Republic of Rwanda

Labour Force Survey Trends

-February 2021 (Q1)-

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NATIONAL INSTITUTE OF
STATISTICS OF RWANDA

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February 2021 (Q1)

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Foreword

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

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

The National Institute of Statistics of Rwanda introduced the labour force survey (LFS) program to provide statistics users; mainly Ministry of Public Service and Labour, 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. Despite the effect of covid-19 on implementation of different activities, NISR in collaboration with different stakeholders managed to maintain the regularity in the production of quarterly LFS with some adjustments where necessary. It is in this context that the telephone interviewing method was introduced for the data collection in May 2020, used again in November 2020 as well as February 2021.

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, interviewers, Analysts, 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 Quarterly Labour Force Survey (QLFS) is a household-based sample survey conducted by National Institute of Statistics of Rwanda (NISR). It collects data on the labour market activities of individuals aged 14 years and older who live in ordinal household in Rwanda. However, for the reporting purpose, only persons aged 16 years or above are covered. In this report, the survey results are mainly compared for February 2021, November 2020, August 2020, May 2020, and February 2020. However, some tables and graphs are presented with more data points including results of the labour force surveys of all quarters of the year 2020 and 2019.

In February 2021 (Q1), the working age population (16 years and above) was around 7.6 million of whom 3,204,924 were employed, 655,648 unemployed and 3,764,686 out of labour force. The sum of employed and unemployed population results to population in labour force (3,860,572 persons). The proportion of working age population who were in the labour force decreased to 50.6 percent in February 2021(Q1) from 56.5 percent in November 2020. The proportion of the working age population outside the labour force increased to 49.4 percent in February 2021_Q1 as compared to November 2020 (43.5 percent) and remained higher compared to the situation of February 2020 (44.4 percent).

The share of subsistence agriculture in population outside labour force was 43.4 percent in February 2021 declined from 52.7 percent as compared to November 2020, to 50.4 percent in August 2020 and to 53.4 percent in February 2020. The sum of employed population (3,204,924 persons) and subsistence agricultural without employment (1,936,803) gives the estimate number of workers[1] in February 2021 equivalent to 5,140,987 persons. Therefore, in February 2021, the proportion of working age population engaged in employment or substance agriculture was 67.4 percent as compared to 74.2 in the previous round and to 76.9 percent in February 2020.

The observed decline in labour market and non-labour market activities in February 2021 may be mainly attributed to the effect of movement restriction between different districts and the lock down in the city of Kigali as preventive measures against Covid-19 spreading happened in February 2021 during the data collection period. The share of agricultural workers in total workforce (employed +subsistence agricultural) increased by around 4.6 percentage points from 65.5 percent in November 2020 to 70.3 percent in February 2021 indicating the shift from non-agriculture to agricultural works

The employment-to-population ratio decreased in February 2021(42.0 percent) as compared to November 2020(45.1 percent) and became relatively lower than the one registered one year ago in February 2020(48.3). As result of a decrease in both employment and unemployment compared to November 2020, the labour force participation rate decreased at relatively higher pace than the employment to population ratio. It decreased from 56.5 percent in November 2020 to 50.6 percent in February 2021.

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

Generally the number of employed population declined since August 2020. In comparison to November 2021, the total employment declined by around 6 percent from 3.4 million to 3.2 million of employed population. Services and industry sectors lost around 207 thousands and 202 thousands of jobs respectively while only the agriculture sector significantly increased with a gain of around 207 thousands additional employed persons. The important loss of employment between November 2020 and February 2021 in absolute terms happened in Construction (-173 thousands), trade and motorcycle repair (-58 around thousands), Activities of households as employers (around -31 thousands), transport and storage (-around 25 thousand), Mining and quarrying (around -24 thousand), Accommodation and food services activities (around -23 thousand).

The February 2021 results reveal that the share of paid employees in the total employment has remained relatively the same as compared November 2020. It was 74.1 percent in November 2020 and stood at 74.9 percent in February 2021; the same was observed among self-employed persons which relatively remained at 22 percent. The comparison of February 2020 and February 2021 reveals that there was an increase of 6.3 percentage points in share of employees and a decrease of 3.4 percentage points in the share of self-employed. The share of contributing family worker in the total employment also decreased by2.5 percentage points in the same period.

In February 2021, the unemployment rate stood at 17.0 and has declined as compared to the previous quarter. The unemployment rate declined by 3.3 percentage points from 20.3 percent in November 2020 to 17.0 percent in February 2021.The unemployment rate remained relatively higher among females (18.4 percent) as compared to males (15.7 percent).

Labour underutilization rate which accounts for unemployment, time-related underemployment and potential labour force was estimated to 59.0 percent in February 2021 and it increased compared to February 2020 (57.1 percent) and August 2020 (56.3 percent), but remained relatively the same as compared to the previous quarter (59.0 percent). The labour underutilization rate was remarkably higher among females (63.8 percent) as compared to males (54.1 percent).

Rwanda Labour force survey, February 2021(Q1): Summary labour force indicators

Working age population 16 years old and over 7,625,258 persons							
Outside the labour force (Not employed nor unemployed) 3,764,686 persons **Out of LF rate: 49.4%**			Labour force (The sum of employed and unemployed) 3,860,572 persons Labour force participation rate 50.6%				
Subsistence agriculture	Exclusively students	Other outside LF (Elderly, disable, discouraged job seekers…)	**Employed** (All who worked for pay or profit) **3,204,924 persons Employment to population ratio: 42.0%**			**Unemployed** (All not employed but seeking and available to work for pay or profit) 655,648 persons **Unemployment rate:17.0%**	
			Agriculture excluding subsistence foodstuff production	Industry	Services	Unemployed but engaged in subsistence agriculture	Other unemployed
43.3%	24.3%	32.4%	52.3%	14.5%	33.2%	46.4%	53.5%
Potential labour force 1,438,502	**Others** 2,326,184		**Time related underemployed** 1,031,888	**Other employed** 2,173,036			
Labour underutilization (**3,126,038** persons): Unemployed (**655,648**) + Time-related underemployed (**1,031,888**) + Potential labour force (**1,438,502**) Composite measure of labour underutilization (**59.0%**)							

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), February 2021(Q1)

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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 year 2020 was marked by the disturbance in the methodology of data production not only in Rwanda but also all over the World due to the covid-19 pandemic. The pandemic was identified for the first time in Rwanda in mid-March 2020 and different preventive measures including the general lockdown in April 2020 were taken. Despite the pandemic, the labour force Survey continued to be conducted on quarterly basis with some adjustments to cope with covid-19 prevention measures. It is in this context that the NISR introduced the use of telephone interviewing in May 2020. The same method of data collection was also used in November 2020 and in February 2021. The data collection of the current round of LFS was conducted from in February 2021. During this period, Rwanda was experiencing the lock down in Kigali City, and movement restrictions between different districts of Rwanda as preventive measures against Covid-19 pandemic. At the end of the data collection, the response rate was evaluated to 95 percent.

The main objective of the survey is to provide data on the structure and trends of labour force, employment and unemployment as well as other related labour market statistics for the implementation and evaluation of economic and social policies related to employment creation, income generation, skills development, and related decent work policies. The current quarterly Labour Force survey is designed according to a two-stage stratified design with a rotation scheme. At the first stage of sampling, a stratified sample of 288 census enumeration areas, called primary sampling units (PSUs) are drawn from the 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 from each of sampled PSUs with equal probabilities, after a fresh listing of the households in the new sample PSUs. All household members in the sample are then selected for survey interview.

In the present report, the results of labour force survey are mainly compared for February 2021(Q1), November 2020(Q4), August 2020 (Q3), May 2020(Q2) and February 2020(Q1). However, in some sections, the tables or figures are presented with the additional time series including results of all quarters of the year 2019, 2018. This comparison allows tracking the change in labour market indicators over time and enabling to compare the labour market performance before and after the covid-19 pandemic in Rwanda.

The resulting estimates of the main labour force indicators at the national level have standard errors of about 0.9 percent. The focus of the present report is the analysis of trends of employment and labour underutilization including unemployment at the national level by selected demographic and socioeconomic characteristics such as sex, age group, educational attainment, etc.

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

Chapter 2: Trends of main indicators

The present chapter provides information on labour force trend of estimates of main indicators from the labour force survey since February 2018 or November 2019. .The survey results of different round of Labour Force survey are compared to have the time series of the main indicator such as Working age population, Labour force participation rate, Employed to population ratio, unemployment rate, and labour underutilisation rate.

2.1 Working age population

The labour force constituted the majority of the working age population in February 2021 (around 3.8 million); this is 6 percentage points lower than a year earlier (February 2020) and 8.5 percentage points lower than the previous quarter (November 2020).

In February 2021, the population outside the labour force was 3,764,686. It increased by 14.9% compared to February 2020 and by 14.5% percentage points as compared to previous quarter (November 2020). Population in working age who were outside the labour force and involved in subsistence agriculture represented 43.4 percent.

Students who are not involved in any economic activity make another important component of the population outside the labour force. In February 2021, their number was estimated at 913,620 corresponding to 24.2 percent of the population outside the labour force. The proportion of students outside the labour force and not involved in any economic activity increased by 44 percentage points as compared to November 2020. The observed unusual increase of students outside labour force may be attributed to the delay of the transition from schools to labour force experienced by some students due to the changes in schools calendar as a consequence of Covid-19 pandemic.

The remaining part of working age population outside the labour force consists of elderly persons, disables, discouraged jobs seekers, etc. Their total number was estimated at 1,218,532 in February 2021 and it increased by 29.4 percentage points as compared to February 2020 and by 32.4 percentage points as compared to November 2020.

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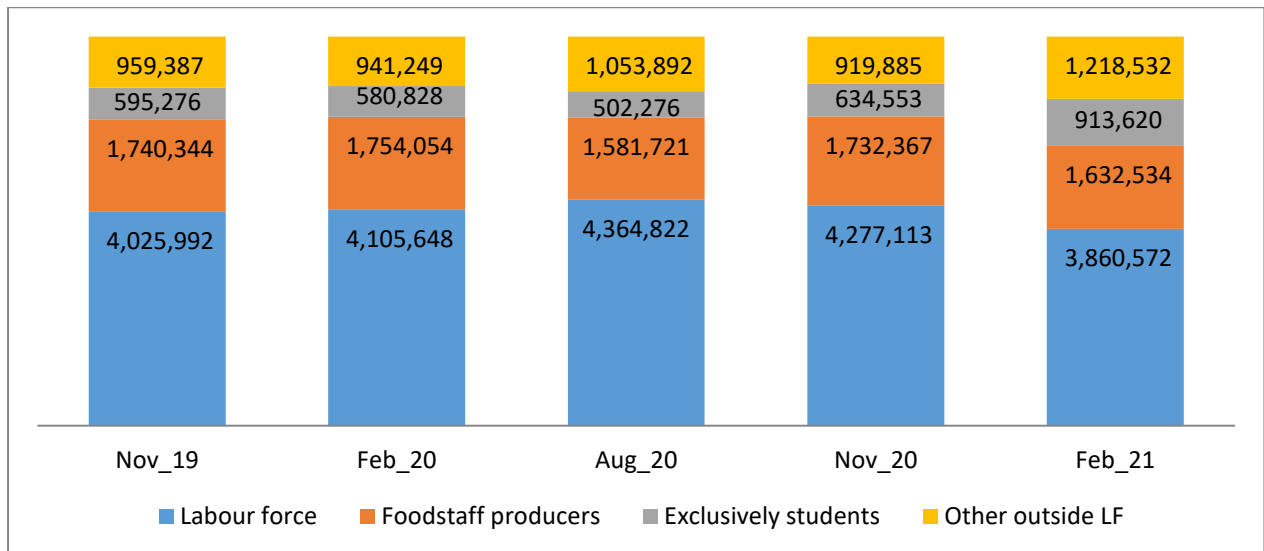
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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

Figure 2.2 illustrates the trends of some of the key labour market indicators. In February 2021, the unemployment rate was 17 percent; it decreased by 3.3 percentage points compared to the previous quarter (November 2020). In comparison with the situation one year earlier, the unemployment rate of February 2021 was around 3.9 percentage points higher.

The employment-to-population ratio (EPR), i.e, the percentage of the working age population who is employed, is an indicator of the performance of the national economy in providing employment to its growing population. The analysis of employment trends shows a decrease of employed population from around 3,408,000 in November 2020(Q4) to 3,204,924 in February 2021. The employment-to-population ratio decreased to 42.0 percent in February 2021 as compared to 45.1 percent of November 2020. The recorded employment to population ratio in February 2021 was lower than the one registered one year earlier (48.3 percent).

According to the results in Figure 2.2, the labour force participation rate picked to 58.2 percent in August 2020(Q3). It declined to 56.6 percent in November 2020 and highly declined to 50.6 percent in February 2021; this figure observed in February 2021 is the lowest recorded compared to other previous rounds.

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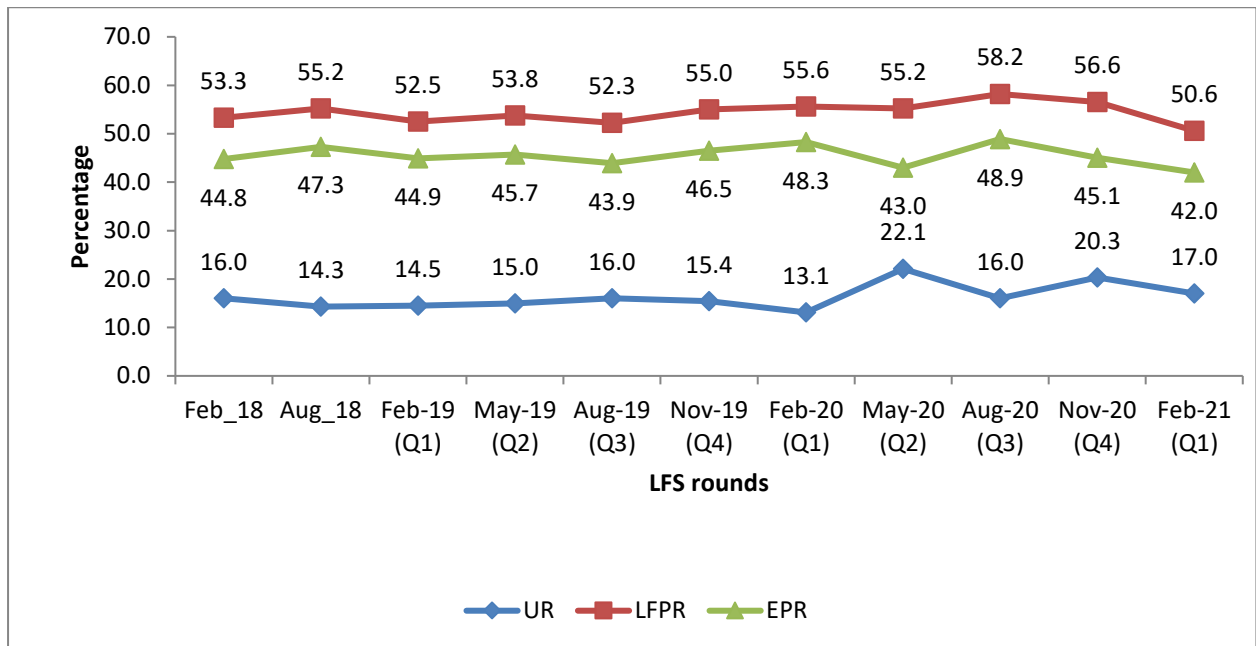
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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

2.3 Population outside labour force

Figure 2.3 presents the trend of the proportion of the working age population who was outside the labour force according to different categories. The results shows that the proportion of the working age population outside the labour force increased by 5.9 percentage points from 43.5 percent in November 2020 to 49.4 percent in February 2021; a rate that is 5 percentage points higher than the one registered a year earlier (44.4 percent). Available non-job seekers constituted a substantial category of the population outside labour force. It increased in May 2020 due to the Covid-19 pandemic and reached 28.1 percent of the before decreasing to 22.6 percent in August 2020 (Q3). It decreased again in November 2020 to 18.9 percent and remained almost stable (18.7 percent) in February 2021 (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 (past failure, to find a suitable job, lack of experience, qualifications or jobs matching the person's skills, lack of jobs in the area, considered too young or too old by prospective employers). The proportion of discouraged jobseekers among the working age population decreased to 12.2 percent in February 2021(Q1) as compared to 13.5 percent in November 2020 (Q4).

Figure 2. 3: Trend of the ratio of population outside labour force to working age population
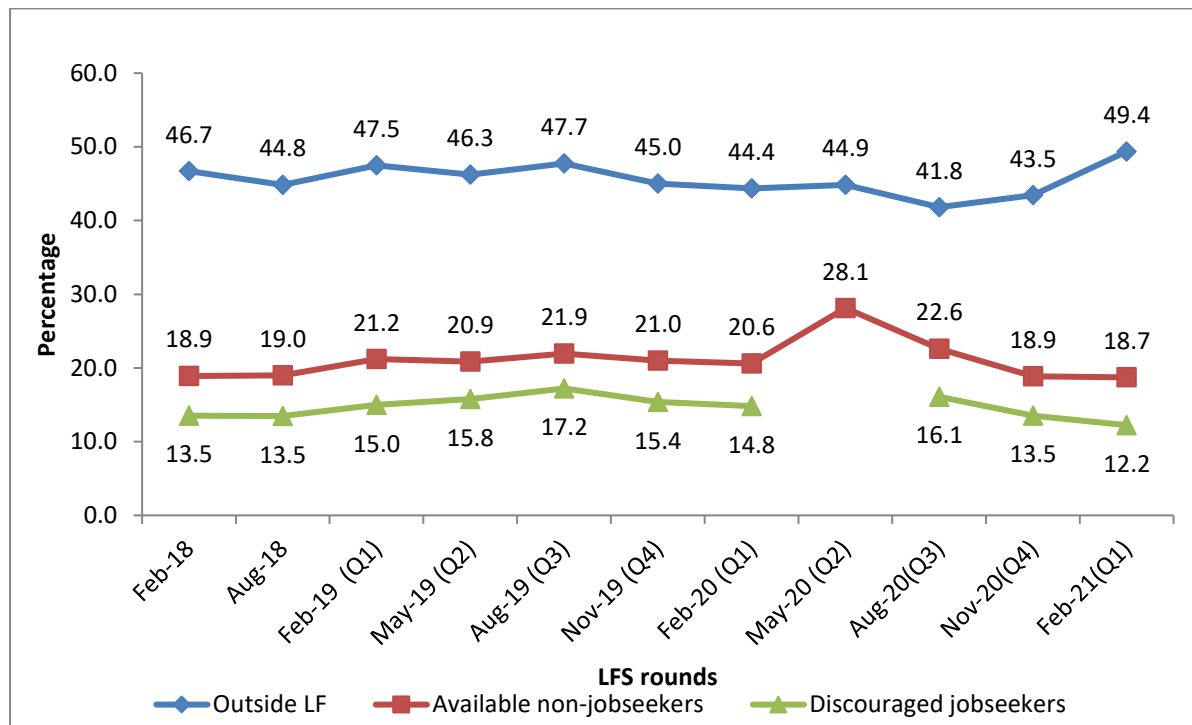
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)
Note: Information on discouraged jobseekers were not collected in May 2020

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 was decreasing from its peak in May 2020 (28.7 percent) to 25.3 percent in August 2020, 22.9 percent in November 2020 and 21.4 percent in February 2021.

Figure 2. 4: Trend of subsistence foodstuff production participation rate
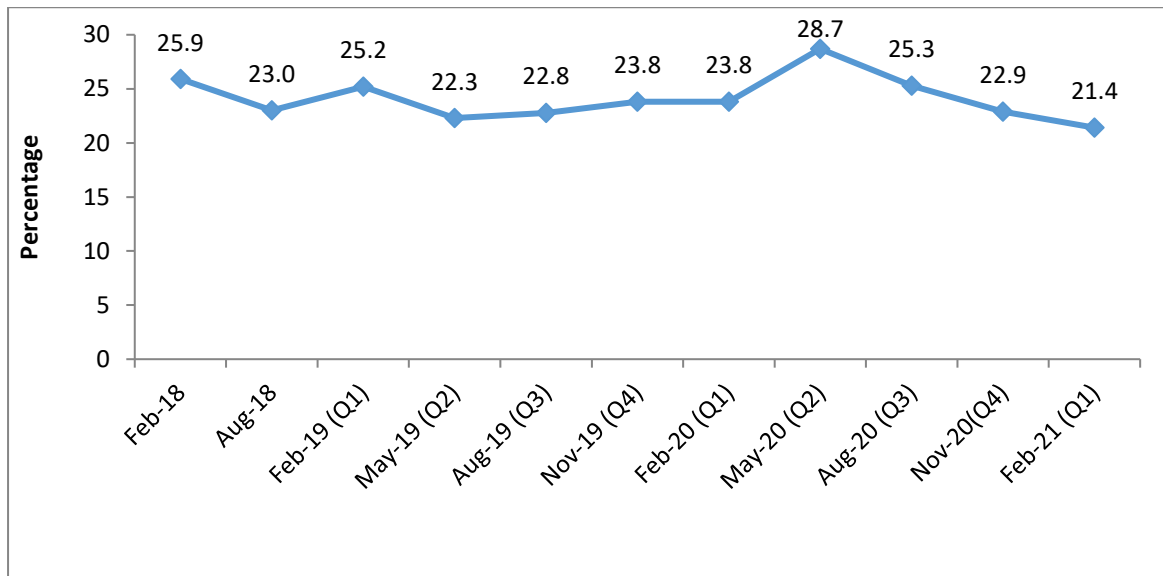
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 compare the labour underutilisation rate and its components in November 2019 (Q4), February 2020(Q1), August 2020(Q3), November 2020(Q4) and February 2021 (Q1). In February 2021, there has been a decrease in all labour underutilisation components in comparison with the previous quarter (November 2020). The unemployment rate (LU1) decreased by 3.3 percentage points and LU2 by 2.4 percentage points. LU3 decreased by 1 percentage point; which is a decrease at a relatively lower level than the unemployment rate (LU1), reflecting the stability among the population in potential labour force in February 2021 as compared to November 2020. LU4 slightly decreased by 0.8 percentage points from November 2020 to February 2021.

Compared to the situation one year earlier (February 2020), the unemployment rate (LU1) increased by 3.9 percentage points, LU2 increased by 2.5 percentage points, LU3 increased by 2.9 percentage points and LU4 increased by 1.9 percentage points.

Figure 2. 5: Trend of the labour underutilization rate
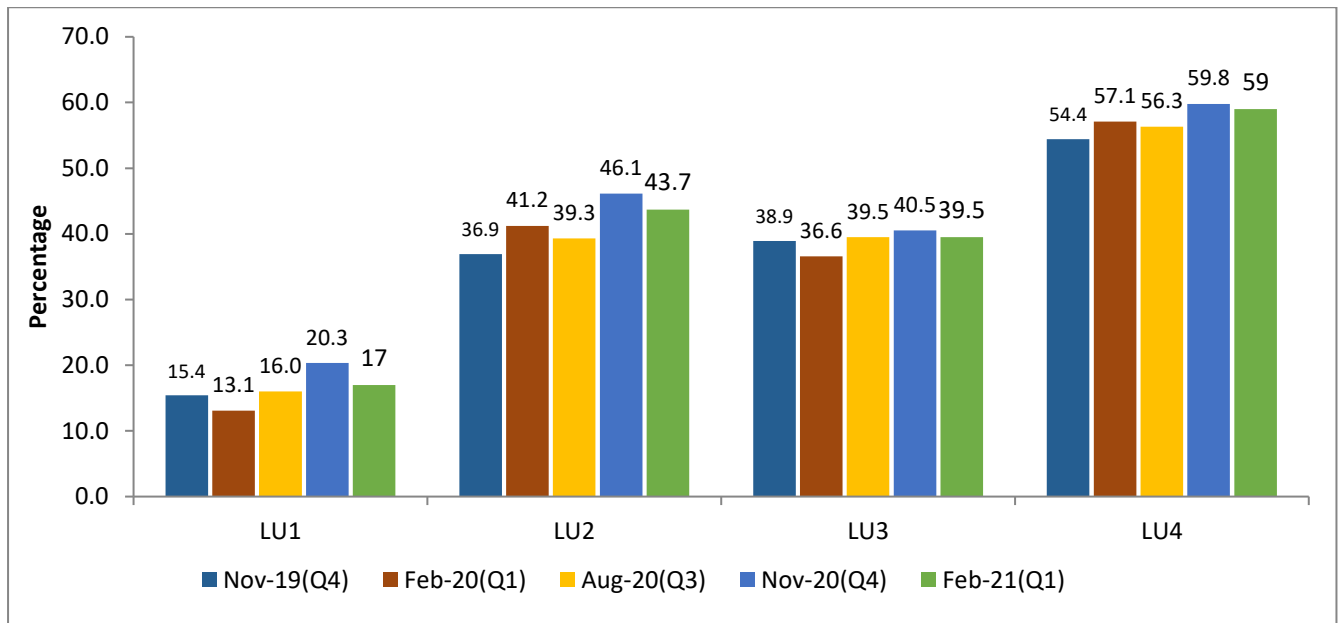
LU1 - Unemployment rate
LU2 - Combined rate of unemployment and time-related underemployment
LU3 - Combined rate of unemployment and potential labour force
LU4 - Composite measure of labour underutilization

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

Chapter 3: Labour Force Participation

3.1 Labour force participation among males and females

The labour force participation rate, which is the ratio of the labour force to the working age population expressed in percentage terms, decreased to 50.6 percent in February 2021(Q1) compared to 55.6 percent in February 2020(Q1). The results show a decrease trend of labour force participation rate in both male and female population in February 2021 as compared to February 2020; however, the labour force participation rate was higher for male population than the female population over time. The labour force participation rate gender gap was around 15.8 percentages points in February 2020 and it decreased to around 13.6 percentage points in February 2021. The comparison with the previous quarter shows that, the labour force participation rate decreased by 5.9 percentage points from November 2020 (Q4) to February 2021(Q1) at National level. It significantly decreased by 7.3 percentages points among males and 4.8 among females in the same period.

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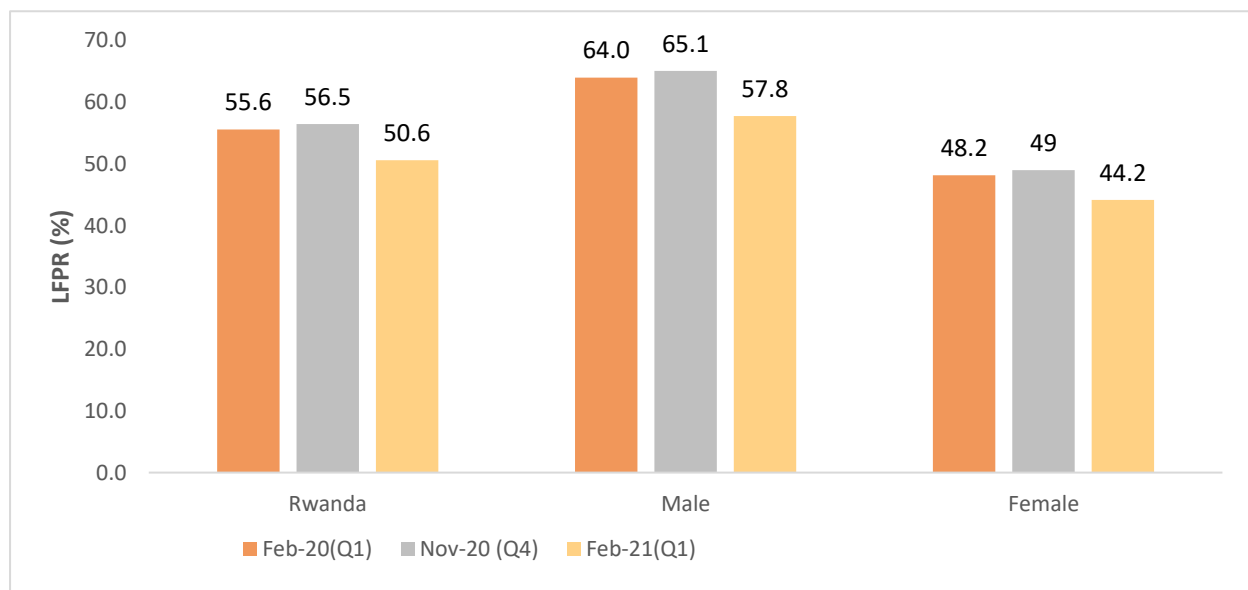
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

3.2 Labour force participation and education

The analysis of the labour force participation rate (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 of February 2020(Q1) to February 2021(Q1) shows a decrease of LFPR for all level of education. The decrease was higher for those with lower secondary (7.6 percentage points), followed by 7.3 percentage points for those with university and5.5 percentage points for both holders of primary and upper secondary level of education. The lowest decrease was observed among` those with no completed level of education (3.0 percentage points).

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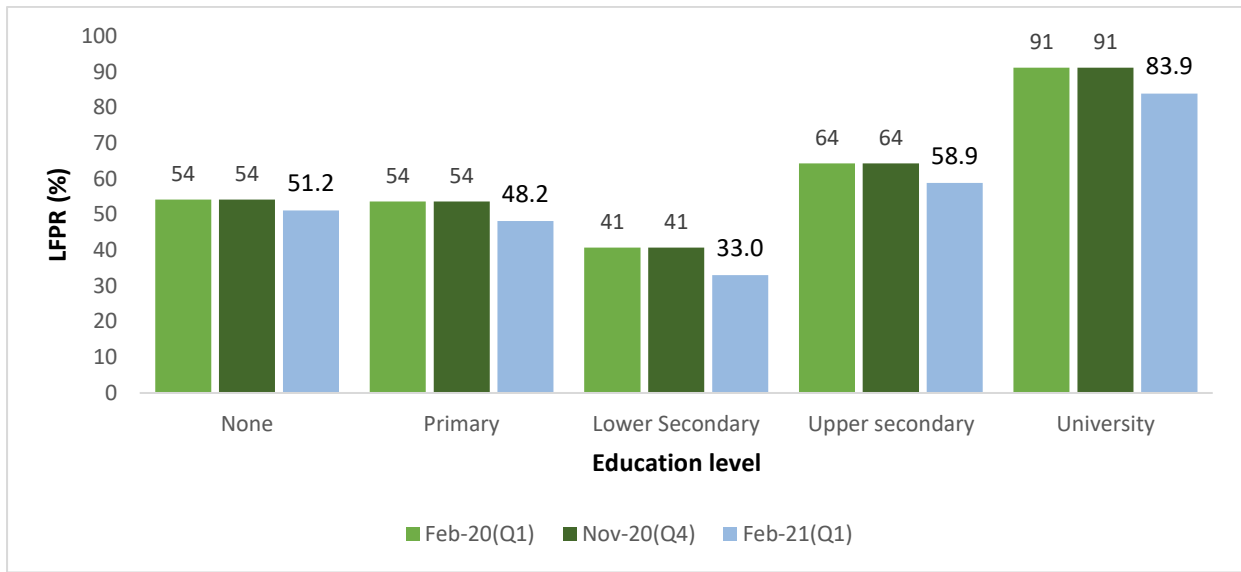
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

3.3 Labour force participation by age group

In February 2021(Q1), the labour force participation rate among youth (46.1percent) was less by 7.1 percentage points than the one of February 2020(Q1) (53.2 percent). In the same way, the labour force participation rate among people in the age group 31 to 54 years old decreased by 2.8 percentage points in February 2021 as compared to February2020(Q1).

The comparison of LFS November 2020(Q4) and February 2021(Q1) shows the decrease of the labour force participation rate among all age groups of population. It decreased by 8.8 percentage points among the population aged 16-30 years old , by 3.9 percentage points among those aged 31-54 years old and by 3.1 percentage points among the population aged 55 years old and above.

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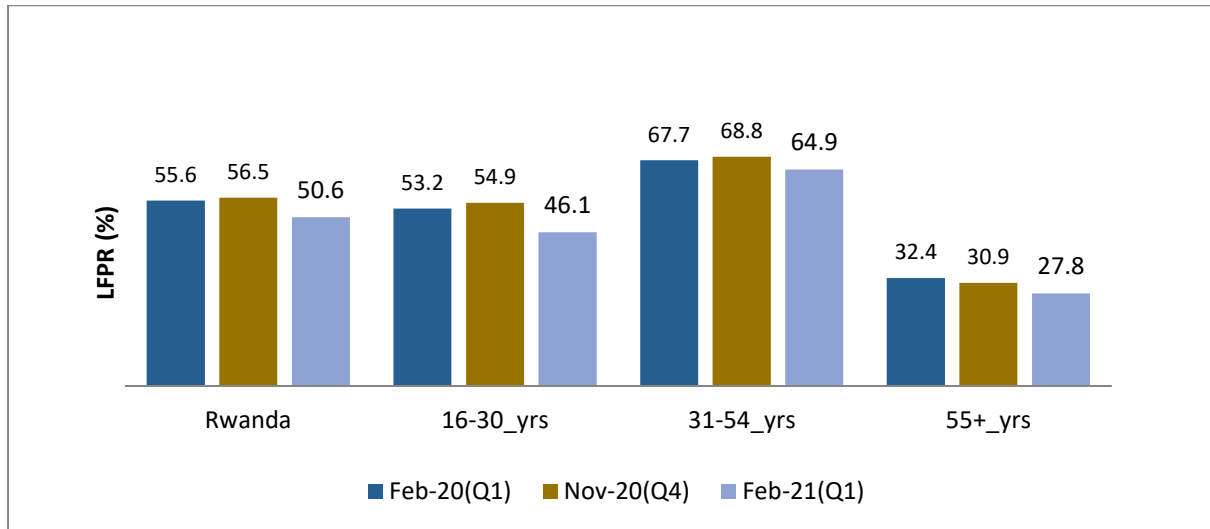
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

3.4 Labour force participation and area of residence

The analysis of labour force participation rate by area of residence (urban and rural) reveals that Labour force participation rate 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. The gap between the labour force participation rate in urban and rural areas decreased by 6.3 percentage points from 16.6 percentage points in February 2020 to 10.3 percentage points in February 2021 mainly due to the high decrease of labour force participation rate in urban areas. The comparison of LFS November 2020(Q4) and February 2021(Q1) reveals that the labour force participation rate decreased by 6.6 percentage points in urban areas and by 4.9 percentage points in rural areas.

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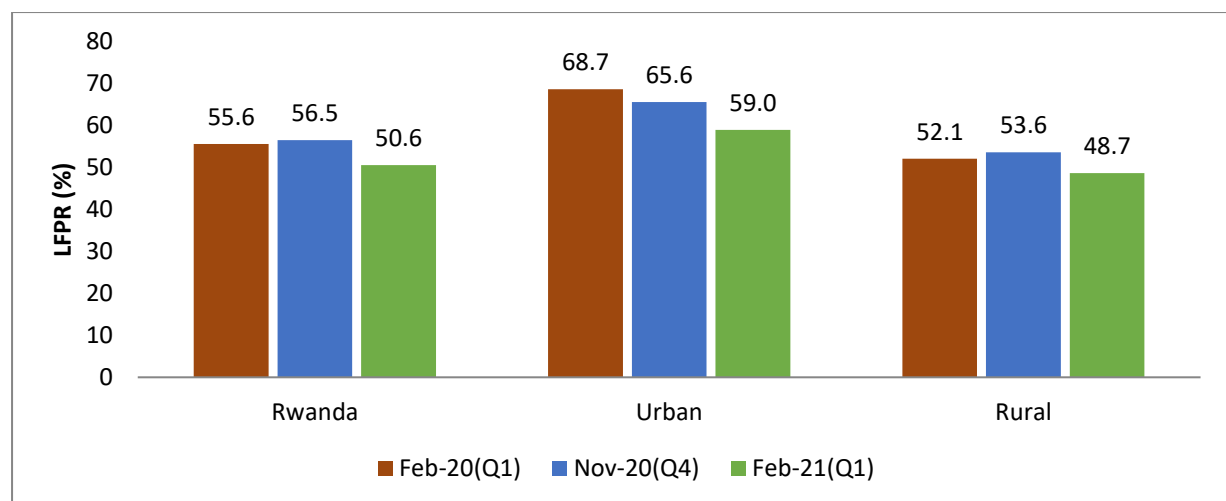
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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Chapter 4: Employment

4.1 Employment to population ratio

Figure 4.1 presents the employment-to-population ratio by area of residence. It was observed that the employment-to-population ratio decreased in February 2021 (Q1) as compared to February 2020(Q1) at the national level (by 6.3 percentage points) as well as in both urban and rural areas (by 11.9 percentage points and 4.5 percentage point respectively). The results show that between November 2020 (Q4) and February 2021 (Q1) the employment-to-population ratio decreased by 3.1 percentage points at national level, while it decreased by 6.1 percentage points in urban areas, and by 1.6 percentage points in rural areas.

It was observed that the employment-to-population ratio was higher in urban areas as compared to rural areas in all rounds of the labour force survey. The gap between the employment-to-population ratio between urban and rural areas remained significant in February 2021 (Q1) (5 percentage points) even though it decreased from 9.5 percentage points registered in November 2020 (Q4). However, the observed decrease of the gap in February 2021 resulted from the decrease of employment to population ratio in urban areas instead of being the result of labour market improvement in rural areas.

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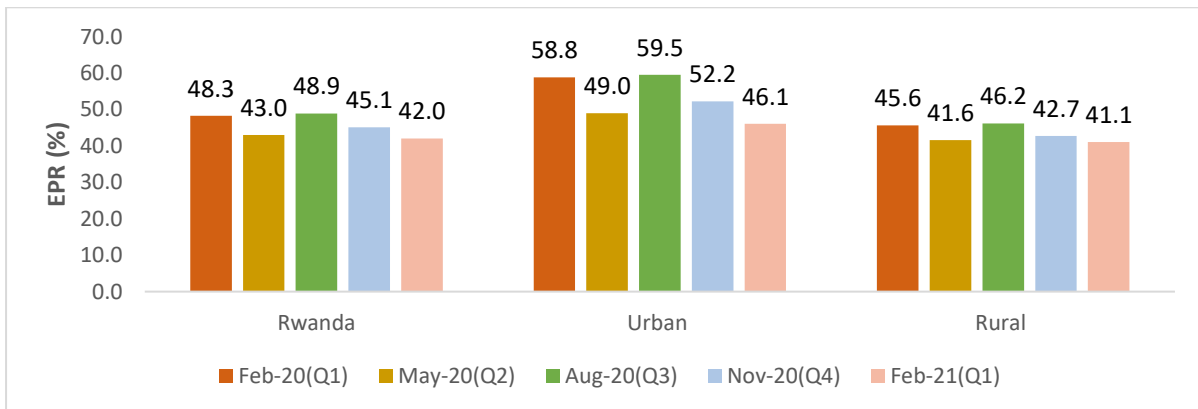
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Figure 4.2 shows the trend in the employment-to-population ratio for the male and female separately. It is informative to note that there is a high gap between the employment-to-population ratio of males and females over time. In February 2021(Q1), the employment-to-population ratio decreased by 7.4 percentage points from 56.1 percent in February 2020 (Q1) to 48.7 percent among males, while it decreased by 5.4 percentage points from 41.5 to 36.1 percent among females; resulting to 12.6 percentage points gender gap in employment to population ratio in February 2021; which is 2.0 percentages points lower than the one of February 2020 (14.6 percent). From November 2020 to February 2021, the employment to population ratio highly decreased among males (from 53.0 percent to 48.7 percent) than among females (from 38 percent to 36.1 percent).

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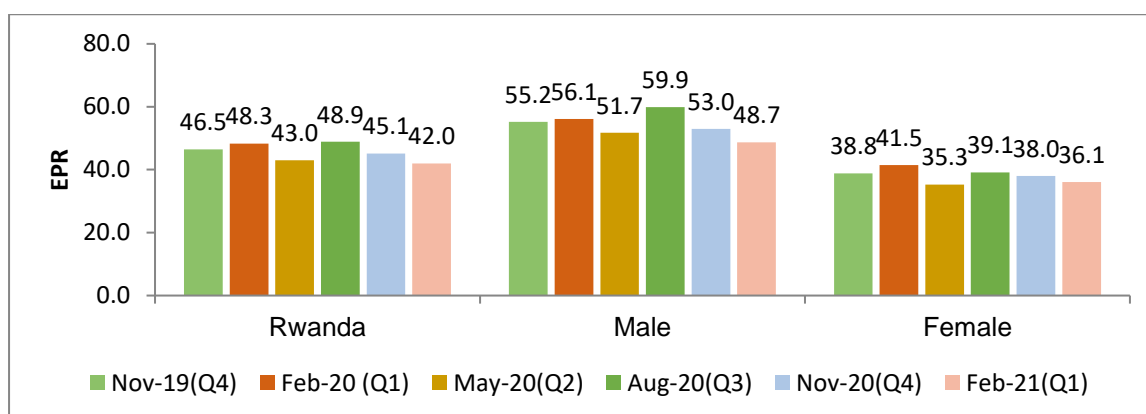
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

4.2 Status in employment

Table 4.1 below reveals that, in February 2021 (Q1) the number of employed population decreased by around 364,000 as compared to February 2020 (Q1) and it decreased by around 203,000 as compared to November 2020(Q4). 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. In February 2021, there was a decrease (5 percent) in the number of employees and paid apprentices in comparison with the previous quarter (November 2020) and the slight decrease of 2 percent as compared to February 2020. In the same way, the number of employers and own account workers substantially decreased in February 2021 as compared to the situation one year earlier (31.8 percent for employer and 22 percent for own account workers).

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

Status in employment	Feb-20	May-20	Aug-20	Nov-20	Feb-21	% Change(Feb20-Feb21)	% Change (Nov20 Feb21)
Total	3,568,934	3,199,104	3,667,611	3,407,789	3,204,924	-10.2%	-6.0%
Employee and paid apprentices	2,448,667	1,909,439	2,288,305	2,525,492	2,399,605	-2.0%	-5.0%
Employer (with regular employees)	46,016	63,566	37,007	38,297	31,398	-31.8%	-18.0%
Own account worker (without regular employees	922,522	1,050,491	1,126,448	775,971	719,320	-22.0%	-7.3%
Member of cooperative	8,723	6,219	5,996	2,227	4,586	-47.4%	105.9%
Contributing family worker	143,006	169,388	209,855	65,802	50,015	-65.0%	-24.0%

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

Figure 4.3 shows the shares of employed population according to the status of employment. It reveals that the share of employees in February 2021(Q1) (74.9 percent) increased by 6.3 percentage points from February 2020(Q1) and it slightly increased by 0.8 percentage points as compared to November 2020(Q4) (74.1 percent). The share of own-account workers in February 2021 (Q1) decreased by 3.5 percentage points from February 2020(Q1) and slightly declined by 0.4 percentage points as compared to November 2020 (Q4). The figure (4.3 percent) also revealed that the share of contributing family workers decreased from (1.9 percent) in November 2020(Q4) to (1.6 percent) in February 2021(Q1).

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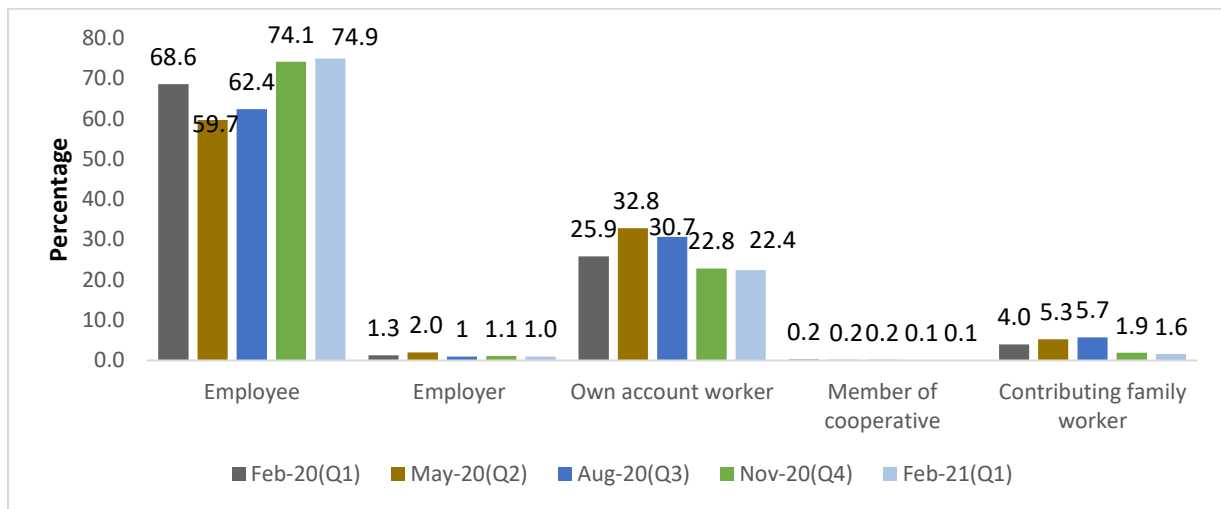
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

4.3 Main occupation

The table below presents the number of employed persons by occupation and its change over time. The comparison of February 2021 with November 2020 reveals that there was a loss of employment in almost all occupations with important loss in three following occupations: Service and sale workers (-67,710 workers), craft and related trade workers (-36,389 workers) and skilled agricultural, forestry and fishery workers (-28,651). The breakdown of occupation to lower level reveals that the important number of lost employments between November 2020 and February 2021 came from Mining and construction labourers (-141,961), street and Market Salespersons (-46,091), Transport and Storage Labourers (-45,702) and Building Frame and Related Trades Workers (-42,276).

On the other hand, there was an increase in the number of employments in elementary occupations, mostly from Agricultural, forestry and fishery labourers (+230,561).

Table 4. 2 Number of employed persons by occupation

Major Occupation Group	Feb-20	Aug-20	Nov-20	Feb-21	% Change Feb-20-Feb21	% Change Nov-20-Feb21
Total	3,568,934	3,667,611	3,407,789	3,204,924	-10.2%	-5.9%
Managers	61,423	38,338	56,506	35,352	-42.4%	-37.4%
Professionals	214,703	173,789	198,952	172,436	-19.7%	-13.3%
Technicians and associate professionals	57,399	56,063	46,706	29,644	-48.4%	-36.5%
Clerical support workers	32,901	36,939	27,822	27,626	-16.0%	-0.7%
Service and sales workers	625,149	751,905	533,639	465,929	-25.5%	-12.7%
Skilled agricultural forestry and fishing	266,774	291,396	150,058	121,407	-54.5%	-19.1%
Craft and related trades workers	298,711	423,088	254,349	217,960	-27.0%	-14.3%
Plant and machine operators and assemble	87,641	99,086	86,975	77,248	-11.9%	-11.2%
Elementary occupations	1,924,232	1,797,007	2,052,781	2,057,323	6.9%	0.2%

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

The percentage distribution of employed population by occupational categories over the six rounds of the Labour Force Survey as presented in table 4.3 below shows that Elementary Occupations registered a highest share followed by Service and Sales Workers and then Craft and Related Trades Workers among others. The result of comparison of February 2021 (Q1) with the same quarter one year back reveals that the share of elementary Occupations in total employment increased by 10.3 percentage points from February 2020 (Q1) to February 2021(Q1). Conversely, the share of service and sales workers decreased by 3 percentage points, the share of Skilled Agricultural, Forestry and Fishery Workers also decreased by 3.7 percentage points. The changes in other occupational categories for the same period are below 1 percentage point.

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

Major Occupation Group	Employed population					
	Aug-19 (Q3)	Nov-19 (Q4)	Feb-20 (Q1)	Aug-20 (Q3)	Nov-20(Q4)	Feb-21(Q1)
Total employed ('000)	3,153	3,406	3,569	3,668	3,408	3,205
Total (percent)	**100**	**100**	**100**	**100**	**100**	**100**
Managers	1.5	1.4	1.7	1.1	1.7	1.1
Professionals	6	5.8	6	4.7	5.8	5.4
Technicians and Associate Professionals	1.7	1.5	1.6	1.5	1.4	0.9
Clerical Support Workers	0.9	1	0.9	1	0.8	0.9
Service and Sales Workers	19.4	21.1	17.5	20.5	15.7	14.5
Skilled Agricultural, Forestry and Fishery Workers	6.3	5.9	7.5	8	4.4	3.8
Craft and Related Trades Workers	8.8	7.9	8.4	11.5	7.5	6.8
Plant and Machine Operators and Assemblers	3	3.2	2.5	2.7	2.5	2.4
Elementary Occupations	52.4	52.2	53.9	49	60.2	64.2

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

4.4 Main Economic activity

According to the results presented in Table 4.4 below, the bulk of employed population were engaged in Agriculture, forestry and fishing (52.3 percent) in February 2021(Q1). Other sectors that employed a substantial number of population were wholesale and retail trade; repair of motor vehicles and motorcycles (10.5 percent) construction (8.8 percent) Manufacturing (4.5 percent), transportation and storage (4.1 percent), Activities of households as employers (4.1 percent); Education (3.0 percent) and other services (2.8 percent).

The number of employed population in February 2021 decreased by about 203,000 as compared to November 2020. There has been a decrease in the number of employed population in 17 main economic activities in February 2021 as compared to November 2020. Among them, those that lost a relatively higher number of employed persons are: construction (-173,242), Wholesale and retail trade; repair of motor vehicles and motorcycles (-58,487), Activities of households as employers (-30,720), Transportation and storage (-25,373). Conversely, agriculture sector gained a substantial number of employed population since November 2020 to February 2021 due to its seasonal nature. In February 2021 there has been a gain of 206,596 jobs in agriculture sector as compared to November 2020.

Table 4. 4: Distribution of employed persons by economic activity in the last nine months

Branch of economic activity	20-Feb	20-Apr	20-May	20-Aug	20-Oct	20-Nov	20-Dec	21-Jan	21-Feb
Total	3,568,934	2,117,416	3,199,104	3,667,611	3,482,586	3,407,789	2,698,437	2,838,032	3,204,924
Agriculture forestry and fishing	1,567,871	999,788	1,369,880	1,192,172	1,588,759	1,469,706	1,362,406	1,467,778	1,676,302
Mining and quarrying	66,182	8,843	41,460	67,735	53,676	54,140	29,222	32,455	30,378
Manufacturing	195,001	83,447	164,545	297,973	148,965	148,698	123,405	128,478	143,238
Electricity gas stream and air condition	5,373	1,458	6,567	7,609	3,466	4,710	6,766	6,766	6,766
Water supply, gas and remediation services	9,266	5,452	7,167	7,672	2,814	4,081	2,228	1,551	2,228
Construction	314,008	160,698	402,910	576,278	454,417	453,807	235,092	245,711	280,565
Whole sale and retail trade; repair of motor vehicles and motor cycles	422,915	248,642	435,891	608,656	384,599	394,657	287,941	292,066	336,170
Transportation and storage	156,455	54,891	121,380	150,171	149,787	157,031	119,912	114,648	131,658
Accommodation and food services activities	116,922	26,887	49,842	122,817	73,449	76,400	46,997	46,788	53,060
Information and communication	6,980	4,333	7,268	13,241	13,521	12,810	10,117	11,502	11,940
Financial and insurance activities	40,912	28,247	28,560	38,424	39,479	34,750	29,188	29,399	33,661
Real estate activities	2,148	1,642	2,403	11,081	2,449	1,189	2,760	2,588	1,927
Professional, scientific and technical	25,194	8,763	11,958	24,739	24,919	22,810	15,447	12,584	14,682

Branch of economic activity	20-Feb	20-Apr	20-May	20-Aug	20-Oct	20-Nov	20-Dec	21-Jan	21-Feb
Administrative and support activities	72,661	42,823	54,264	76,708	70,030	73,221	50,650	50,527	56,409
Public administration and defense; compulsory social security	69,530	68,381	71,269	64,743	55,826	55,853	57,425	57,217	61,110
Education	127,040	99,561	101,627	92,366	92,380	109,464	83,238	90,255	97,050
Human health and social work activities	67,896	57,592	58,023	45,813	53,425	53,281	39,791	40,714	42,620
Arts, entertainment and recreation	14,579	3,801	4,069	8,693	9,836	11,520	2,364	2,217	3,678
Other services	97,002	55,753	98,263	85,794	104,654	103,755	75,281	78,477	89,021
Activities of households as employers	182,257	151,380	152,275	171,285	150,023	160,531	115,560	123,664	129,811
Activities of extraterritorial organization	8,741	5,033	9,485	3,640	6,108	5,373	2,648	2,648	2,648

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

4.5. Hours worked in the main job per person in the working population

Assessing the impact of the Covid-19 pandemic on the labour market has been a big challenge, the ILO recognized that traditional labour market indicators are not enough to reflect the current situation of the labour market and suggested hours of work as indicators (hours worked per person in the working population, working-hour losses) to complement the existing labour market indicators in order to measure the impact of the pandemic to the employment[2].

Figure 4. 4: Hours worked in the main job per person in the working population by sex
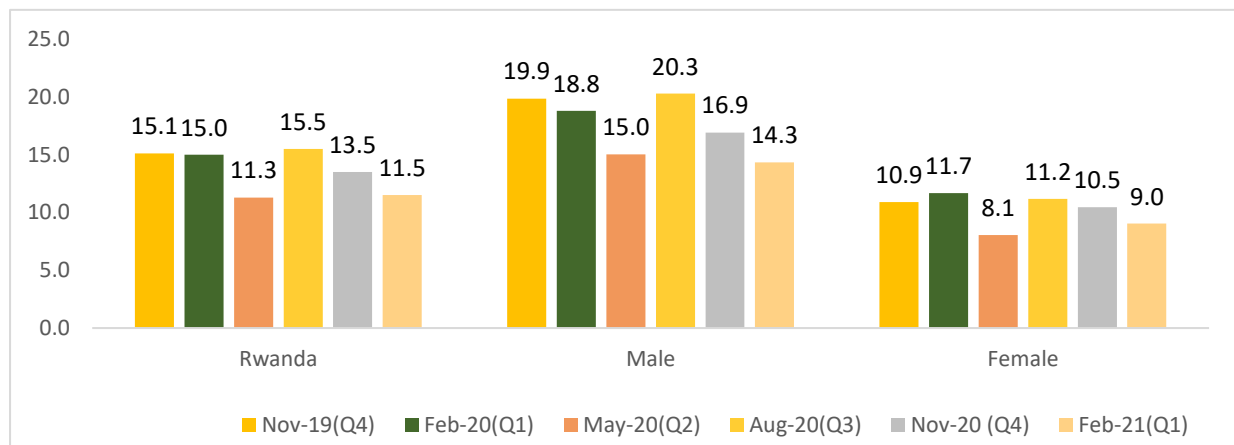
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

It can be observed that the number of hours worked in the main job per person in the reference week had a declining trend from August 2020 all the way to Feb-2021 indicating a loss in actual working hours per person for both males and females. This may be due to some of the measures taken by the government of Rwanda to contain COVID-19, which include business closure, movements' restrictions and the reduction of daily working hours. The figure 4.4 also shows the down pick for the number of weekly worked hours in the main job per person in May 2020 that was due to the decrease of employment followed the full lock down of April 2020. The same trends is observed when the data are disaggregated by residential area as shown in figure 4.5 below.

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[2] https://www.ilo.org/global/topics/coronavirus/impacts-and responses/WCMS_767028/lang--en/index.htm

Figure 4. 5: hours worked in the main job per person in the working population by area of residence.
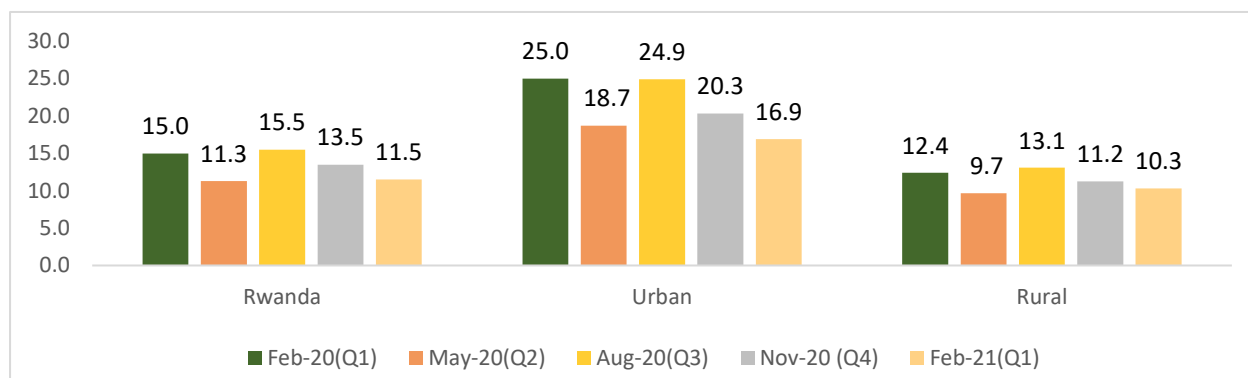
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

The total number of actual weekly working hours observed in February 2021 was 14% lower than the one observed in November 2020. The loss of working hours has been mainly observed in urban areas as compared to rural areas of Rwanda and among Young person. The Table 4.4 below also shows a loss in actual working hours when comparing Feb-2020 round to Feb-2021 in Rwanda (20.8%). Round to round comparison according to the residential area shows a loss of 37% of actual hours worked from November to February 2021 as well the loss of 20% among youth (16 to 30 year).

Table 4. 5: Trend of Actual working

	Feb-20	May-20	Aug-20	Nov-20	Feb-21	loss Feb-20-feb-21	loss Nov-20-feb-21
Total	110,923,750	84,416,138	115,999,051	102,132,095	87,885,825	20.8%	14.0%
Male	65,170,054	52,617,053	71,545,053	60,215,305	51,417,568	21.1%	14.6%
Female	45,753,696	31,799,085	44,453,998	41,916,789	36,468,257	20.3%	13.0%
Urban	38,566,734	25,918,707	37,648,535	38,321,710	24,075,765	37.6%	37.2%
Rural	72,357,016	58,497,431	78,350,515	63,810,385	63,810,060	11.8%	0.0%
16-30 yrs	48,551,488	37,928,638	54,844,579	45,208,323	36,098,229	25.6%	20.2%
30+	62,372,262	46,487,500	61,154,472	56,923,772	51,787,596	17.0%	9.02%

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

Chapter 5: Unemployment and Labour Underutilization

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

5.1 Unemployment rate

The unemployment rate is defined as the ratio of the number of unemployed persons to the labour force. It is the most 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 February 2021(Q1), the unemployment rate in Rwanda was 17.0 percent compared to 20.3 percent in November 2020(Q4) and 13.1 in February 2020(Q1). The comparison between February 2021 and November 2020 shows that the unemployment rate decreased by 3.3 percentage points. The highest decrease was among females (4.0 percentage points) compared to males (2.9 percentage points). Looking at the trend from February 2020 to February 2021, the unemployment rate increased by 3.9 percentage points with a higher increase among females (4.4 percentage points), as compared to that of males (3.4 percentage points).

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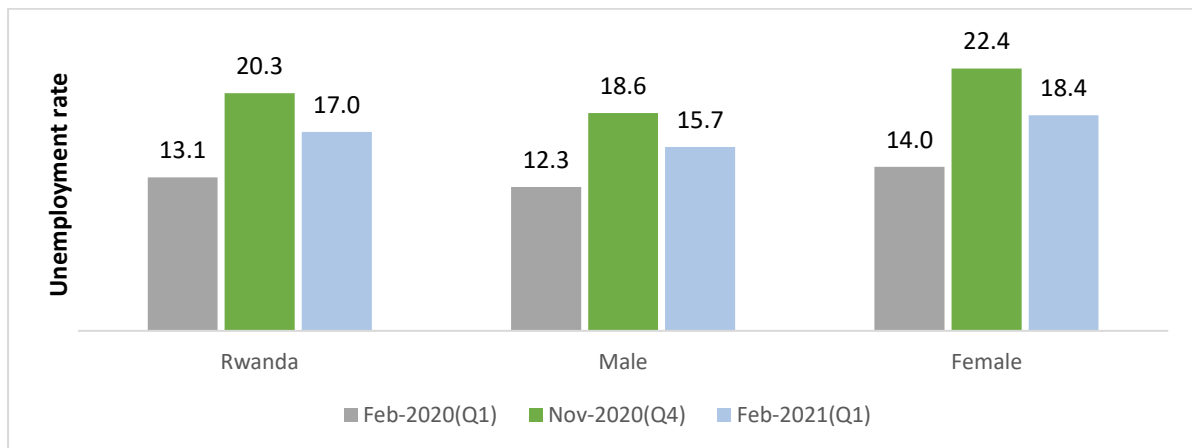
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

The survey results of February 2021(Q1) show that the unemployment rate was higher among the population living in urban as compared to those living in rural areas of Rwanda (21.8 percent and 15.6 percent respectively). The comparison of unemployment rates of the survey results of the current quarter to the same quarter of the year 2020

shows a dramatic increase of 7.3 percentage points among population living in urban areas while it only increased by 3.0 percentage points among population living in rural areas.

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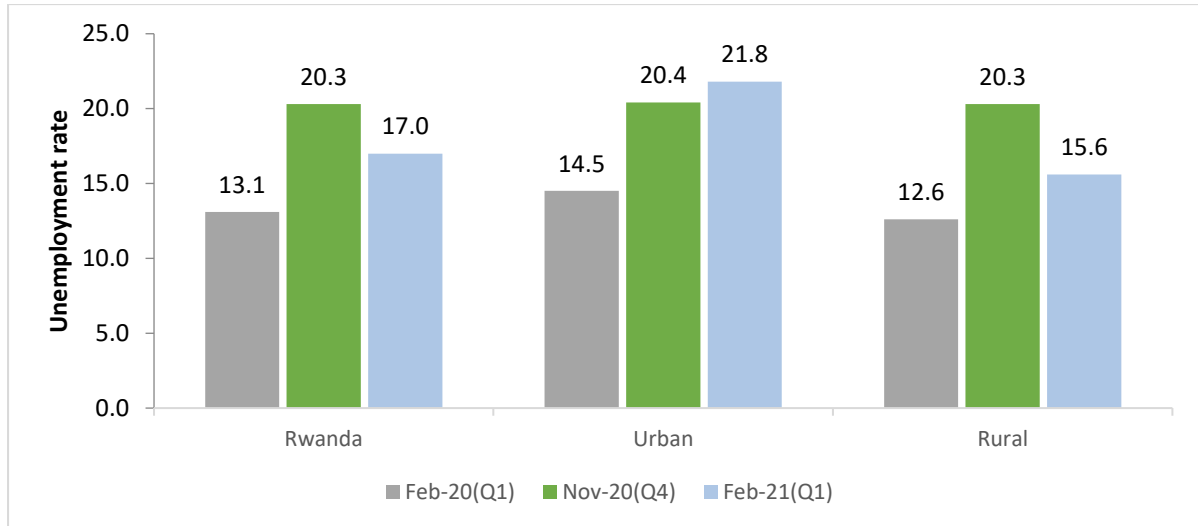
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Figure 5.3 shows the trend 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 show that the unemployment rate among the youth has been relatively higher than the unemployment rate among adults over time. The unemployment rate among the youth (16-30 years) increased from 17.3 percent in February 2020 (Q1) to 21.7 percent in February 2021(Q1) while the unemployment rate among adults (31+ years) increased from 9.8 percent to 13.7 percent in the same period. A comparison of the survey results between November 2020 and February 2021 showed a decreasing trend among both population living in urban as well as those living in rural areas of Rwanda.

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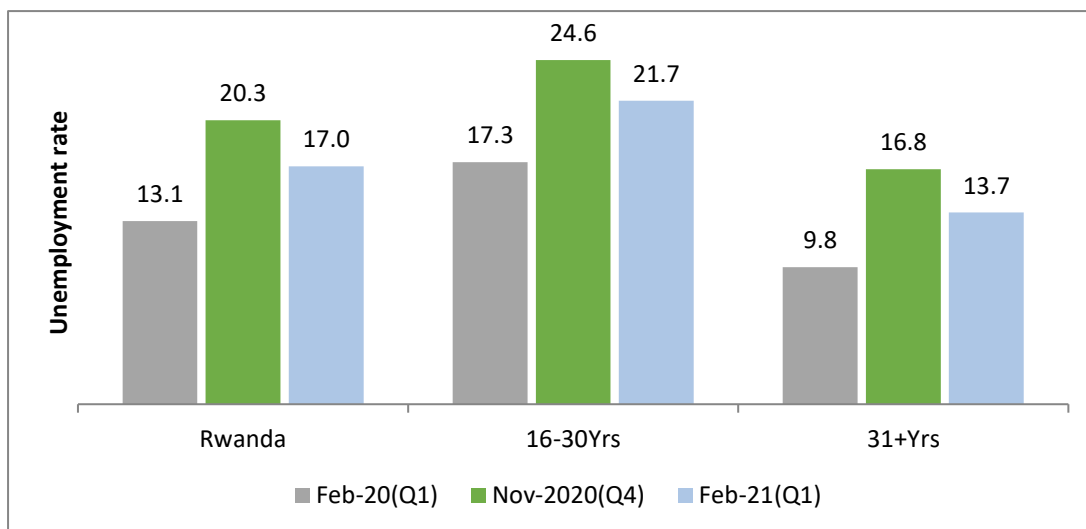
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

The figure 5.4 below shows the trend of unemployment rate among selected age's groups. The comparison between November 2020 (Q4) and February 2021(Q1) shows a decrease of 4.0 percentage points in the unemployment rate among young aged 16-24 years old and a decline of 5.0 percentage points among those aged 45 years old and above. Overall, the results of the current round show that the unemployment rate increased in all selected age groups as compared to the results of February 2020 (Q1) round. During this period, the unemployment rate increased by 5.0 percentage points for 16-25 years old, by 4.0 percentage points for 25-44 years old and by 3.0 percentage points for 45 years and above.

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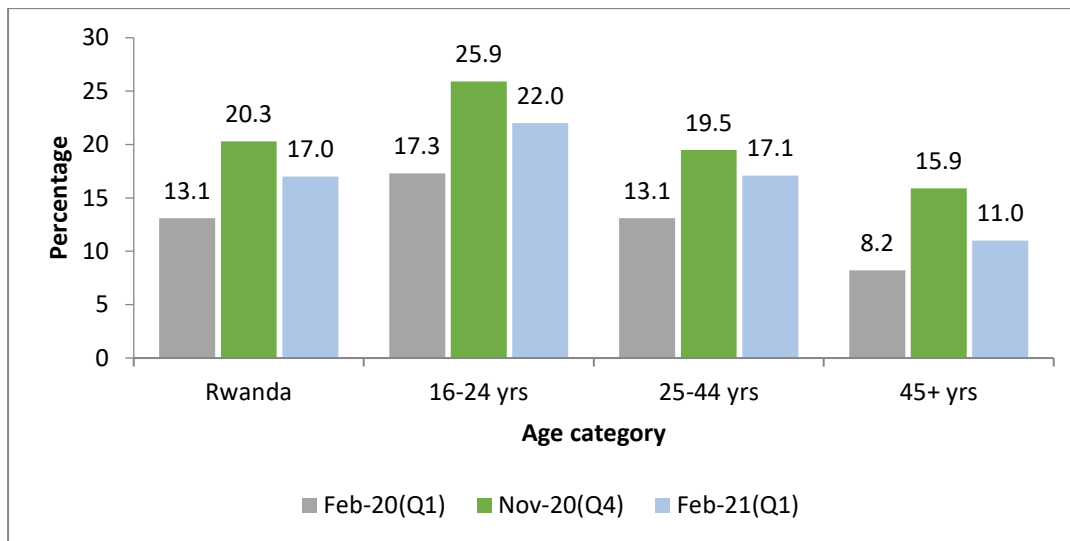
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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

Participation in employment, education or training is important for youth in their transition to the labour market and achieves self-sufficiency. 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 youth in the age group 16 to 24 years old, who were neither in employment nor in education or training, was 704,818 persons while for those aged between 16 and 30 years old, the total number was 1,191,274 persons in February 2021(Q1).

The share of young (16 to 24 years old) neither in employment nor in education or training (NEET) stood at 30.2 percent in February 2021(Q1) representing a decrease of 2.2 percent compared to November 2020(Q4) (32.4 percent). The comparison of results in November 2020(Q4) and February 2021(Q1) shows that the highest decrease of the NEET rate was essentially among the young living in rural areas (3.8 percentage points) while it remained almost unchanged among youth living in rural areas. The comparison with February 2020, reveals a more significant decrease of NEET among youth (16-24) living in rural areas (5.5 percentage points). The NEET rate among the youth (16 to 24 years old) also decreased among males (2.5 percentage points) as compared to females (2.0 percentage points) in the same period. In the same way, the comparison of February

2021 with the same February one year earlier, shows a decline of NEET rate by 3.8 percentage points at the national level and among both youth males and females by 4 and 3.6 percentage points respectively.

The results also show that the NEET rate among youth (16-30 years) was 34.4 percent in February 2021(Q1) with higher rate among females (40.1 percent) than among males (28.4 percent) and higher rate in rural areas (33.3 percent) than in urban areas (30.4 percent). The comparison of the current NEET rate with the results of the previous round shows that the NEET rate remained almost stable overall as well as among male and female population. This remains also true when compared February 2021 with the situation one year back. Conversely, the NEET rate among youth (16-30 years old) living in urban areas substantially increased by 5.9 percentage points from February 2020 to February 2021

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

Age group	sex/ Residence	Estimate (NEET)				Percentage change	
		Feb-20	Aug-20	Nov-20	Feb-21	Nov-20 to Feb-21	Feb-20 to Feb-21
16-24 years	Total	34	28.4	32.4	30.2	-2.2	-3.8
	Male	30.6	22.1	29.1	26.6	-2.5	-4
	Female	37.2	34.5	35.6	33.6	-2	-3.6
	Urban	23.8	19.1	24.8	25.1	0.3	1.3
	Rural	36.8	30.8	35.1	31.3	-3.8	-5.5
16-30 years	Total	34.2	31.8	34.7	34.4	-0.3	0.2
	Male	28.6	23	28.9	28.4	-0.5	-0.2
	Female	39.4	40.2	40.4	40.1	-0.3	0.7
	Urban	24.5	22.5	28.1	30.4	2.3	5.9
	Rural	37.2	34.6	37.3	35.3	-2	-1.9

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

5.3. Labour Underutilization

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

The results presented in figure 5.5 shows that the composite measure of labour underutilization rate stood at 59.0 percent in February 2021(Q1) as compared to 59.8 percent recorded in November 2020(Q4). The labour underutilization rate was higher among females (63.8 percent) than males (54.1 percent). The comparison of February 2021(Q1) and November 2020(Q4) shows that the labour underutilization rate essentially remained unchanged among males while it slightly decreased by 2.1 percentage points among female population.

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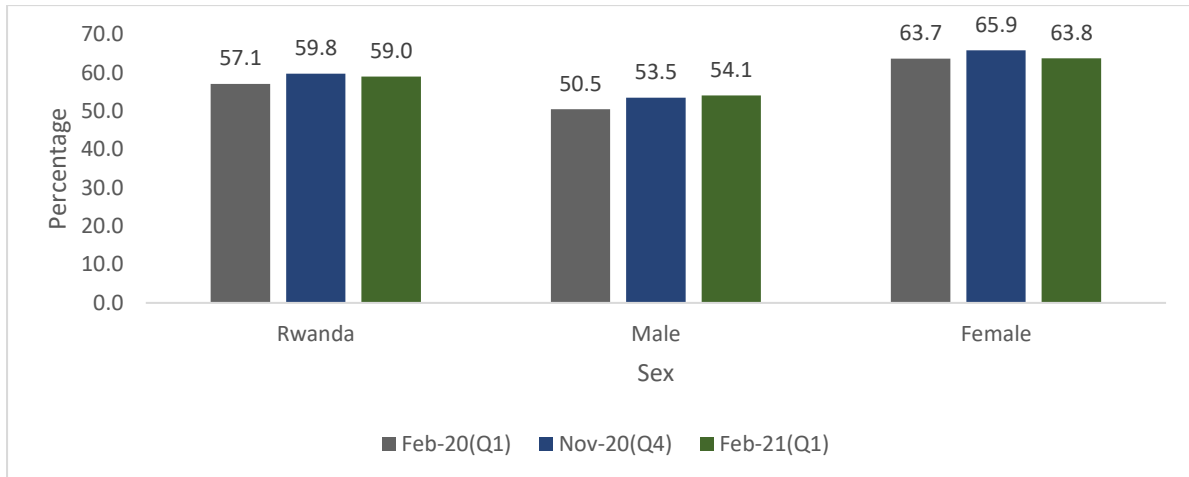
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

The results presented in figure 5.6 below shows also that the labour under-utilization rate was higher among the population living in rural than those living in urban areas of Rwanda. The comparison of November 2020(Q4) and February 2021(Q1) reveals that the labour underutilization rate increased by 6.2 percentage points among population living in urban areas of Rwanda whereas it declined by 3.9 percentage points among the population living in urban areas. A comparison of the labour underutilization rate in the current quarter with the same quarter of the previous year, revealed that the rate remained stable among the population living in rural areas while it increased by 9.0 percentage points among those living in urban areas of Rwanda.

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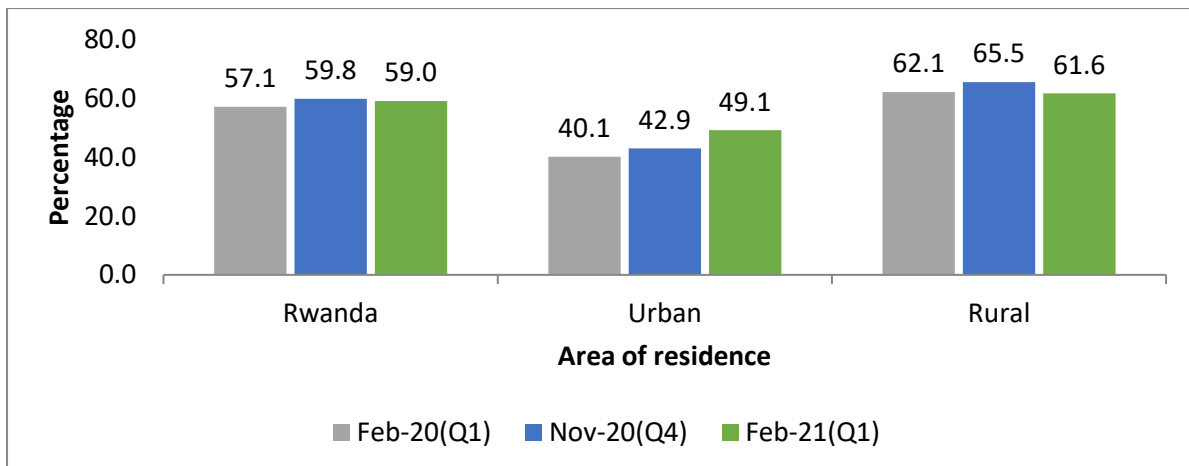
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Figure 5.7 presents the labour underutilization rate by age group (youth and adults). It is observed that the labour underutilization rate slightly decreased by 1.1 percentage points among adult population while it remained stable among the youth in February 2021(Q1) as compared to November 2020(Q4). The comparison of labour underutilization rate in February 2021(Q1) and February 2020(Q1) shows an increase of 2.2 percentage points among the youth while it increased by 1.7 percentage points among adults population.

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

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

The survey results show also that the labour underutilisation rate was higher among population in lower age group than the adult population. In February 2021(Q1), the labour underutilization rate was 64.2 percent among youth in age group 16-24 while it was 59.0 percent among population aged 25-44 years and 53.7 percent among those in age group 45 and above.

A comparison between November 2020(Q4) and February 2021(Q1) reveals that the labour underutilisation rate declined by 3.8 percentage points among those aged 45 years and above while it remained almost unchanged among all other selected age groups.

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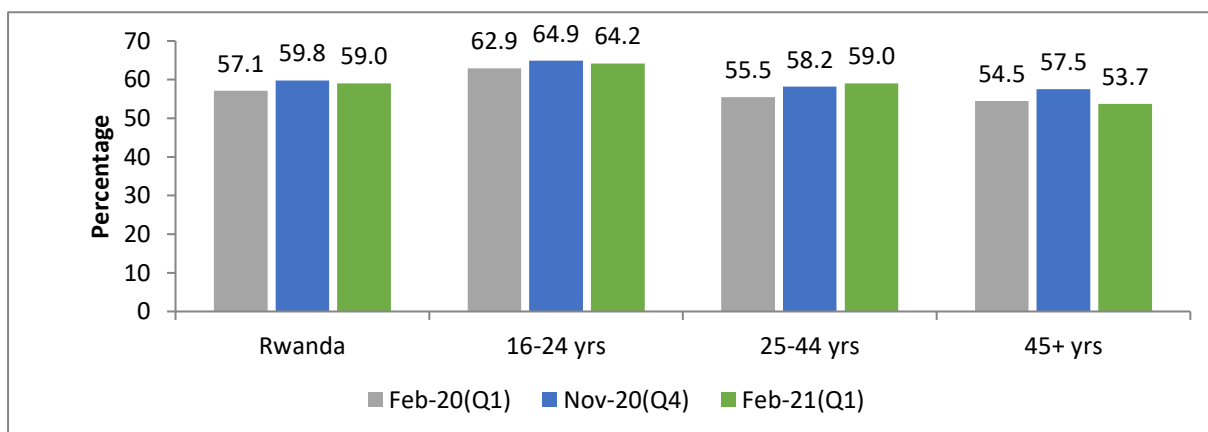
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

Chapter 6: Population outside the Labour Force

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

The population outside the labour force increased to around 3,765,000 in February 2021(Q1) from 3,287,000 in November 2020(Q4) and it was higher than 3,277,000 found in February 2020(Q1). This increase is equivalent to 12.7 percentage points when compared to the previous quarter while the increase is less than 1 percentage point when compared to the situation one year earlier.

6.1 Main components of population outside the labour Force

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

Table 6.1 presents the main components of population outside the labour force. The majority of the population outside the labour force was engaged in subsistence agriculture (43.3 percent) in February2021 (Q1). Those who were exclusively classified as students represented 24.3 percent while the remaining part represented 32.4 percent. The comparison with the situation of February2020 (Q1) shows that the share of those exclusively in schools increased by 5 percent while the share of those engaged in subsistence agriculture decreased by 10.2 percent. The comparison with the previous quarter reveals tangible changes in both magnitude and distribution of the population outside labour force. In February 2021, the population outside labour force increased by 13 percent as compared to November 2020. The share of students increased by 5 percent while the share of subsistence agricultural decreased by 9.4 percent.

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

Main components	LFS rounds				% Change	
	Feb-20 (Q2)	Aug-20 (Q3)	Nov-20 (Q4)	Feb-21(Q1)	Feb-20 (Q1) to Feb-21	Nov-20 (Q4) to Feb-21
Count(,000)	3,276	3,138	3,287	3,765	12.7	13
Total	**100**	**100**	**100**	**100**		
Exclusively student	19	16	19.3	24.3	5.3	5
Subsistence agricultural farmers	53.5	50.4	52.7	43.4	-10.2	-9.4
Other outside LFS	27.4	33.6	28	32.4	5	4.4

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

6.2 Population outside the labour force by area of residence

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

The comparison of February2020 (Q1) and February2021 (Q1) shows that the proportion of population outside labour force highly increased from 44.4 percent to 49.9 percent at the national level. In rural area, it increased from 47.9 percent to 51.3 percent and from 31.3 percent to 41 percent in urban area.

The comparison with the previous quarter (November 2020(Q4)) shows that the proportion of the population outside labour force increased by 5.8 percentage points at the National level, by 4.7 percentage points in rural areas and by 6.6 percentage points in urban areas.

It is also observed from Figure 6.1 that the proportion of population outside labour force is normally higher in rural areas relatively to urban areas. However, the urban-rural gap decreased to 10.3 in February 2021(Q1) as compared to 12.2 percentage points of the urban-rural gap observed in November 2019(Q4). The observed gap decrease however, is not the result of the improvement of the labour market in rural areas, but it is instead, the effect of observed increase of population outside labour force in urban areas.
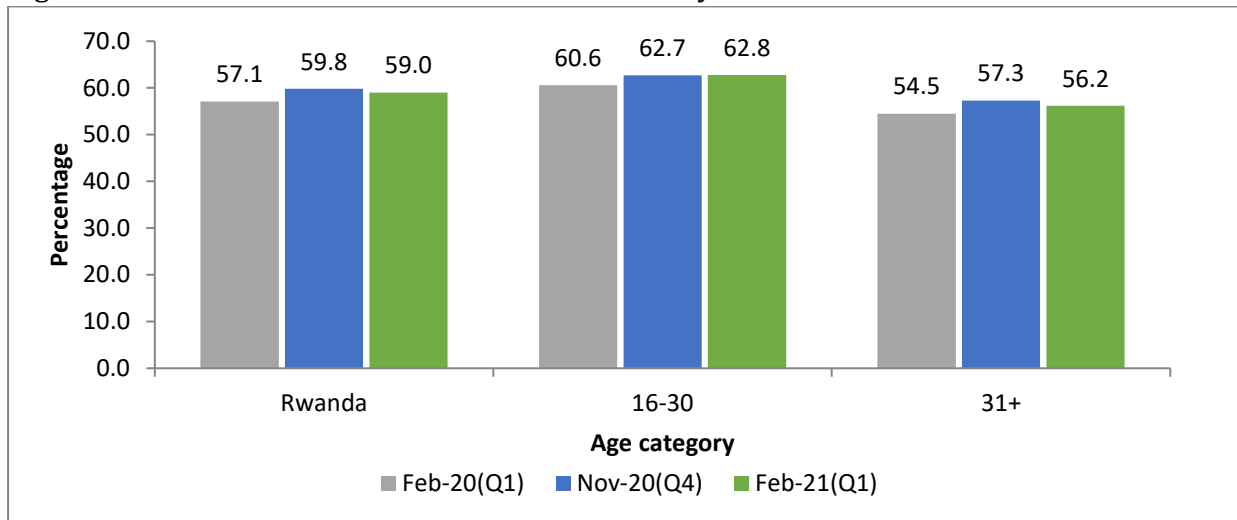
Figure 6. 1: Population outside Labour force by Area of residence
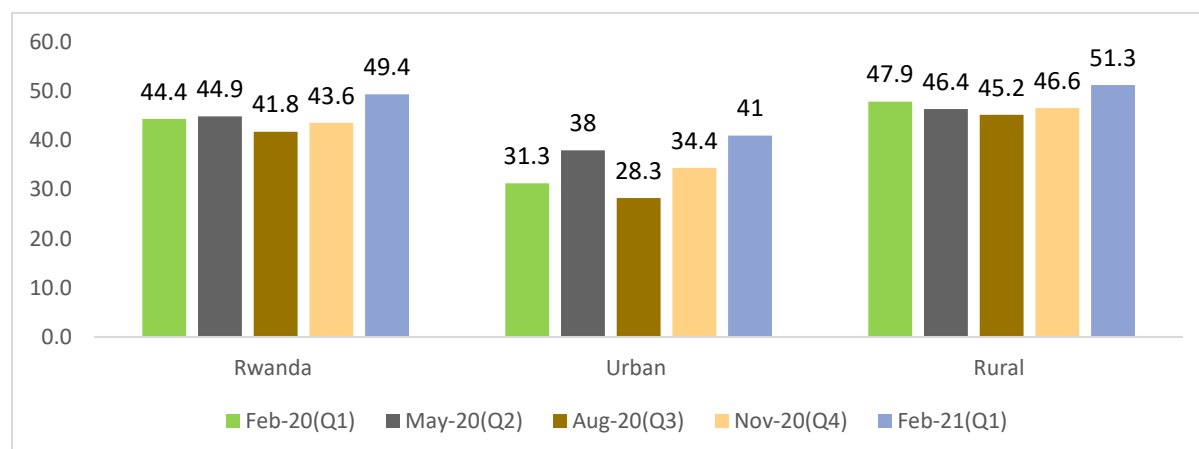
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

6.3 Population outside the labour force by age group

Figure 6.2 shows that the proportion of population outside labour force among youth (16-30 years old) increased from 44.4 percent in February 2020 (Q1) to 49.4 percent in February 2021(Q1) and from 46.8 percent to 53.9 percent among adult (31 years and above), in the same period.

The comparison of November 2020 (Q4) and February 2021(Q1) shows that this proportion increased from 45.1 percent to 53.9 among youth and increased from 42.0 percent to 45.6 percent among adults.

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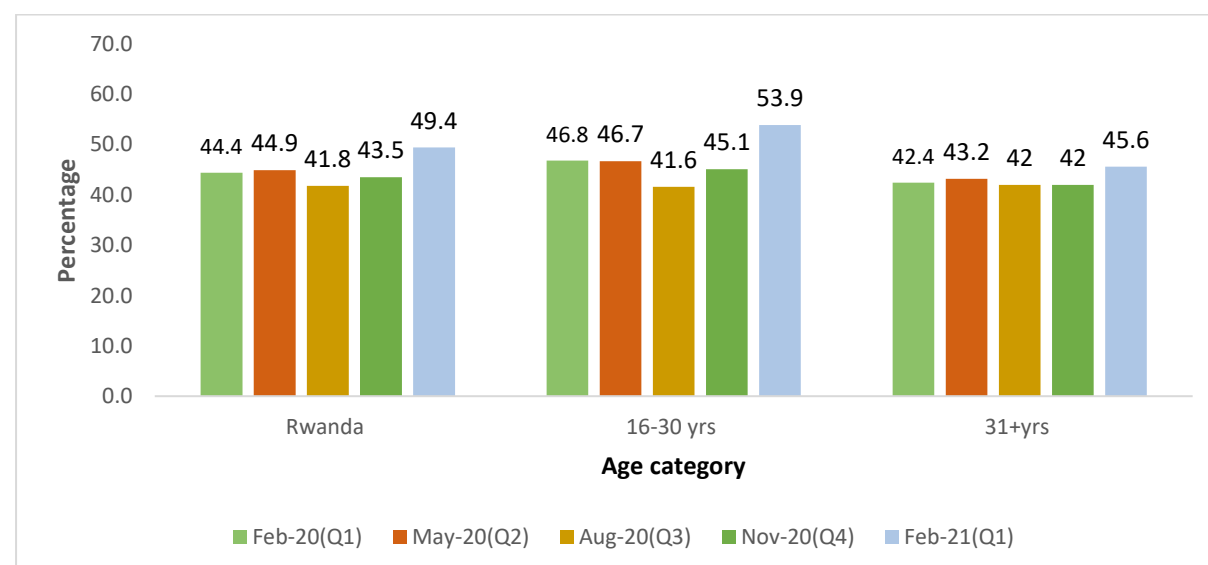
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

6.4 Population outside the labour force by level of educational attainment

The survey results reveal that the share of population 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 proportion of working age population outside the labour force generally increased in almost all levels of education attainment in February 2021(Q1) as compared to February 2020(Q1). The highest increase was observed among holders of lower secondary level of education..

The comparison with the previous quarter (November 2020) reveals that there was an increase of the share of the population outside labour force in all levels of education. The increase is more remarkable among holders of lower secondary level with 10 percentage points and upper secondary level with 9 percentage points. For the remaining levels of education the increase are less than 7 percentage points. .

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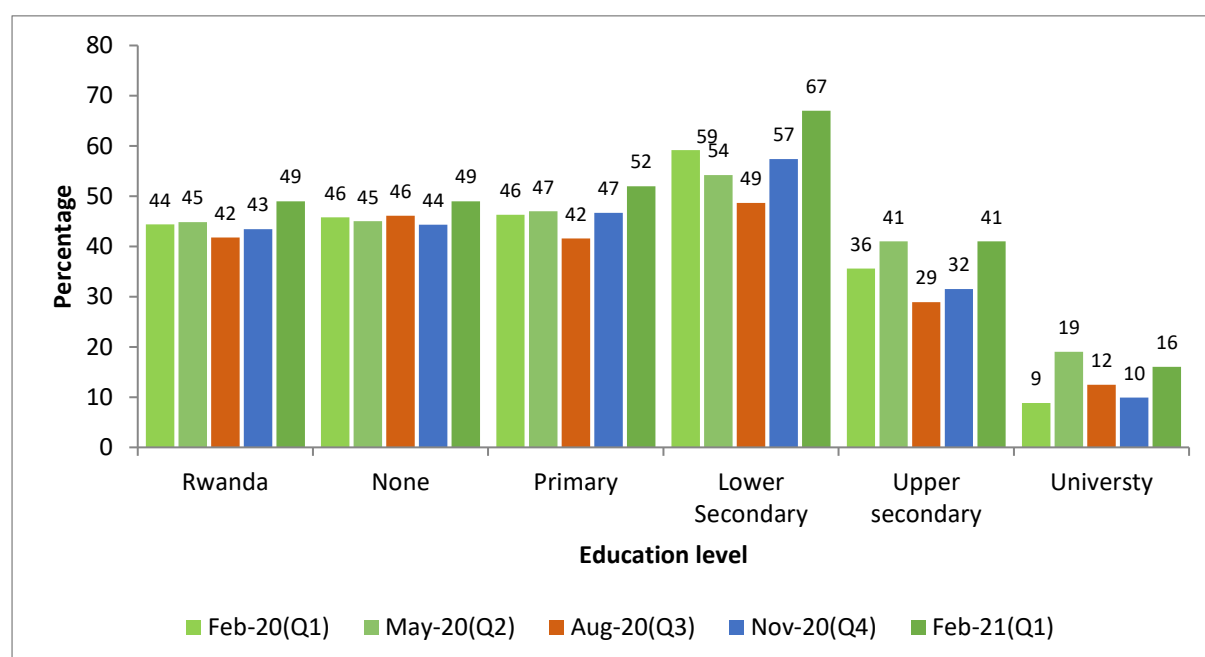
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS)

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 agriculture sector as presented in table 7.1 reveals that in February 2021, around 52.8 percent of working age population were involved in agriculture activity. The correspondence proportion one year back (February 2020) was 56.1 percent and it was almost the same in November 2020 (56.5 percent).

The proportion of agricultural persons in market-oriented agriculture increased by 7.3 percentage points as compared to the previous quarter (November-20(Q4)) while the proportion of agricultural workers exclusively in subsistence agriculture decreased by 3.5 percentage points.

Table 7. 1: Works status in agriculture

Categories of agriculture	Feb-20 (Q1)	Aug-20 (Q3)	Nov-20 (Q4)	Feb-21 (Q1)
Market oriented agriculture as main job (a)	37.9	32.2	34.4	41.7
Subsistence agriculture exclusively (b)	48.8	51.2	51.6	48.1
Participated in Subsistence agriculture but have non-agriculture main job (c)	12.5	16.2	13.7	10.1
Market oriented agriculture as secondary job (d)	0.8	0.4	0.4	0.1
Total (100%)	**100**	**100**	**100**	**100**
Count ('000s)	**4,142**	**3,702**	**4,276**	**4,023**
Proportion of working age population	**56.1**	**49.3**	**56.5**	**52.8**

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

7.2 Characteristics of agricultural workers

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

The results reveal that the bulk of agricultural workers were involved in subsistence agriculture with more predominance among females than males.

In February 2021, the share of subsistence agricultural in all agricultural workers was 53.6 percent and it decreased by 2.7 percent point as compared to the situation in February 2020(56.3 percent) and by 6.4 percent as compared to November 2020(60 percent). The proportion of agricultural workers in market-oriented agriculture was 46.4 percent in February 2021 and it increased by 2.7 percentage points compared to the proportion in February 2020 and it also increased by 6.4 percentage points as compared to November 2020. The proportion of agricultural males engaged in market-oriented agriculture (52.8 Percent in February 2021) was far higher than the corresponding proportion of females involved in the same activity (42 percent in February 2021).

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

		LFS rounds				Change
		Feb-20 (Q1)	Aug-20(Q3)	Nov-20(Q3)	Feb-21(Q1)	Feb-20 (Q1) to Feb-21(Q1)
Both	Total	**100**	**100**	**100**	**100**	
	Market oriented agriculture	43.7	38.6	40	46.4	2.7
	Subsistence agriculture	56.3	61.4	60	53.6	-2.7
Male	Total	100	100	100	100	0
	Market oriented agriculture	50.3	45.1	46.1	52.8	2.5
	Subsistence agriculture	49.7	54.9	54	47.2	-2.5
Female	Total	100	100	100	100	0
	Market oriented agriculture	39.3	34.5	35.9	42	2.7
	Subsistence agriculture	60.7	65.5	64.1	58	-2.7

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

Table 7.3 below presents the trend of the share of market oriented and subsistence agricultural workers among young and adults persons, separately. The level of participation of agricultural adults in subsistence agriculture was higher than the level of participation of agricultural youth in the same activity (55.1 percent and 50.7 percent respectively) in February 2021(Q1). The level of participation in subsistence agriculture decreased between February 2020 and February 2021 in both youth and adults categories; however, the pace of decreasing was slightly higher among adults (2.9 percent) than among youth (2.6 percent).

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

		LFS rounds				Change
		Feb-20 (Q1)	Aug-20(Q3)	Nov-20(Q3)	Feb-21(Q1)	Feb-20 (Q1) to Feb-21(Q1)
Both	Total	**100**		**100**	**100**	**100**	
	Market oriented agriculture	43.7	38.6	40	46.4	2.7
	Subsistence agriculture	56.3	61.4	60	53.6	-2.7
Young(16-30)	Total	100	100	100	100	0
	Market oriented agriculture	46.7	38.3	39.2	49.3	2.6
	Subsistence agriculture	53.3	61.7	60.8	50.7	-2.6
Adults(31+)	Total	100	100	100	100	0
	Market oriented agriculture	42	38.8	40.5	44.9	2.9
	Subsistence agriculture	58	61.2	59.6	55.1	-2.9

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

The distribution of agricultural workers by education attainment, presented in table 7.4, shows that the higher 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

		Feb-20 (Q1)	Aug-20(Q3)	Nov-20(Q4)	Feb-21(Q1)
Both	Total				
	None	62.1	55.5	57.5	58.1
	Primary	30.8	34.9	32.1	33.8
	Lower secondary	4.1	5.2	5.8	4.4
	Upper secondary	2.8	3.9	4	3.3
	University	0.2	0.6	0.6	0.4
Market oriented agriculture	Total	**100**	**100**	100	100
	None	67.4	59.7	66.7	64.7
	Primary	27.4	33.5	26.8	30.4
	Lower secondary	3.2	3.6	3.5	3
	Upper secondary	1.7	2.8	2	1.7
	University	0.4	0.5	1	0.2
Subsistence agriculture	Total	**100**	**100**	100	100
	None	58	52.9	51.4	52.5
	Primary	33.4	35.8	35.6	36.7
	Lower secondary	4.9	6.2	7.4	5.6
	Upper secondary	3.6	4.6	5.4	4.7
	University	0.1	0.6	0.2	0.5

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

7.5 Share of agriculture in the total work force

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

The results presented in figure 7.1 below shows that the share of agricultural workers in the work force was 70.3 percent in February 2021. It increased by 6.1 percentage points as compared to February 2020 and by 4.8 percentage points as compared to November 2020. The proportion of female workers involved in agriculture activities (79.1 percent in February 2021) is far higher than the one for male workers involved in the same activities (60.6 percent in February 2021). Compared to February 2020, there was an increase of 6.6 percentage points among males, and an increase of 5.6 percentage points among females.

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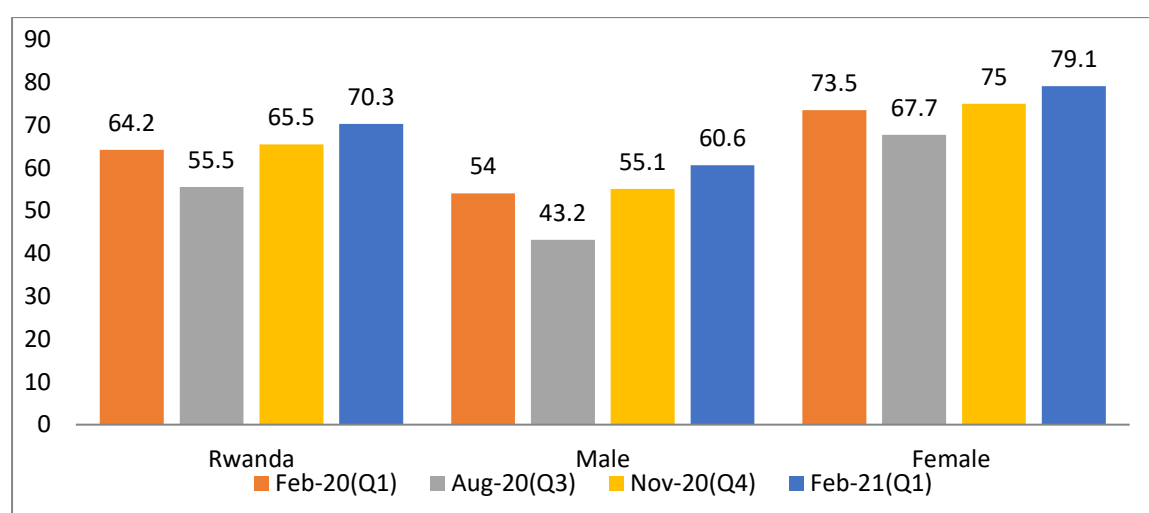
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

The share of agriculture workers in total workforce is inversely correlated with the level of education attainment. Persons with lower level of educational attainment are more likely to join agricultural work as compared to others with higher level of education.
The result reveals a relatively stable share of agriculture workers in February 2021(Q1) among low skilled workers and an increase of agriculture participation among high skilled population (upper secondary and university) as compared to previous quarter (November 2020). The level of participation in agriculture among workers with no level of education completed and workers with primary education attainment increased by 5 and 4.6 percentage points respectively. On the other side, it decreased among workers with upper secondary and university level of educational attainments by 0.6 and 1.7 percentage points respectively in February 2021 as compared to November 2020.

Figure 7. 2: Share of workers in agriculture by level of education attained
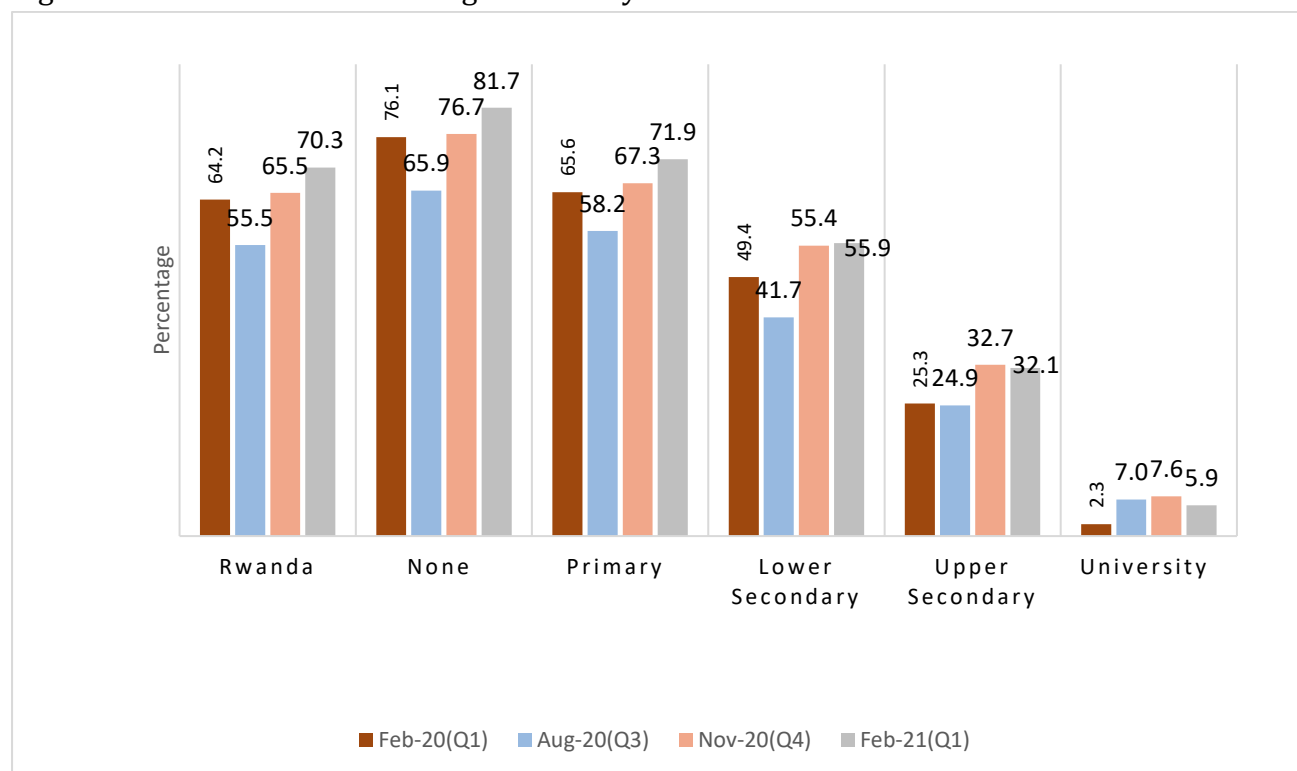
Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS).

Appendix A: Survey Methodology and Data quality

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

The strata are composed of the 30 administrative districts of the country, sub-divided into urban and rural areas. At the second stage of sampling; 16 households were selected in each of the 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 4608 households, composed of three rotation groups. 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 η is the proportionality factor of the pps-sampling scheme.

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

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

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

The designed sampling weights for the quarterly Labour Force Survey are labelled "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:

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

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, dk, 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,

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

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.[3] 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.[4] 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 February 2021(Q1) are subject to sampling and different forms of measurement errors. This section provides information on sampling errors.

- **Sampling errors**

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

The table A.1 below gives the sampling errors of the main labour force estimates obtained from the LFS February 2021(Q1). 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,

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[3] National Institute of Statistics of Rwanda, *Fourth Population and Housing Census, Rwanda, 2012, Thematic Report Population Projections*, January 2014.
[4] Deville, J.C., and Sarndäl, C.E., "Calibration Estimators in Survey Sampling," *Journal of the American Statistical Association*, Vol. 87, 1992, pp. 376-382.

proportions, and their differences can be obtained on the basis of totals calculated for the primary sampling units, here the localities[5]. 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	7,625,258	202,326	2.7%	7,226,838	8,023,678
Employment	3,204,924	100,287	3.1%	3,007,439	3,402,409
Unemployment	655,648	41,245	6.3%	574,429	736,868
Labour force	3,860,572	115,267	3.0%	3,633,589	4,087,555
Outside Labour force	3,764,686	121,510	3.2%	3,525,408	4,003,964

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), February 2021(Q1)

As an illustration of the use of the table, consider the fourth row of the table on the labour force. The total labour force is 3,860,572 estimated with a relative standard error of 3.0 percent. The true value at 95 percent confidence level lies within the interval 3,633,589 and 4,087,555

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 17.0 percent has a standard error of 0.9 percentage points. This may be interpreted to mean that the true unemployment rate lies with 95 percent confidence within the interval, 15.2 percent to 18.8 percent.

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

Indicator	Estimate	Standard error	Confidence interval	
			Lower	Upper
Labour Force Participation Rate	50.6%	0.8%	49.0%	52.2%
Employment-Population Ratio	42.0%	0.8%	40.5%	43.6%
Unemployment rate	17.0%	0.9%	15.2%	18.8%

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), February 2021(Q1)

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[5] 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

Table B. 1: Summary labour force indicators, Feb-21 (Q1)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Population 16 years old and over	7,625,258	3,587,851	4,037,407	1,424,123	6,201,134	3,384,266	4,240,992
Labour force	3,860,572	2,074,703	1,785,869	840,573	3,019,999	1,751,732	2,108,841
- Employed	3,204,924	1,748,038	1,456,886	656,973	2,547,951	1,447,463	1,757,461
- Unemployed	655,648	326,665	328,983	183,600	472,048	304,269	351,380
Outside labour force	3,764,686	1,513,148	2,251,538	583,550	3,181,135	1,632,534	2,132,151
Labour underutilization	3,126,038	1,420,274	1,705,764	533,380	2,592,658	1,831,309	1,294,730
- Unemployed	655,648	326,665	328,983	183,600	472,048	304,269	351,380
- Time-related underemployed	1,031,888	540,902	490,986	103,434	928,454	633,926	397,962
- Potential labour force	1,438,502	552,707	885,795	246,346	1,192,156	893,114	545,388
Labour force participation rate (%)	50.6	57.8	44.2	59.0	48.7	51.8	49.7
Employment-to-population ratio (%)	42.0	48.7	36.1	46.1	41.1	42.8	41.4
Time related underemployment rate (%)	32.2	30.9	33.7	15.7	36.4	43.8	22.6
LU1 - Unemployment rate (%)	17.0	15.7	18.4	21.8	15.6	17.4	16.7
LU2 - Combined rate of unemployment and time-related underemployment (%)	43.7	41.8	45.9	34.1	46.4	53.6	35.5
LU3 - Combined rate of unemployment and potential labour force (%)	39.5	33.5	45.5	39.6	39.5	45.3	33.8
LU4 - Composite measure of labour underutilization (%)	59.0	54.1	63.8	49.1	61.6	69.2	48.8
Youth unemployment rate (16-30 yrs)(%)	21.7	19.2	24.6	27.2	21.7	23.3	20.7
Median monthly earnings at main job	25,000	26,000	20,800	52,000	20,800	20,800	26,000

Table B. 2: Population by sex, age group and urban/rural area, Feb-21 (Q1)

	Total	Sex	
		Male	Female
Population	**12,677,574**	**6,120,663**	**6,556,911**
0-4 yrs	1,582,012	797,125	784,887
5-9 yrs	1,573,000	797,536	775,465
10-14 yrs	1,565,766	791,848	773,919
15-19 yrs	1,493,928	706,195	787,733
20-24 yrs	1,173,849	592,089	581,760
25-29 yrs	944,478	455,199	489,279
30-34 yrs	846,612	419,660	426,951
35- 39 yrs	821,298	378,767	442,531
40-44 yrs	610,225	280,987	329,237
45-49 yrs	508,350	225,154	283,196
50-54 yrs	378,822	174,364	204,458
55-59 yrs	361,094	163,934	197,160
60-64 yrs	290,840	128,529	162,311
65-69 yrs	206,337	84,474	121,863
70-74 yrs	126,281	57,895	68,386
75+	194,683	66,907	127,776

Table B. 3: Households by household size, sex of head of household and urban/rural area, Feb-21 (Q1)

Household size	Total number households	Head of household		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
	2,980,228	2,170,490	809,738	545,566	2,434,662	1,501,381	1,478,846
1	291,757	155,514	136,243	81,971	209,786	93,924	197,832
2	337,932	175,020	162,912	70,787	267,144	137,618	200,314
3	532,188	358,448	173,740	84,752	447,436	267,530	264,658
4	571,127	412,330	158,797	91,965	479,162	289,067	282,060
5	464,380	372,315	92,065	76,747	387,634	254,357	210,023
6	353,743	312,758	40,985	61,522	292,220	198,800	154,943
7	219,722	189,944	29,778	42,216	177,506	137,917	81,805
8	116,933	107,647	9,286	21,891	95,042	69,257	47,676
9	56,525	52,903	3,622	7,196	49,328	32,919	23,606
10+	35,921	33,610	2,311	6,519	29,402	19,993	15,929

Table B. 4: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, Feb-21 (Q1)

	Total	Labour force status				Labour force participation rate (%)	Employment -population ratio (%)	Unemploymen t rate (%)
		Labour force	Employed	Unemployed	Outside labour force			
Total Population 16 yrs and over	**7,625,258**	**3,860,572**	**3,204,924**	**655,648**	**3,764,686**	**50.6**	**42.0**	**17.0**
16-24 yrs	2,336,240	833,468	649,812	183,656	1,502,772	35.7	27.8	22.0
25-34 yrs	1,791,089	1,217,023	970,050	246,973	574,066	67.9	54.2	20.3
35-54 yrs	2,318,695	1,482,067	1,293,574	188,493	836,628	63.9	55.8	12.7
55-64 yrs	651,933	266,780	233,602	33,178	385,152	40.9	35.8	12.4
65+ yrs	527,301	61,234	57,886	3,348	466,067	11.6	11.0	5.5
		-						
Male Pop. 16+ yrs	**3,587,851**	**2,074,703**	**1,748,038**	**326,665**	**1,513,148**	**57.8**	**48.7**	**15.7**
16-24 yrs	1,151,980	439,907	343,642	96,265	712,074	38.2	29.8	21.9
25-34 yrs	874,859	677,504	563,322	114,182	197,356	77.4	64.4	16.9
35-54 yrs	1,059,272	778,335	683,649	94,686	280,937	73.5	64.5	12.2
55-64 yrs	292,462	143,177	123,557	19,620	149,286	49.0	42.2	13.7
65+ yrs	209,277	35,782	33,868	1,914	173,495	17.1	16.2	5.3
Female Pop. 16+ yrs	**4,037,407**	**1,785,869**	**1,456,886**	**328,983**	**2,251,538**	**44.2**	**36.1**	**18.4**
16-24 yrs	1,184,259	393,561	306,170	87,391	790,699	33.2	25.9	22.2
25-34 yrs	916,230	539,520	406,728	132,792	376,710	58.9	44.4	24.6

	Total	Labour force status				Labour force participation rate (%)	Employment-population ratio (%)	Unemployment rate (%)
		Labour force	Employed	Unemployed	Outside labour force			
35-54 yrs	1,259,422	703,732	609,925	93,807	555,690	55.9	48.4	13.3
55-64 yrs	359,471	123,604	110,045	13,559	235,867	34.4	30.6	11.0
65+ yrs	318,024	25,452	24,018	1,434	292,572	8.0	7.6	5.6
Urban Pop. 16+ yrs	**1,424,123**	**840,573**	**656,973**	**183,600**	**583,550**	**59.0**	**46.1**	**21.8**
16-24 yrs	429,803	144,722	106,179	38,543	285,081	33.7	24.7	26.6
25-34 yrs	421,102	313,547	231,040	82,507	107,555	74.5	54.9	26.3
35-54 yrs	445,950	339,212	281,769	57,443	106,737	76.1	63.2	16.9
55-64 yrs	71,713	35,704	30,597	5,107	36,010	49.8	42.7	14.3
65+ yrs	55,555	7,387	7,387	-	48,168	13.3	13.3	0.0
						0.0	0.0	0.0
Rural Pop. 16+ yrs	**6,201,135**	**3,019,999**	**2,547,951**	**472,048**	**3,181,135**	**48.7**	**41.1**	**15.6**
16-24 yrs	1,906,437	688,745	543,632	145,113	1,217,692	36.1	28.5	21.1
25-34 yrs	1,369,987	903,476	739,009	164,467	466,511	65.9	53.9	18.2
35-54 yrs	1,872,745	1,142,855	1,011,805	131,050	729,891	61.0	54.0	11.5
55-64 yrs	580,220	231,078	203,006	28,072	349,143	39.8	35.0	12.1
65+ yrs	471,746	53,847	50,499	3,348	417,899	11.4	10.7	6.2

Table B. 5: Population 16 years old and over by labour force status and level of educational attainment, Feb-21 (Q1)

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	**7,625,258**	**3,860,572**	**3,204,924**	**655,648**	**3,764,686**	**50.6**	**42.0**	**17.0**
None	3,510,713	1,798,759	1,554,248	244,511	1,711,955	51.2	44.3	13.6
Primary	2,478,108	1,195,158	986,129	209,029	1,282,949	48.2	39.8	17.5
Lower secondary	669,247	221,146	176,264	44,882	448,101	33.0	26.3	20.3
Upper secondary	663,647	390,840	282,621	108,219	272,807	58.9	42.6	27.7
University	303,543	254,669	205,662	49,007	48,875	83.9	67.8	19.2

Table B. 6: Population 16 years old and over by labour force status and marital status, Feb-21 (Q1)

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	**7,625,258**	**3,860,572**	**3,204,924**	**655,648**	**3,764,686**	**50.6**	**42.0**	**17.0**
Married	2,793,059	1,547,195	1,330,112	217,083	1,245,863	55.4	47.6	14.0
Living together	1,160,852	777,004	658,214	118,790	383,848	66.9	56.7	15.3
Divorced/separeted	242,899	152,078	132,037	20,041	90,821	62.6	54.4	13.2
Single	2,889,079	1,215,690	930,428	285,262	1,673,390	42.1	32.2	23.5
Widow/widower	539,369	168,606	154,133	14,473	370,764	31.3	28.6	8.6

Table B. 7: Employed population by sex, age group, and urban/rural area, Feb-21 (Q1)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population 16+	**3,204,924**	**1,748,038**	**1,456,886**	**656,973**	**2,547,951**	**1,447,463**	**1,757,461**
16-19 yrs	197,682	93,023	104,659	25,707	171,975	86,911	110,770
20-24 yrs	452,130	250,619	201,511	80,473	371,658	161,505	290,625
25-29 yrs	488,238	283,728	204,510	115,693	372,545	166,148	322,090
30-34 yrs	481,812	279,594	202,218	115,347	366,465	194,666	287,145
35- 39 yrs	460,588	249,983	210,604	97,385	363,203	229,866	230,722
40-44 yrs	377,624	189,065	188,559	84,471	293,153	201,097	176,527
45-49 yrs	276,860	144,379	132,481	63,487	213,373	158,363	118,497
50-54 yrs	178,502	100,222	78,280	36,427	142,075	92,961	85,541
55-59 yrs	150,257	81,408	68,849	20,666	129,591	88,003	62,254
60-64 yrs	83,345	42,149	41,196	9,930	73,415	35,802	47,543
65-69 yrs	46,074	25,378	20,696	5,822	40,252	28,247	17,827
70-74 yrs	8,451	5,128	3,322	1,443	7,007	3,190	5,260
75+	3,362	3,362	-	121	3,240	703	2,659

Table B. 8: Employed population by sex, occupation group, and urban/rural area, Feb-21 (Q1)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Occupation group (ISCO High level)	**3,204,924**	**1,748,038**	**1,456,886**	**656,973**	**2,547,951**	**1,447,463**	**1,757,461**
Managers	35,351	23,677	11,674	26,339	9,012	3,831	31,520
Professionals	172,436	102,129	70,307	86,684	85,753	27,107	145,330
Technicians and associate professionals	29,644	20,656	8,988	20,178	9,466	3,626	26,018
Clerical support workers	27,626	10,118	17,508	17,969	9,657	2513	25,113
Service and sales workers	465,929	230,266	235,663	184,867	281,062	135,614	330,315
Skilled agricultural, forestry and fishery workers	121,407	65,725	55,682	8,299	113,108	18,811	102,596
Craft and related trades workers	217,960	169,260	48,700	60,794	157,166	74,474	143,486
Plant and machine operators and assemblers	77,248	75,910	1,337	32,939	44,309	10,340	66,908
Elementary occupations	2,057,323	1,050,296	1,007,027	218,905	1,838,418	1,171,147	886,176

Table B. 9: Employed population by sex, educational attainment, and urban/rural area, Feb-21 (Q1)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	3,204,924	1,748,038	1,456,886	656,973	2,547,951	1,447,463	1,757,461
None	1,554,248	799,898	754,350	170,292	1,383,956	869,655	684,593
Primary	986,129	568,387	417,742	171,738	814,392	468,834	517,295
Lower secondary	176,264	93,059	83,205	53,687	122,577	50,133	126,132
Upper secondary	282,621	166,671	115,951	117,929	164,693	45,370	237,252
University	205,662	120,024	85,638	143,327	62,335	13,473	192,189

Table B. 10: Employed population by sex, branch of economic activity, and urban/rural area, Feb-21 (Q1)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	**3,204,924**	**1,748,038**	**1,456,886**	**656,973**	**2,547,951**	**1,447,463**	**1,757,461**
Agriculture, forestry and fishing	1,676,302	782,918	893,385	89,625	1,586,678	1,042,233	634,069
Mining and quarrying	30,378	27,044	3,335	2,124	28,254	11,168	19,210
Manufacturing	143,238	81,919	61,319	41,409	101,829	40,960	102,278
Electricity, gas, steam and air conditioning supply	6,766	6,282	484	3,485	3,282	1,822	4,945
Water supply, sewerage and waste management	2,228	1,199	1,029	1,377	851	677	1,551
Construction	280,565	236,300	44,266	61,659	218,906	113,199	167,366
Wholesale, retail trade, repair of motor vehicles, motorcycles	336,170	147,397	188,774	143,220	192,950	100,643	235,527
Transportation and storage	131,658	128,190	3,467	37,722	93,936	31,511	100,147
Accommodation and food service activities	53,060	29,708	23,352	20,983	32,077	16,488	36,572
Information and communication	11,940	7,166	4,774	8,334	3,605	2,316	9,624
Financial and insurance activities	33,661	19,243	14,418	17,952	15,708	4,711	28,950
Real estate activities	1,927	932	996	685	1,243	0	1,927
Professional, scientific and technical activities	14,682	12,665	2,018	9,451	5,231	598	14,084
Administrative and support service activities	56,409	41,040	15,369	19,341	37,068	18,126	38,283
Public administration and defence	61,110	47,669	13,440	34,144	26,966	2,059	59,051
Education	97,050	54,403	42,647	29,667	67,383	30,768	66,282
Human health and social work activities	42,620	16,207	26,413	28,615	14,005	4,886	37,734
Arts, entertainment and recreation	3,678	2,888	789	1,441	2,236	2,103	1,575
Other service activities	89,021	48,378	40,642	25,561	63,459	20,889	68,132
Activities of households as employers	129,811	55,171	74,640	77,527	52,283	2,305	127,506
Activities of extraterritorial organizations and bodies	2,648	1,320	1,329	2,648	0	0	2,648

Table B. 11: Educational attainment and field of Education by Labour market status, Feb-21 (Q1)

Educational attainment	Employed	Unemployed	Outside labour force	Total
Total	**42.0**	**8.6**	**49**	**100**
None	44.3	7.0	48.8	100
Primary	39.8	8.4	51.8	100
Lower secondary	26.3	6.7	67.0	100
Upper secondary	42.6	16.3	41.1	100
University	67.8	16.1	16.1	100
Field of Education	Employed	Unemployed	Outside labour force	Total
Total	**42.7**	**9.3**	**48.0**	**100**
General education	43.5	8.5	48.0	100
Education	58	5.3	37	100
Humanity and art	35.4	12.4	52.2	100
Social Science business	51.3	15.3	33.3	100
Science	29.9	11.2	58.9	100
Engineering, manufacturing	35.0	13.9	51.1	100
Agriculture	32.8	17.8	49.4	100
Health and welfare	57.0	5.5	37.6	100
Services	26.8	19.8	53.4	100

Table B. 12: Employed population by sex, status in employment, and urban/rural area, Feb-21 (Q1)

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
		Sex		Residential area			
Employed population	3,204,924	1,748,038	1,456,886	656,973	2,547,951	1,447,463	1,757,461
Employee, Paid apprentice/intern	2,399,605	1,319,255	1,080,350	437,970	1,961,635	1,178,811	1,220,794
Employer	31,398	18,784	12,613	16,344	15,054	2,571	28,826
Own-account worker	719,320	401,742	317,578	188,634	530,686	251,126	468,195
Member of cooperative	4,586	4,036	550	2,026	2,560	1,285	3,301
Contributing family worker	50,015	4,221	45,794	11,999	38,016	13,670	36,345

Table B. 13: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, Feb-21 (Q1)

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employed population	3,204,924	1,748,038	1,456,886	656,973	358,336	298,637	2,547,951	1,389,702	1,158,249
less than 24 hours	963,516	458,973	504,543	87,929	40,357	47,573	875,587	418,617	456,970
25-34 hours	425,635	217,996	207,639	38,282	20,237	18,045	387,353	197,760	189,594
35-40 hours	781,280	410,366	370,914	108,449	56,947	51,502	672,831	353,419	319,412
41-48 hours	465,943	281,070	184,873	179,667	103,342	76,325	286,276	177,728	108,548
49-61 hours	329,854	209,360	120,493	136,580	69,693	66,887	193,274	139,667	53,606
62-79 hours	194,399	132,946	61,453	85,927	51,619	34,309	108,472	81,328	27,144
80 hours+	44,297	37,326	6,972	20,138	16,141	3,997	24,159	21,184	2,975

Table B. 14: Youth Population by sex, and residential area, Feb-21 (Q1)

	Age Group	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
			Male	Female	Urban	Rural		
Youth Population (16-30yrs)		3,465,204	1,702,943	1,762,261	685,353	2,779,851	1,088,580	2,376,624
Employed	16-24 yrs	649,812	343,642	306,170	106,179	543,632	248,417	401,395
	16-30 yrs	1,250,534	693,236	557,298	243,033	1,007,501	455,475	795,059
Unemployed	16-24 yrs	183,656	96,265	87,391	38,543	145,113	74,384	109,271
	16-30 yrs	346,019	164,575	181,444	90,696	255,324	138,491	207,528
Outside Labour Force	16-24 yrs	1,502,772	712,074	790,699	285,081	1,217,692	304,681	1,198,092
	16-30 yrs	1,868,651	845,132	1,023,519	351,625	1,517,026	494,614	1,374,037

Table B. 15: Youth Unemployed by sex, duration of seeking employment, and urban/rural area, Feb-21 (Q1)

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Youth Unemployed (16-30 yrs)	332,557	157,632	174,925	41,233	47,491	116,399	127,434
0 – less than 3 months	137,160	72,442	64,717	13,840	10,985	58,602	53,733
3 – less than 6 months	67,004	34,869	32,135	8,078	8,237	26,791	23,899
6 – less than 12 months	49,757	17,306	32,451	7,824	12,602	9,482	19,849
1 – less than 2 years	41,273	19,982	21,290	7,813	6,443	12,169	14,847
2 years or more	37,364	13,033	24,330	3,679	9,224	9,354	15,106

Table B. 16: Youth not in employment and not currently in education or training by sex, age group, and urban/rural area, Feb-21 (Q1)

Young not in employment nor in education (16-30 yrs)	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
	1,191,274	484,443	706,831	82,344	126,283	402,099	580,549
16-19 yrs	261,281	128,198	133,084	8,868	18,095	119,330	114,989
20-24 yrs	443,537	178,603	264,934	32,813	47,912	145,789	217,022
25-30 yrs	486,456	177,643	308,814	40,663	60,276	136,980	248,538
None	396,366	190,941	205,425	15,812	24,571	175,129	180,854
Primary	449,570	177,112	272,458	12,768	34,221	164,344	238,237
Lower secondary	112,685	20,977	91,707	10,060	17,969	10,917	73,738
Upper secondary	195,219	76,538	118,681	29,193	38,195	47,345	80,486
University	37,435	18,875	18,560	14,512	11,326	4,364	7,234

Table B. 17: Unemployed population by sex, broad age group and urban/rural area, Feb-21 (Q1)

	Total	Sex		Residential area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Unemployed population 16+	655,648	326,665	328,983	183,600	472,048	304,269	351,380
16-24 yrs	183,656	96,265	87,391	38,543	145,113	74,384	109,271
25-34 yrs	246,973	114,182	132,792	82,507	164,467	101,488	145,485
35-54 yrs	188,493	94,686	93,807	57,443	131,050	101,468	87,025
55-64 yrs	33,178	19,620	13,559	5,107	28,072	23,580	9,598

| 65+ yrs | 3,348 | 1,914 | 1,434 | - | 3,348 | 3,348 | - |

Table B. 18: Unemployed population by sex, level of educational, and urban/rural area, Feb-21 (Q1)

	Total	Sex		Area of Residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Unemployed population 16+	655,648	326,665	328,983	183,600	472,048	304,269	351,380
None	244,511	118,397	126,114	34,144	210,367	135,568	108,943
Primary	209,029	108,072	100,957	47,527	161,502	113,864	95,165
Lower secondary	44,882	16,431	28,451	21,982	22,900	21,163	23,719
Upper secondary	108,219	51,573	56,647	44,343	63,876	28,052	80,167
University	49,007	32,193	16,814	35,604	13,402	5,621	43,385

Table B. 19: Unemployed population (who looked for a job) by sex, method of seeking employment, and urban/rural area, Feb-21 (Q1)

		Sex		Area of Residence		Participated in subsistence agriculture	Not participated in subsistence agriculture	Number of responses per search method
	Total	Male	Female	Urban	Rural			
Unemployed population who looked for a job	615,986	307,867	308,119	172,850	443,136	283,911	332,075	
Arranging for financial resources, applying for permits, licenses	66,014	30,088	35,926	29,013	37,001	18,148	47,867	70,480
Looking for land, premises, machinery, supplies, farming inputs	4,187	-	4,187	1,868	2,319	3,253	934	13,712
Seeking the assistance of friends, relatives or other types of intermediaries	189,615	102,412	87,204	55,306	134,309	83,000	106,615	205,841
Registering with or contacting public or private employment services	15,227	9,336	5,891	5,270	9,957	6,060	9,167	28,750
Applying to employers directly, checking at worksites, farms, factory gates, markets	296,586	141,759	154,826	54,158	242,428	165,943	130,643	403,075
Placing or answering newspaper or online job advertisements	31,164	17,728	13,436	20,404	10,761	4,896	26,268	57,474
Placing and updating resumes on professional or social networking sites online	13,193	6,544	6,649	6,831	6,362	2,611	10,582	52,343

Table B. 20: Unemployed population (who looked for a job) by sex, duration of seeking employment, and urban/rural area, Feb-21 (Q1)

	Total	Sex Male	Female	Area of Residence Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Unemployed population 16+	621,328	310,634	310,694	177,252	444,075	285,898	335,430
Less than 3 months	291,590	158,204	133,386	60,964	230,626	151,602	139,988
Less than 6 months	118,612	65,742	52,869	32,886	85,726	53,133	65,478
Less than 12 months	84,633	35,449	49,184	37,772	46,861	36,375	48,258
1 year to less than 2 years	67,382	31,968	35,415	20,684	46,698	27,537	39,845
2 years and above	59,111	19,271	39,840	24,946	34,165	17,251	41,860

Table B. 21: Time related under employment by age group sex and area of residence, Feb-21 (Q1)

age group	Total	Sex Male	Female	Residence area Urban	Rural
Total	**1,031,888**	**540,902**	**490,986**	**103,434**	**928,454**
16-24 yrs	215,408	110,733	104,676	18,183	197,226
25-34 yrs	320,448	175,892	144,556	41,491	278,956
35-54 yrs	421,021	216,066	204,954	40,849	380,171
55-64 yrs	70,150	34,576	35,575	2,708	67,443
65+ yrs	4,861	3,635	1,225	203	4,658

Appendix C : Labour Force Survey Personnel

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