q4)

Table B. 2: Population by sex, age group, Nov-19 (Q4)

	Total	Sex	
		Male	Female
<b>Population</b>	<b>12,326,241</b>	<b>5,945,023</b>	<b>6,381,218</b>
0-4 yrs	1,604,899	794,011	810,889
5-9 yrs	1,514,884	769,319	745,565
10-14 yrs	1,572,128	803,774	768,355
15-19 yrs	1,466,913	697,026	769,888
20-24 yrs	1,099,961	540,364	559,598
25-29 yrs	917,799	429,531	488,269
30-34 yrs	886,368	439,109	447,259
35- 39 yrs	774,324	359,927	414,397
40-44 yrs	562,263	264,951	297,312
45-49 yrs	486,739	228,979	257,760
50-54 yrs	348,024	171,147	176,876
55-59 yrs	317,236	137,395	179,842
60-64 yrs	263,423	119,519	143,904
65-69 yrs	198,111	78,282	119,828
70-74 yrs	129,982	44,204	85,778
75+	183,187	67,488	115,699

LABOUR FORCE SURVEY, NOVEMBER 2019 (Q4)

Table B. 3: Households by household size, sex of head of household and urban/rural area, Nov-19 (Q4)

Household size	Total number households	Head of household		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
	2,930,706	2,162,941	767,765	577,032	2,353,673	1,462,851	1,467,855
1	315,892	186,606	129,287	97,092	218,801	110,349	205,543
2	392,278	211,702	180,577	93,847	298,431	165,551	226,727
3	468,328	302,710	165,618	84,348	383,980	246,634	221,694
4	511,966	384,685	127,282	80,590	431,377	278,759	233,207
5	469,074	394,102	74,972	68,227	400,847	245,589	223,485
6	347,266	304,869	42,397	63,070	284,196	192,304	154,962
7	219,950	191,952	27,998	45,133	174,817	120,117	99,832
8	113,955	103,791	10,164	24,082	89,873	57,131	56,824
9	50,769	42,805	7,964	12,105	38,664	24,517	26,251
10+	41,227	39,720	1,507	8,539	32,688	21,899	19,328



LABOUR FORCE SURVEY, NOVEMBER 2019 (Q4)

Table B. 4: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, Nov-19 (Q4)

	Total	Labour force status				Labour force participation rate (%)	Employment-population ratio (%)	Unemployment rate (%)
		Labour force	Employed	Unemployed	Outside labour force			
<b>Total Population 16 yrs and over</b>	<b>7,320,999</b>	<b>4,025,992</b>	<b>3,405,877</b>	<b>620,115</b>	<b>3,295,006</b>	<b>55.0</b>	<b>46.5</b>	<b>15.4</b>
16-24 yrs	2,253,544	1,006,451	801,400	205,051	1,247,094	44.7	35.6	20.4
25-34 yrs	1,804,167	1,298,544	1,075,944	222,600	505,623	72.0	59.6	17.1
35-54 yrs	2,171,349	1,396,829	1,231,552	165,277	774,521	64.3	56.7	11.8
55-64 yrs	580,659	245,889	227,096	18,793	334,770	42.3	39.1	7.6
65+ yrs	511,280	78,281	69,886	8,395	432,999	15.3	13.7	10.7
		-						
<b>Male Pop. 16+ yrs</b>	<b>3,438,059</b>	<b>2,207,995</b>	<b>1,898,636</b>	<b>309,359</b>	<b>1,230,064</b>	<b>64.2</b>	<b>55.2</b>	<b>14.0</b>
16-24 yrs	1,097,529	545,803	442,027	103,776	551,726	49.7	40.3	19.0
25-34 yrs	868,640	725,411	625,126	100,285	143,228	83.5	72.0	13.8
35-54 yrs	1,025,003	761,156	678,098	83,058	263,847	74.3	66.2	10.9
55-64 yrs	256,913	136,087	119,829	16,258	120,826	53.0	46.6	11.9
65+ yrs	189,974	39,537	33,556	5,981	150,436	20.8	17.7	15.1
<b>Female Pop. 16+ yrs</b>	<b>3,882,940</b>	<b>1,817,998</b>	<b>1,507,241</b>	<b>310,757</b>	<b>2,064,943</b>	<b>46.8</b>	<b>38.8</b>	<b>17.1</b>
16-24 yrs	1,156,015	460,648	359,373	101,275	695,368	39.8	31.1	22.0
25-34 yrs	935,527	573,133	450,818	122,315	362,395	61.3	48.2	21.3
35-54 yrs	1,146,346	635,672	553,453	82,219	510,674	55.5	48.3	12.9
55-64 yrs	323,746	109,803	107,268	2,535	213,943	33.9	33.1	2.3
65+ yrs	321,306	38,743	36,329	2,414	282,563	12.1	11.3	6.2
<b>Urban Pop. 16+ yrs</b>	<b>1,525,695</b>	<b>1,043,774</b>	<b>891,494</b>	<b>152,280</b>	<b>481,922</b>	<b>68.4</b>	<b>58.4</b>	<b>14.6</b>
16-24 yrs	506,232	258,688	210,427	48,261	247,543	51.1	41.6	18.7
25-34 yrs	484,593	396,727	334,017	62,710	87,866	81.9	68.9	15.8

LABOUR FORCE SURVEY, NOVEMBER 2019 (Q4)

	Total	Labour force status				Labour force participation rate (%)	Employment-population ratio (%)	Unemployment rate (%)
		Labour force	Employed	Unemployed	Outside labour force			
35-54 yrs	421,288	340,012	304,451	35,561	81,276	80.7	72.3	10.5
55-64 yrs	62,200	32,731	29,097	3,634	29,469	52.6	46.8	11.1
65+ yrs	51,382	15,615	13,502	2,113	35,767	30.4	26.3	13.5
						0.0	0.0	0.0
<b>Rural Pop. 16+ yrs</b>	<b>5,795,303</b>	<b>2,982,219</b>	<b>2,514,383</b>	<b>467,836</b>	<b>2,813,085</b>	<b>51.5</b>	<b>43.4</b>	<b>15.7</b>
16-24 yrs	1,747,312	747,761	590,972	156,789	999,551	42.8	33.8	21.0
25-34 yrs	1,319,574	901,817	741,927	159,890	417,757	68.3	56.2	17.7
35-54 yrs	1,750,061	1,056,816	927,100	129,716	693,245	60.4	53.0	12.3
55-64 yrs	518,459	213,158	197,999	15,159	305,301	41.1	38.2	7.1
65+ yrs	459,898	62,666	56,384	6,282	397,232	13.6	12.3	10.0

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Table B. 5: Population 16 years old and over by sex, level of educational attainment and urban/rural area, Nov-19 (Q4)

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
<b>Total</b>	<b>7,320,999</b>	<b>3,438,059</b>	<b>3,882,940</b>	<b>1,525,695</b>	<b>5,795,303</b>	<b>3,424,669</b>	<b>3,896,330</b>
None	3,412,845	1,506,692	1,906,153	310,720	3,102,125	2,014,876	1,397,969
Primary	2,245,010	1,090,265	1,154,745	388,627	1,856,383	1,117,067	1,127,943
Lower secondary	646,268	303,509	342,759	235,204	411,064	149,737	496,531
Upper secondary	690,265	347,176	343,089	355,611	334,654	115,720	574,545
University	326,611	190,416	136,195	235,533	91,078	27,268	299,343

Table B. 6: Population 16 years old and over by labour force status, sex, marital status, and urban/rural area, Nov-19 (Q4)

Marital status	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	<b>7,320,999</b>	<b>4,025,992</b>	<b>3,405,877</b>	<b>620,115</b>	<b>3,295,006</b>	<b>55.0</b>	<b>46.5</b>	<b>15.4</b>
Married	2,756,108	1,564,139	1,367,983	196,156	1,191,969	56.8	49.6	12.5
Living together	1,063,447	749,008	641,893	107,115	314,439	70.4	60.4	14.3
Divorced/separated	245,208	167,874	140,006	27,868	77,334	68.5	57.1	16.6
Single	2,719,590	1,370,965	1,093,097	277,868	1,348,625	50.4	40.2	20.3
Widow/widower	536,647	174,007	162,898	11,109	362,640	32.4	30.4	6.4

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Table B. 7: Employed population by sex, age group, and urban/rural area, Nov-19 (Q4)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
<b>Employed population 16+</b>	<b>3,405,877</b>	<b>1,898,636</b>	<b>1,507,241</b>	<b>891,494</b>	<b>2,514,383</b>	<b>1,353,570</b>	<b>2,052,307</b>
16-19 yrs	311,620	164,823	146,797	63,536	248,084	100,551	211,069
20-24 yrs	489,779	277,204	212,575	146,892	342,888	149,062	340,717
25-29 yrs	519,747	296,483	223,265	172,389	347,358	149,533	370,215
30-34 yrs	556,196	328,643	227,553	161,628	394,569	213,328	342,869
35- 39 yrs	467,552	258,802	208,751	117,811	349,742	213,796	253,757
40-44 yrs	323,899	179,918	143,980	92,114	231,785	141,009	182,889
45-49 yrs	281,137	146,077	135,060	66,171	214,966	138,933	142,205
50-54 yrs	158,963	93,302	65,662	28,356	130,608	85,941	73,022
55-59 yrs	138,171	68,703	69,468	18,552	119,618	76,120	62,050
60-64 yrs	88,926	51,126	37,800	10,545	78,381	48,787	40,139
65-69 yrs	43,688	18,328	25,360	11,106	32,582	21,575	22,113
70-74 yrs	16,926	9,907	7,019	2,235	14,692	11,139	5,788
75+	9,272	5,321	3,951	162	9,110	3,797	5,474

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Table B. 8: Employed population by sex, occupation group, and urban/rural area, Nov-19 (Q4)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Occupation group (ISCO High level)	3,405,877	1,898,636	1,507,241	891,494	2,514,383	1,353,570	2,052,307
Managers	47,130	34,906	12,224	32,137	14,993	4,061	43,069
Professionals	196,306	119,138	77,169	105,592	90,715	30,318	165,988
Technicians and associate professionals	52,520	37,238	15,282	34,879	17,641	5,323	47,197
Clerical support workers	33,122	12,543	20,579	24,303	8,819	2520	30,602
Service and sales workers	719,632	363,002	356,630	290,713	428,919	235,474	484,158
Skilled agricultural, forestry and fishery workers	201,428	108,920	92,508	9,968	191,460	15,739	185,689
Craft and related trades workers	268,249	188,434	79,815	88,286	179,964	80,815	187,435
Plant and machine operators and assemblers	108,445	105,722	2,723	51,126	57,319	12,490	95,954
Elementary occupations	1,779,044	928,732	850,312	254,491	1,524,553	966,831	812,213

Table B. 9: Employed population by sex, educational attainment, and urban/rural area, Nov-19 (Q4)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	3,405,877	1,898,636	1,507,241	891,494	2,514,383	1,353,570	2,052,307
None	1,605,681	846,475	759,205	197,925	1,407,756	833,579	772,102
Primary	1,035,988	604,010	431,978	243,894	792,094	405,237	630,751
Lower secondary	203,429	117,980	85,449	101,398	102,031	41,979	161,450
Upper secondary	315,082	180,140	134,942	168,672	146,410	48,324	266,757
University	245,698	150,031	95,667	179,605	66,093	24,451	221,247

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Table B. 10: Employed population by sex, branch of economic activity, and urban/rural area, Nov-19 (Q4)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	3,405,877	1,898,636	1,507,241	891,494	2,514,383	1,353,570	2,052,307
Agriculture, forestry and fishing	1,270,506	581,232	689,274	37,023	1,233,483	770,014	500,492
Mining and quarrying	51,501	47,896	3,605	745	50,756	17,185	34,316
Manufacturing	210,683	115,705	94,979	67,175	143,509	68,973	141,710
Electricity, gas, steam and air conditioning supply	12,827	11,784	1,043	4,831	7,996	1,435	11,392
Water supply, sewerage and waste management	6,825	3,526	3,299	3,842	2,984	555	6,271
Construction	303,581	246,823	56,759	61,494	242,087	136,733	166,849
Wholesale, retail trade, repair of motor vehicles, motorcycles	533,919	246,226	287,693	207,960	325,959	178,432	355,487
Transportation and storage	199,107	192,129	6,979	66,172	132,935	40,535	158,572
Accommodation and food service activities	107,211	56,690	50,521	40,987	66,224	35,046	72,165
Information and communication	17,212	11,123	6,089	13,367	3,845	1,995	15,217
Financial and insurance activities	34,438	21,553	12,884	25,282	9,155	570	33,867
Real estate activities	4,798	2,800	1,998	4,036	762	182	4,616
Professional, scientific and technical activities	29,987	20,607	9,380	23,872	6,115	1,627	28,360
Administrative and support service activities	74,094	52,502	21,592	38,605	35,489	16,769	57,325
Public administration and defence	74,573	57,714	16,859	43,836	30,737	15,317	59,256
Education	123,752	69,459	54,293	42,849	80,902	29,369	94,383
Human health and social work activities	41,634	18,120	23,514	22,319	19,315	3,757	37,878
Arts, entertainment and recreation	8,476	6,342	2,134	5,709	2,767	0	8,476
Other service activities	75,842	40,106	35,736	35,114	40,728	20,194	55,648
Activities of households as employers	204,462	86,333	118,129	132,211	72,252	11,436	193,027
Activities of extraterritorial organizations and bodies	20,447	9,967	10,480	14,065	6,382	3,447	17,000

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Table B. 11: Distribution of educational attainment and field of Education by Labour market status, Nov-19 (Q4)

<b>Educational attainment</b>	<b>Employed</b>	<b>Unemployed</b>	<b>Outside labour force</b>	<b>Total</b>
<b>Total</b>	<b>46.5</b>	<b>8.5</b>	<b>45</b>	<b>100</b>
None	47.0	7.3	45.7	100
Primary	46.1	8.2	45.7	100
Lower secondary	31.5	7.0	61.5	100
Upper secondary	45.6	14.1	40.3	100
University	75.2	13.9	10.9	100
<b>Field of Education</b>	<b>Employed</b>	<b>Unemployed</b>	<b>Outside labour force</b>	<b>Total</b>
<b>Total</b>	<b>47.5</b>	<b>9.1</b>	<b>43.3</b>	<b>100</b>
General education	47.8	8.3	43.9	100
Education	65	4.0	31	100
Humanity and art	41.9	16.2	41.9	100
Social Science business	58.1	13.4	28.5	100
Science	33.0	11.2	55.9	100
Engineering, manufacturing	40.9	16.3	42.8	100
Agriculture	59.6	9.3	31.1	100
Health and welfare	66.6	10.2	23.2	100
Services	29.4	19.2	51.4	100

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Table B. 12: Employed population by sex, status in employment, and urban/rural area, Nov-19 (Q4)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	3,405,877	1,898,636	1,507,241	891,494	2,514,383	1,353,570	2,052,307
Employee, Paid apprentice/intern	2,288,756	1,297,612	991,144	573,038	1,715,719	1,025,066	1,263,691
Employer	42,411	33,006	9,405	18,536	23,875	9,310	33,101
Own-account worker	942,427	540,557	401,870	271,524	670,902	292,164	650,263
Member of cooperative	10,625	8,829	1,796	1,853	8,772	943	9,682
Contributing family worker	121,658	18,632	103,026	26,543	95,115	26,087	95,571

Table B. 13: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, Nov-19 (Q4)

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employed population	3,405,877	1,898,636	1,507,241	891,494	495,516	395,978	2,514,383	1,403,120	1,111,263
less than 24 hours	775,115	328,456	446,659	78,917	38,424	40,493	696,198	290,032	406,166
25-34 hours	409,316	192,941	216,375	48,893	25,860	23,033	360,422	167,080	193,342
35-40 hours	733,212	388,186	345,026	113,778	54,581	59,197	619,434	333,605	285,829
41-48 hours	613,284	390,658	222,626	234,337	129,803	104,534	378,946	260,855	118,091
49-61 hours	460,898	302,483	158,414	212,255	119,908	92,347	248,642	182,575	66,067
62-79 hours	324,083	227,735	96,348	172,520	104,824	67,696	151,563	122,910	28,653
80 hours+	89,970	68,177	21,793	30,793	22,114	8,679	59,177	46,063	13,114



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Table B. 14: Youth Population by sex, and residential area, Nov-19 (Q4)

	Age Group	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
			Male	Female	Urban	Rural		
Youth Population (16-30yrs)		3,338,433	1,607,464	1,730,969	824,821	2,513,612	1,135,815	2,202,618
Employed	16-24 yrs	801,400	442,027	359,373	210,427	590,972	249,613	551,787
	16-30 yrs	1,422,333	796,891	625,443	418,403	1,003,931	426,980	995,353
Unemployed	16-24 yrs	205,051	103,776	101,275	48,261	156,789	96,934	108,117
	16-30 yrs	345,890	167,878	178,013	94,098	251,792	158,985	186,906
Outside Labour Force	16-24 yrs	1,247,094	551,726	695,368	247,543	999,551	382,786	864,308
	16-30 yrs	1,570,210	642,696	927,514	312,321	1,257,889	549,850	1,020,360

Table B. 15: Youth Unemployed by sex, duration of seeking employment, and urban/rural area, Nov-19 (Q4)

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Youth Unemployed (16-30 yrs)	315,493	155,965	159,528	45,927	40,903	110,038	118,625
0 – less than 3 months	141,977	76,983	64,994	18,979	7,006	58,004	57,987
3 – less than 6 months	65,409	33,147	32,262	7,004	10,554	26,143	21,708
6 – less than 12 months	30,107	15,578	14,529	5,027	5,626	10,551	8,904
1 – less than 2 years	41,244	14,257	26,987	7,758	9,520	6,499	17,467
2 years or more	36,756	16,000	20,756	7,159	8,197	8,841	12,559

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Table B. 16: Youth not in employment and not currently in education or training by sex, age group, and urban/rural area, Nov-19 (Q4)

Young not in employment nor in education (16-30 yrs)	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
	1,149,817	431,440	718,378	58,322	121,758	373,118	596,620
16-19 yrs	322,839	136,897	185,942	13,346	20,644	123,550	165,298
20-24 yrs	404,708	158,890	245,818	22,506	39,688	136,384	206,130
25-30 yrs	422,271	135,653	286,618	22,469	61,425	113,184	225,192
None	444,637	181,975	262,662	8,107	19,285	173,868	243,377
Primary	414,757	142,069	272,688	9,738	32,662	132,331	240,026
Lower secondary	95,632	30,495	65,137	7,747	16,641	22,748	48,496
Upper secondary	160,996	62,874	98,122	23,261	37,890	39,613	60,232
University	33,795	14,026	19,769	9,468	15,280	4,558	4,488

Table B. 17: Unemployed population by sex, broad age group and urban/rural area, Nov-19 (Q4)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
<b>Unemployed population 16+</b>	620,115	309,359	310,757	152,280	467,836	330,755	289,360
16-24 yrs	205,051	103,776	101,275	48,261	156,789	96,934	108,117
25-34 yrs	222,600	100,285	122,315	62,710	159,890	105,692	116,908
35-54 yrs	165,277	83,058	82,219	35,561	129,716	111,953	53,324
55-64 yrs	18,793	16,258	2,535	3,634	15,159	10,414	8,379
65+ yrs	8,395	5,981	2,414	2,113	6,282	5,763	2,632

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Table B. 18: Unemployed population by sex, level of educational and urban/rural area, Nov-19 (Q4)

	Total	Sex		Area of Residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
<b>Unemployed population 16+</b>	620,115	309,359	310,757	152,280	467,836	330,755	289,360
None	248,254	118,814	129,440	19,855	228,400	166,673	81,582
Primary	184,017	91,679	92,338	30,267	153,750	121,573	62,444
Lower secondary	45,424	22,767	22,657	21,367	24,057	14,824	30,599
Upper secondary	97,175	51,607	45,568	51,064	46,111	26,880	70,295
University	45,246	24,492	20,754	29,727	15,518	806	44,440

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Table B. 19: Unemployed population (who looked for a job) by sex, method of seeking employment, and urban/rural area, Nov-19 (Q4)

	Total	Sex		Area of Residence		Participated in subsistence agriculture	Not participated in subsistence agriculture	Number of responses per search method
		Male	Female	Urban	Rural			
<b>Unemployed population who looked for a job</b>	557,441	284,458	272,983	139,407	418,034	297,482	259,959	
Arranging for financial resources, applying for permits, licenses	78,984	31,573	47,411	25,836	53,148	47,198	31,786	81,315
Looking for land, premises, machinery, supplies, farming inputs	3,082	2,706	376	455	2,627	2,437	645	14,118
Seeking the assistance of friends, relatives or other types of intermediaries	212,122	117,013	95,109	52,737	159,386	104,960	107,162	263,081
Registering with or contacting public or private employment services	19,076	10,575	8,501	8,297	10,779	5,799	13,277	44,586
Applying to employers directly, checking at worksites, farms, factory gates, markets	220,769	109,143	111,626	33,050	187,719	134,813	85,957	379,276
Placing or answering newspaper or online job advertisements	15,333	8,711	6,622	13,232	2,100	-	15,333	58,432
Placing and updating resumes on professional or social networking sites online	8,075	4,737	3,338	5,800	2,275	2,275	5,800	49,451

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Table B. 20: Unemployed population (who looked for a job) by sex, duration of seeking employment, and urban/rural area, Nov-19 (Q4)

	Total	Sex		Area of Residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
<b>Unemployed population 16+</b>	562,866	287,967	274,899	143,708	419,159	298,366	264,501
Less than 3 months	265,466	141,944	123,522	45,238	220,227	161,661	103,805
Less than 6 months	119,870	65,760	54,110	27,176	92,694	66,035	53,835
Less than 12 months	49,298	25,812	23,485	17,965	31,333	26,493	22,805
1 year to less than 2 years	62,317	24,325	37,992	27,134	35,182	16,880	45,437
2 years and above	65,916	30,127	35,789	26,194	39,722	27,297	38,619

Table B. 21: Time related under employment by age group sex and area of residence, Nov-19 (Q4)

Age group	Total	Sex		Residence area	
		Male	Female	Urban	Rural
<b>Total</b>	<b>866,553</b>	<b>401,104</b>	<b>465,449</b>	<b>104,836</b>	<b>761,717</b>
16-24 yrs	209,272	97,669	111,604	19,300	189,972
25-34 yrs	268,599	126,303	142,296	45,434	223,166
35-54 yrs	324,909	150,393	174,516	35,645	289,264
55-64 yrs	45,809	18,744	27,065	1,971	43,838
65+ yrs	17,963	7,995	9,969	2,485	15,478



## Appendix C: Labour Force Survey Personnel

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