



# Labour Force Survey Trends







# Labour Force Survey Trends

November 2021 (Q4)

Labour Force Survey Trends, November 2021 (Q4) report is produced by the National Institute of Statistics of Rwanda (NISR).
Additional information about Labour Force Survey Trends report may be obtained from NISR:
P.O. Box 6139, Kigali, Rwanda; Telephone: (+250) 788383103; Hotline: 4321
E-mail: info@statistics.gov.rw; Website: http://www.statistics.gov.rw
Recommended citation:
National Institute of Statistics of Rwanda (NISR), Labour Force Survey Trends, November 2021 report, March 2022

#### **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.

After the pilot survey that was 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. Due to movement restrictions measures to avoid the spread of Covod-19 pandemic, telephone interviewing method was introduced for the data collection since May 2020 and was used in all rounds of LFS except for August 2020. The current findings are for quarter four of LFS\_2021 that was conducted in November 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 pounds to contribute to enhancing Rwandans' Economic development.

MURANGWA Yusuf

**Director General of NISR** 

## **Executive summary**

The Quarterly Labour Force Survey (QLFS) is a household-based sample survey conducted by the National Institute of Statistics of Rwanda (NISR). It collects data on the labour market activities of individuals aged 14 years and older who live in private households in Rwanda. For the reporting purpose, only persons aged 16 years and above are covered. In this report, the survey results are mainly compared for November 2021, August 2021, May 2021, February 2021 and November 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 2018 to 2021.

In November 2021 (Q4), the working age population (16 years and above) was around 7.81 million of whom 3,633,132 were employed, 1,135,637 were unemployed and 3,044,224 were out of labour force. The sum of employed and unemployed population results to population in labour force (4,768,769 persons). The proportion of working age population who were in the labour force increased to 61 percent in November 2021(Q4) from 50.9 percent in August 2021(Q3). The proportion of the working age population outside the labour force declined to 39 percent in November 2021(Q4) as compared to August 2021(Q3) (49.1 percent) and November 2020(Q4) (43.5 percent).

The share of subsistence agriculture in population outside labour force was 33.5 percent in November 2021(Q4) and it declined by 5.8 percentage points as compared to August 2021(Q3) (39.3 percent). The sum of employed population (3,633,132 persons) and subsistence agricultural without employment (1,566,460) gives the estimate number of workforce<sup>1</sup> in November 2021(Q4) equivalent to 5,199,591 persons. Therefore, in November 2021(Q4), the proportion of working age population engaged in employment or subsistence agriculture was 66.6 percent as compared to 64.6 percent in August 2021(Q3), and to 74.2 percent registered in November 2020(Q4).

The share of agricultural workers in total workforce (employed +subsistence agricultural) declined by around 2.1 percentage points from 65.1 percent in August 2021 to 63.0 percent in November 2021.

The employment-to-population ratio relatively increased in November 2021 (Q4) (46.5 percent) as compared to August 2021 (Q3) (41.0 percent), and became slightly higher than the one registered one year back in November 2020(45.1 percent). Because of the increase in both employment and unemployment compared to August 2021, the labour force participation rate increased at higher pace than the employment to population ratio. It increased from 50.9 percent in August 2020 to 61.0 percent in November 2021(Q4).

Generally, the number of employed population has declined since August 2020 but has increased in November 2021(Q4). Round to round comparison shows that the total employment increased by around 13.3 percent from 3.2 million in August 2021 to 3.6

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

million of employed population in November 2021. A comparison with the same quarter one year back shows that the total employment increased by 6.6 percent.

In November 2021, the agriculture and Services sectors gained about 285 thousand and 205 thousands workers respectively as compared to August 2021; while the industry sector lost about 37 thousands of jobs as compared to the previous quarter.

In addition to the agriculture sector, the important gains of additional jobs was observed in education (+52,848 workers) and activity of household as employer (+38,680 workers) sectors; while the important loss of employment between August 2021 and November 2021 in absolute terms occurred in Construction (-22,393 workers), Manufacturing (-14,365 workers), whole sale and retail trade (-7,305 workers) sectors.

The November 2021(Q4) results revealed that the share of paid employees in the total employment increased by 4 percentage points from 70.7 percent in August 2021 to 74.7 percent in November 2021(Q4). On the other hand, self-employed persons remained almost stable from 24.1 percent to 23.5 percent in the same period. The comparison of November 2020 and November 2021 revealed that the employment status remained unchanged.

In November 2021 (Q4), the unemployment rate increased to 23.8 percent as compared to 19.4 percent recorded in August 2021 (Q3) which is equivalent to an increase of 4.4 percentage points. The unemployment rate remained relatively higher among females (27.3 percent) as compared to males (20.7 percent). It is also relatively higher among youth population aged 16 years to 30 years (29.8 percent) as compared to the one among adults aged 31 years and above (19.3 percent).

Labour underutilization rate which accounts for unemployment, time-related underemployment and potential labour force slightly declined to 56.8 percent in November 2021(Q4) from 60.0 percent in August 2021(Q3). It slightly declined as compared to November 2020 (59.8 percent). The labour underutilization rate was remarkably higher among females (63.6 percent) as compared to males (49.8 percent).

# Rwanda Labour force survey, November 2021(Q4) Summary labour force indicators

Working age population 16 years old and over 7,812,993 persons										
employe	Outside the labour force (Not employed nor unemployed)  3,044,224 persons  Labour force (The sum of employed and unemploy 4,768,769 persons  Labour force participation rate					loyed)				
Out of	1					61.0%	_			
Subsistenc	Exclu		Other	Em	Employed Une					
e	ly		outside	(All not employed but						
agriculture	stud	ents	LF (Elderly,	seeking and available to work for pay or						
			disable,	(All who worke	(All who worked for pay or profit)					
			discourag	•	<b>32 person</b> :	profit) <b>1,135,637</b> persons				
			ed job	Employment to	-	Unemployment rate:				
			seekers)	4	6.5%		23.8%			
				Agriculture excluding			Unemployed	Other		
				subsistence			but engaged	unempl		
				foodstuff			in	oyed		
				production	Industry	Services	subsistence			
							agriculture			
33.5%	28.0	0 %	38.5 %	46.9%	17.0%	36.1%	48.2%	51.8%		
Potentia	1	Oth	ner out of	Time related	Other er	nployed				
labour for	ce	lab	our force	underemploye						
4 000 11		0.04	2006	d	0.50					
1,032,11	1	2,262	2,896	1,124,897		3,235				

Labour underutilization (3,332,432 persons):

Unemployed (1,135,637) + Time-related underemployed (1,124,897) + Potential labour force (1,032,111)

Composite measure of labour underutilization (60.0%)

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), November 2021(Q4)

# **Table of Contents**

Foreword	i
Executive summary	iii
Table of Contents	vii
List of tables	ix
List of Figures	
Annex statistical Tables	xi
Chapter 1: Introduction	xiii
Chapter 2: Trends of main indicators	15
2.1 Working age population	15
2.2 Labour force participation rate, employment to population ratio and unemploy	
2.2 Population outside labour force	
•	
2.5 Labour underutilization rates	
1 1	
3.4 Labour force participation and area of residence	
Chapter 4: Employment	
4.1 Employment to population ratio	
4.2 Status in employment	
4.3 Main occupation	
4.4 Main Economic activity	28
4.5 Actual hours worked (main and secondary jobs) per person in the working age	
• •	
·	
-	
Appendix B: Statistical Tables	
Appendix C : Labour Force Survey Personnel	
мррениіх С . Laduul fulce sulvey felsuillel	

# **List of tables**

Table 4. 1: Distribution of employed population by status in employment	26
Table 4. 2 Number of employed persons by occupation	
Table 4. 3: Percentage distribution of employed population by major occupation gro	up
	28
Table 4. 4: Percentage distribution of employed population by branch of economic	
activity	29
Table 4. 5: Number of employed persons by economic activity	30
Table 4. 6: Actual working hour's losses (main and secondary jobs)	32
area of residence	36
Table 6. 1: Main components of Persons outside the labour force	42
Table 7. 1: Works status in agriculture	45
Table 7. 2: Trend of proportion of agricultural workers by sex	46
Table 7. 3: Trend of proportion of agricultural workers by age group	
Table 7. 4: Trend of proportion of agricultural workers by level of education attainm	
1 1	48

# **List of Figures**

Figure 2. 1: Trend of the main component of the working age population (, 000s)	16
Figure 2. 2: Trend of the main labour force indicators	17
Figure 2. 3: Trend of the ratio of population outside labour force to working age	
population	18
Figure 2. 4: Trend of subsistence foodstuff production participation rate	19
Figure 2. 5: Trend of the labour underutilization rate	20
Figure 3. 1: Labour force participation rate by sex	21
Figure 3. 2: Labour force participation rate by level of education	22
Figure 3. 3: Labour force participation rate by age group	22
Figure 3. 4: Labour force participation rate by area of residence	23
Figure 4. 1: Employment to population ratio (EPR) by area of residence	25
Figure 4. 2: Employment to population ratio by sex	
Figure 4. 3: Distribution of employed population by status in employment	27
Figure 4. 4: Actual hours worked (main and secondary jobs) per person in the wor	king
population by sex	31
Figure 5. 1: Unemployment rate by sex	33
Figure 5. 2: Unemployment rate by area of residence	34
Figure 5. 3: Unemployment rate among youth and Adult	35
Figure 5. 4: Unemployment rate by selected age groups	35
Figure 5. 5: Labour under-utilization rate by sex	37
Figure 5. 6: Labour under-utilization rate by area of residence	38
Figure 5. 7: Trend in labour underutilization rate by Youth and Adult	38
5. 8: Trend in labour underutilization rate by selected age group	39
Figure 6. 1: Population outside Labour force by Area of residence	43
Figure 6. 2: Population outside the Labour force by Age category	
Figure 6. 3: Population outside the Labour force by Education level attained	
Figure 7. 1: Share of workers in agriculture by sex	49
Figure 7. 2: Share of workers in agriculture by level of education attained	50

# **Annex statistical Tables**

Table A. 1: Sampling errors of estimates of main Labour force aggregates53
Table A. 2: Sampling errors of estimates of main labour force indicators (percentage).54
Table B. 1: Summary labour force indicators, November-21 (Q4)56
Table B. 2: Population by sex and age group, November-21 (Q4)57
Table B. 3: Households by household size, sex of head of household and urban/rural
area, November-21 (Q4)58
Table B. 4: Population 16 years old and over by labour force status, sex, age group, and
urban/rural area, November-21 (Q4)59
Table B. 5: Population 16 years old and over by labour force status and level of
educational attainment, November-21 (Q4)61
Table B. 6: Population 16 years old and over by labour force status and marital status,
November-21 (Q4)61
Table B. 7: Employed population by sex, age group, and urban/rural area, November-21
(Q4)62
Table B. 8: Employed population by sex, occupation group, and urban/rural area,
November-21 (Q4)63
Table B. 9: Employed population by sex, educational attainment, and urban/rural area,
November-21 (Q4)63
Table B. 10: Employed population by sex, branch of economic activity, and urban/rural
area, November-21 (Q4)
Table B. 11: Educational attainment and field of Education by Labour market status,
November-21 (Q4)
Table B. 12: Employed population by sex, status in employment, and urban/rural area, November-21 (Q4)66
Table B. 13: Employed population by sex, hours usually worked per week at all jobs, and
urban/rural area, November-21 (Q4)66
Table B. 14: Youth Population by sex, and residential area, November-21 (Q4)67
Table B. 15: Youth Unemployed (who looked for a job) by sex, duration of seeking
employment, and urban/rural area, November-21 (Q4)67
Table B. 16: Youth not in employment and not currently in education nor in training by
sex, age group, and urban/rural area, November-21 (Q4)68
Table B. 17: Unemployed population by sex, broad age group and urban/rural area,
November-21 (Q4)69
Table B. 18: Unemployed population by sex, level of educational and urban/rural area,
November-21 (Q4)69
Table B. 19: Unemployed population (who looked for a job) by sex, method of seeking
employment, and urban/rural area, November-21 (Q4)70
Table B. 20: Unemployed population (who looked for a job) by sex, duration of seeking
employment, and urban/rural area, November-21 (Q4)71
Table B. 21: Time related under employment by age group sex and area of residence,
November-21 (Q4)71

## **Chapter 1: Introduction**

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

Since 2020, there was a disturbance in the methodology and techniques of data production not only in Rwanda but also all over the World due to the covid-19 pandemic. The pandemic was identified for the first time in Rwanda in mid-March 2020 and different preventive measures including lockdowns were taken. Despite the aforementioned pandemic, the labour force Survey continued to be conducted on a quarterly basis with some adjustments to cope with covid-19 prevention measures. It is in this context that NISR introduced the telephone interviews in May 2020(Q2). The same method of data collection was also used in November 2020(Q4), and in all quarterly labour force Surveys conducted in 2021 including the present one conducted in November 2021..

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. At the end of the data collection, the response rate was evaluated to 90.6 percent, which is 2 percentage points lower than the previous quarter (92 percent).

In the present report, the results of November 2021(Q4) labour force survey are mainly compared with August 2021, May 2021, February 2021(Q1) and November 2020(Q4). However, in some sections, the tables or figures are presented with the additional time series including results of all quarters of the year from 2017 to 2021. This comparison allows tracking the change in labour market indicators over time and enabling to compare the labour market performance during the period of the covid-19 pandemic in Rwanda.

The resulting estimates of the main labour force indicators at the national level have standard errors of about 1.2 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 the trends of the main labour force indicators since February 2018. The different Labour Force survey rounds results are compared to have the time series of the main indicators such as Working age population, Labour force participation rate, Employed to population ratio, unemployment rate, and labour underutilisation rate.

## 2.1 Working age population

The labour force constituted the majority of the working age population in November 2021(Q4) (4,768,769). It substantially increased as compared to August 2021(Q3) by 20.9 percentage point and by 11 percentage points as compared to the situation one year back (November 2020 (Q4)).

The November 2021(Q4) LFS results indicate that the population outside the labour force was 3,044,224. It decreased by 20.0 percentage points as compared to the previous quarter (August 2021(Q3)). Population in working age who were outside the labour force and involved in subsistence agriculture (Food producers) represented 33.5 percent.

Students who are not involved in any economic activity make another important component of the population outside the labour force. Their number was estimated at 852,190 corresponding to 22.4 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 about 9.2 percentage points as compared to August 2021(Q3).

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 1,172,612 in November 2021(Q4). It decreased by 23.3 percentage points as compared to August 2021(Q3).

941 1054 920 1219 1357 1529 959 1173 581 635 595 502 914 852 842 780 1,740 1754 1582 1732 1019 1633 1390 1497 4769 4365 4106 4277 4,026 4090 3944 3861 Nov\_19 Feb\_20 Aug\_20 Nov\_20 Feb\_21 May\_21 Aug\_21 Nov\_21 ■ Foodstaff producers ■ Labour force ■ Exclusively students Other outside LF

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 November 2021, the unemployment rate increased to 23.8 percent from 19.4 percent estimated in the previous quarter (Aug 2021). In comparison with the situation one year earlier (November 2020 (Q4); the current unemployment rate increased by around 3.5 percentage points.

The employment-to-population ratio (EPR), i.e., the percentage of the working age population who is employed, is an indicator of the performance of the national economy in providing employment to its growing population. The analysis of employment trends shows that in November 2021, the estimated number of employed population was 3,633,132 persons while it was 3,179,124 persons in August 2021, expressing an increase of 14.3 percentage points.

The employment-to-population ratio increased to 46.5 percent in November 2021(Q4) as compared to 41.0 percent in August 2021(Q3). The recorded employment to population ratio in November 2021(Q4) was slightly higher than the one registered one year earlier November 2020 (Q4) (45.1 percent).

According to the results of the LFS presented in Figure 2.2, the labour force participation rate significantly increased by around 10 percentage points from 50.9 percent in August 2021 to 61.0 percent in November 2021. This increase is the result of the increase in both employment and unemployment during this period.

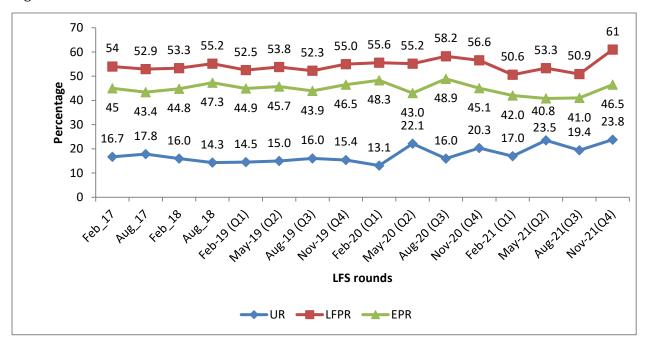


Figure 2. 2: Trend of the main labour force indicators

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

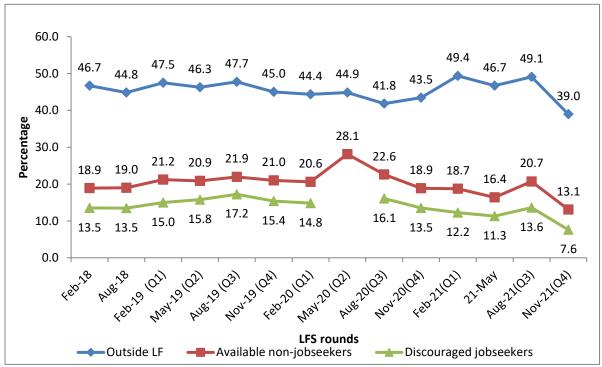
Figure 2.3 presents the trend of the proportion of the working age population who was outside the labour force according to different categories. The results shows that the proportion of the working age population outside the labour force decreased by 10.1 percentage points from 49.1 percent in August 2021(Q3) to 39.0 percent in November 2021(Q4). In comparison with the estimated rate in November a year earlier (43.5 percent), the decrease was evaluated to 4.5 percentage points.

Among the components of population out of labour force; Available non-job seekers constituted a substantial category. In Rwanda, the majority of the population in this category are mainly subsistence farmers. The proportion of working age population falling in this category reached 28.1 percent in May 2020 due to the general lockdown happened in April 2020 but it was consistently decreasing over time since then. In November 2021(Q4), it declined to 13.7 percent from 20.7 percent observed in August 2021.

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 7.6 percent in November 2021(Q4) as compared to 13.6 percent in August 2021 (Q3).

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 population 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 population 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 declining from its pick in May 2020(Q2) where this proportion was 28.7 percent. It reached 22.9 percent in November 2020 and 13.1 percent in November 2021, indicating a decrease of 6.2 percentage points as compared to the estimated rate in the previous quarter(19.3 percent).

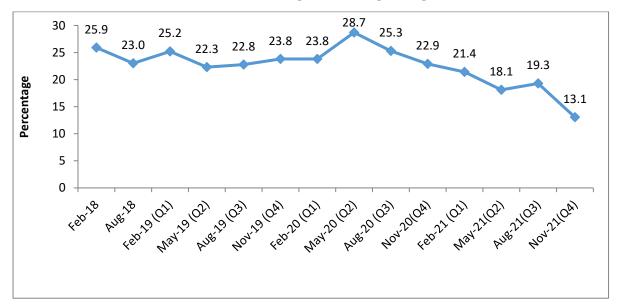


Figure 2. 4: Trend of subsistence foodstuff production participation rate

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

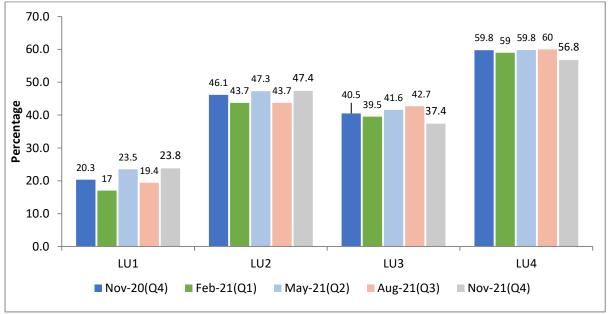
### 2.5 Labour underutilization rates

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 presented in figure 2.5 compare the labour underutilisation rate and its components in different quarterly LFS series. The quarter to quarter comparison shows that, the unemployment rate (LU1) increased by 4.4 percentage points in November 2021(Q4) as compared to August 2021(Q3). In the same way, LU2 increased by 3.7 percentage points in the same period. Conversely, LU3 and LU4 declined by 5.3 and 3.2 percentage points respectively during the same period, mainly due to the observed decrease of the population in potential labour force. The comparison of November 2021 results with the results of the same month one-year back reveals that there has been an

increase for LU1 and LU2 by 3.5 and 1.3 percentage points respectively and a decrease for LU3 and LU4 by 3.1 and 3.0 percentage points respectively.

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, increased to 61 percent in November 2021(Q4) compared to 56.5 percent in November 2020(Q4). The results show an increase trend of labour force participation rate in both male and female population in November 2021(Q4) as compared to previous rounds; however, the labour force participation rate was higher for male population than the female population over time.

Gender gap in labour force participation rate was around 16.1 percent in November 2020(Q4) and it decreased to 14.3 percent in November 2021(Q4). The comparison with the previous quarter shows that the labour force participation rate increased by 10.1 percent from August 2021(Q3) to November 2021(Q4) at National level. The Labour force participation rate significantly increased by 8.6 percent among male and by 11.5 percent among female from August (Q3) to November 2021(Q4).

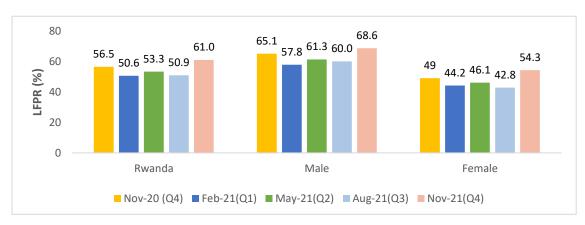


Figure 3. 1: Labour force participation rate by sex

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

### 3.2 Labour force participation and education

The analysis of the labour force participation rate by educational attainment shows that it was higher among those with relatively higher levels of education compared to those with lower levels of education over time. A comparison of November 2020(Q4) to November 2021(Q4) shows an increase of labour force participation rate in all levels of education.

From August 2021(Q3) to November 2021(Q4), the remarkable change was observed in upper secondary level of education where the labour force participation rate increased by 19.1 percent. An increase of 7.7 percent and 10.7 percent was also observed in population with tertiary level of education and in population with no level of education respectively. An increase of 3.7 and 9 percent was also observed among those with lower secondary and primary level of education respectively.

Rwanda None Primary Lower Upper University Secondary secondary

Nov-20(Q4) Feb-21(Q1) May-21(Q2) Aug-21(Q3) Nov-21(Q4)

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 November 2021(Q4), the labour force participation rate among youth aged 16 to 30 years (57.3 percent) was 10.4 percent higher than August 2021(Q3) (46.9 percent). In the age group 31-54 years old, it was 77 percent which is 16 percent higher than the rate at the national level and 12.3 percent higher than the one observed in August 2021(Q3)(64.7 percent). For the age group 55 years old and above, the labour force participation rate increased by 3.5 percent from 27.7 percent in August 2021(Q3) to 31.2 percent in November 2021(Q4).

The trend of labour force participation rate from November 2020(Q4) to November 2021(Q4) shows a slight increase among youth and old people (55 years and above):2.4 percentage points and 1.2 percentage points respectively.

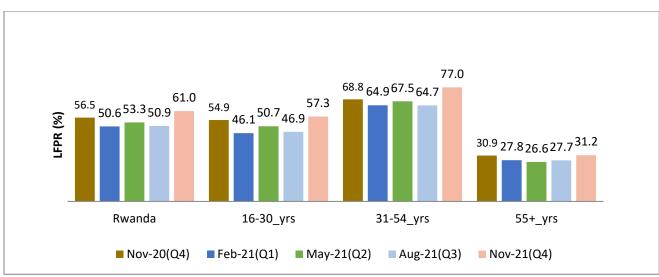


Figure 3. 3: Labour force participation rate by age group

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

## 3.4 Labour force participation and area of residence

Labour force participation rate by area of residence (urban and rural) was revealed to be high in urban areas compared to rural areas. This may be attributed to the diversity of job opportunities in urban areas as compared to rural areas where the number of employment opportunities is limited and most people are involved in subsistence agriculture. The gap between the labour force participation rate in urban and rural areas decreased by 2.1 percent; from 12 percent in November 2020(Q4) to 9.9 percent in November 2021(Q4).

The comparison of LFS November 2021(Q4) and August 2021(Q3) shows that the labour force participation rate in urban areas increased by 8.4 percent from 60.2 percent in August 2021(Q3) to 68.6 percent in November 2021(Q4) and by 10.3 percent in rural areas from 48.4 percent in August 2021(Q3) to 58.7 percent in November 2021(Q4).

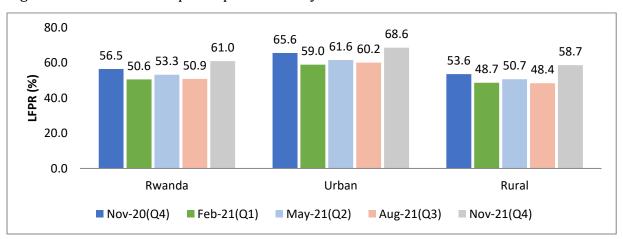


Figure 3. 4: Labour force participation rate by area of residence

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

## **Chapter 4: Employment**

## 4.1 Employment to population ratio

Aggregate employment generally increases with growing population. Therefore, the ratio of Employment to the working age population is an important indicator of the capacity of the Economy to provide employment to a growing population. A decline in the employment-to population ratio is often regarded as an indicator of economic slowdown and a decline in total employment as an indicator of a more severe economic downturn. In November 2021 (Q4), the Employment-to-population ratio was 45.6 percent. It was observed that the employment-to-population ratio increased in November 2021 (Q4) as compared to August 2021(Q3) at the national level as well as in both urban and rural areas. The results show that between August 2021 (Q3) and November 2021 (Q4) the employment-to-population ratio increased by 5.5 percentage points at national level, by 5.4 percentage points in rural areas, and by 4.3 percentage points in urban 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 November 2021 (Q4) (9.3 percentage points).

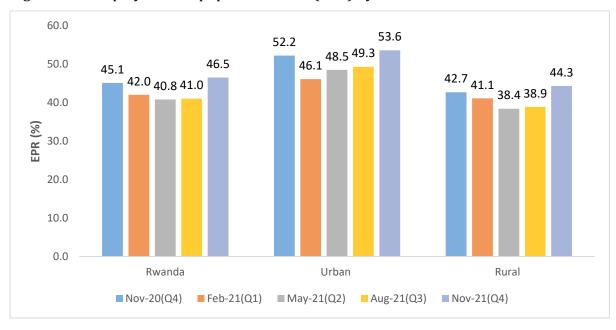


Figure 4. 1: Employment to population ratio (EPR) by area of residence.

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 November 2021(Q4), the employment-to-population ratio increased among both females and males as compared to August 2021 (Q3). The gender gap in employment to population ratio in November 2021(Q1) remained significant (14.9 percentage points) at the

National level. A comparison between the current quarter and the same quarter in the year 2020, shows that, the employment to population ratio slightly increased by 1.4 percentage points at the national level, by 1.4 percentage points among males by 1.5 percentage points among females.

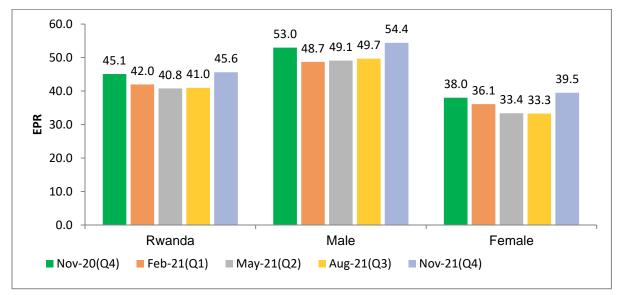


Figure 4. 2: Employment to population ratio by sex

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

## 4.2 Status in employment

The results in Table 4.1 below reveal that, in November 2021 (Q4) the number of employed population increased by around 14.3 percent as compared to August 2021 (Q3) while it increased by around 6.6 percent 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 . In November 2021(Q4), the number of employees and paid apprentices increased by 20.7 percent as compared to August 2021 (Q3). In the same way, the number of own account workers increased by 6.5 percent while the number declined in the remaining categories.

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

Status in employment	20-Nov	21-Feb	21-May	21-Aug	21-Nov	% Change (Nov20- Nov21)	% Change (Aug21- Nov21)
Total	3,407,789	3,204,924	3,130,156	3,179,124	3,633,132	6.6%	14.3%
Employee and paid apprentices	2,525,492	2,399,605	2362970	2,247,771	2,714,127	7.5%	20.7%
Employer (with regular employees)	38,297	31,398	26,527	40,061	28,451	-25.7%	-29.0%
Own account worker (without regular employees	775,971	719,320	682,480	765,892	815,543	5.1%	6.48%
Member of cooperative	2,227	4,586	1,427	5,658	1,637	-26.5%	-71.1%
Contributing family worker	65,802	50,015	46,791	119,741	73,375	11.5%	-38.7%

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

Figure 4.3 shows the distribution of employed population according to the status of employment. It reveals that the share of employees in November 2021(Q4) (74.7 percent) increased by 4.0 percentage points from August 2021(Q3) while it remained relatively stable as compared to November 2020(Q4) (74.1 percent). The share of own-account workers in November 2021 (Q4) decreased by 1.6 percentage points from August 2021(Q3) while it remained unchanged as compared to November 2020 (Q4). The share of contributing family workers also decreased by 1.8 percentage points as the current quarter is compared to the previous one, but remained almost the same as the current quarter is compared same quarter of the previous year.

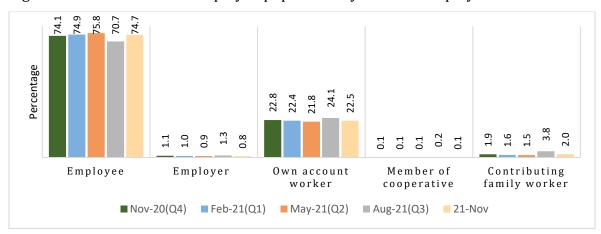


Figure 4. 3: Distribution of employed population by status in employment

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 November 2021(Q4) with August 2021(Q3) reveals that there was a loss of employment in six occupation groups with important loss in two following occupations: skilled agricultural forestry and fishing (-32.6 percent), and Managers (-3.8 percent). The following occupation groups recorded a gain in employment: Cleric and support workers (60.3 percent), Technicians and associate professionals (+ 39.4 percent), professionals (+ 33.4 percent), Service and sales workers (6.5 percent), and plant and machine operators and assemble (4.3 percent).

Table 4. 2 Number of employed persons by occupation	Table 4.	2	Number	of	empl	loyed	persons	by	occupation
---	----------	---	--------	----	------	-------	---------	----	------------

Major Occupation Group	20-Nov	21-Feb	21-May	21-Aug	21-Nov	% Change Aug- Nov 21
Total	3,407,789	3,204,924	3,132,838	3,179,124	3,633,132	14.3%
Managers	56,506	35,352	38,389	32,354	31,124	-3.8%
Professionals	198,952	172,436	230,971	179,092	238,827	33.4%
Technicians and associate professionals	46,706	29,644	41,166	41,276	57,546	39.4%
Clerical support workers	27,822	27,626	35,671	24,793	39,742	60.3%
Service and sales workers	533,639	465,929	417,196	477,936	508,960	6.5%
Skilled agricultural forestry and fishing	150,058	121,407	116,941	204,065	137,635	-32.6%
Craft and related trades workers	254,349	217,960	241,355	276,692	277,768	0.4%

Plant and machine operators and						
assemble	86,975	77,248	81,141	83,850	87,496	4.3%
Elementary occupations	2,052,781	2,057,323	1,930,008	1,859,068	2,254,034	21.2%

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

The percentage distribution of employed population by occupational categories across selected rounds of the Labour Force Survey as presented in table 4.3 below shows that Elementary Occupations(62.0 percent) usually registered a highest share followed by Service and Sales Workers (14.0 percent) and then Craft and Related Trades Workers(7.7 percent) among others. The result of comparison of November 2021 (Q4) with the previous quarter revealed that the share of elementary Occupations in total employment increased by 3.5 percentage points while the share of professionals increased by 1 percentage point as compared to the previous round. The share of service and sales workers and the one of Skilled Agricultural, Forestry and Fishery Workers declined by 1 and 2.6 percentage points respectively. In the same way, e the share of craft and related Trade workers declined by 1.1 percentage point. The changes among other occupational categories were below 1 percentage point in the same period.

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

Major Occupation Group	Nov- 20(Q4)	Feb- 21(Q1)	May- 21(Q2)	Aug-21 (Q3)	Nov 21 (Q3)	Change in % Aug 21- Nov 21
Total employed ('000)	3,408	3,205	3,205	3,179	3,633	1.6%
Total (percent)	100	100	100	100	100.0	0
Managers	1.7	1.1	1.2	1	0.9	-0.1
Professionals	5.8	5.4	7.4	5.6	6.6	1.0
Technicians and Associate Professionals	1.4	0.9	1.3	1.3	1.6	0.3
Clerical Support Workers	0.8	0.9	1.1	0.8	1.1	0.3
Service and Sales Workers	15.7	14.5	13.3	15	14.0	-1.0
Skilled Agricultural, Forestry and Fishery Workers	4.4	3.8	3.7	6.4	3.8	-2.6
Craft and Related Trades Workers	7.5	6.8	7.7	8.7	7.7	-1.1
Plant and Machine Operators and Assemblers	2.5	2.4	2.6	2.6	2.4	-0.2
Elementary Occupations	60.2	64.2	61.6	58.5	62.0	3.5

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 (46.9 percent) in November 2021(Q3). Other sectors that employed a substantial number of population were construction (11.3 percent), wholesale and retail trade; repair of motor vehicles and motorcycles (10.4 percent), transportation and storage (5.0 percent), Manufacturing (4.5 percent), Education and Activities of households as employers (4.3 percent, respectively).

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

	Nov-	Feb-	May-	Aug-	Nov-
ISIC High level	20	21	21	21	21
Agriculture forestry and fishing	43.1	52.3	46.8	44.6	46.9
Mining and quarrying	1.6	1	0.8	1	0.9
Manufacturing	4.4	4.5	4.8	5.6	4.5
Electricity gas stream and air condition	0.1	0.2	0.2	0.3	0.2
Water supply, gas and remediation					
services	0.1	0.1	0.2	0.2	0.18
Construction	13.3	8.8	10.9	13.6	11.3
Whole sale and retail trade; repair of					
motor vehicles and motor cycles	11.7	10.5	9.6	12.2	10.4
Transportation and storage	4.6	4.1	5.3	4.7	5.0
Accommodation and food services					
activities	2.2	1.7	1.8	1.1	3.0
Information and communication	0.3	0.4	0.5	0.4	0.3
Financial and insurance activities	1	1.1	1.3	0.9	0.9
Real estate activities	0	0.1	0.1	0.1	0.1
Professional, scientific and technical	0.7	0.5	0.6	0.5	0.6
Administrative and support activities	2.2	1.8	1.8	1.6	1.3
Public administration and defense;					
compulsory social security	1.6	1.9	2.4	1.8	2.1
Education	3.2	3	4.4	3.3	4.3
Human health and social work activities	1.5	1.3	1.6	1.4	1.6
Arts, entertainment and recreation	0.3	0.1	0.3	0.1	0.3
Other services	3.1	2.8	2.3	3	2.8
Activities of households as employers	4.7	4.1	4.2	3.7	4.3
Activities of extraterritorial organization	0.2	0.1	0.2	0.1	0.0

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

The number of employed population increased by about 454,000 in November 2021(Q4) as compared to August 2021(Q3). The sectors that had an important growth of the number of workers in absolute terms are Agriculture and forestry (+285,471 workers); education (+52,848 workers) and activity of household as employer (+38,680 workers). On the other hand, the following sectors lost a higher number of workers from August 2021 to November 2021 as compared to other sectors: Construction (-22,393 workers), Manufacturing (-14,365 workers), whole sale and retail trade (-7,305 workers) sectors

There has been a decrease in the number of employed population in nine main economic activities in November 2021(Q4) as compared to November 2020(Q4). Among them, those that lost a relatively higher number of employed persons are Construction (-44,780.5 workers), Administrative and support workers (-25,858 workers), Mining and quarrying (-21,379 workers) and Whole sale and retail trade; repair of motor vehicles and motor cycles (-15,180). Conversely, in the same period, Education gained a substantial number of employed population (48,210 workers) followed by Transport and storage sector (+25,746 workers).

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

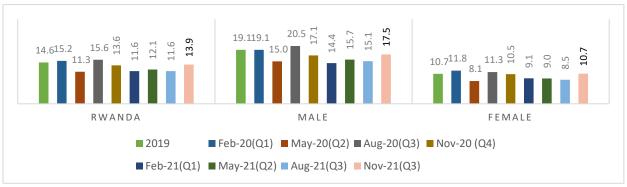
Branch of economic								
activity	20-Aug	21-Feb	21-May	21-Aug	21-Nov			
Total	3,667,611	3,204,924	3,130,156	3,179,124	3,633,132			
Agriculture forestry and	0,001,011	0,201,721	3,233,233	0,2: 2,22	0,000,101			
fishing	1,469,706	1,676,302	1,466,071	1,419,153	1,704,624			
Mining and quarrying	54,140	30,378	25,908	30,976	32,761			
Manufacturing	148,698	143,238	148,676	177,152	162,787			
Electricity gas stream								
and air condition	4,710	6,766	5,912	8,197	7,222			
Water supply, gas and	Í	,		,	·			
remediation services	4,081	2,228	6,627	7,347	6,555			
Construction	453,807	280,565	340,731	431,420	409,027			
Whole sale and retail				-				
trade; repair of motor								
vehicles and motor								
cycles	394,657	336,170	300,916	386,782	379,476			
Transportation and								
storage	157,031	131,658	164,631	148,467	182,777			
Accommodation and								
food services activities	76,400	53,060	57,462	35,235	71,698			
Information and								
communication	12,810	11,940	14,219	11,586	10,081			
Financial and insurance								
activities	34,750	33,661	41,147	28,585	33,950			
Real estate activities	1,189	1,927	3,486	3,808	1,648			
Professional, scientific								
and technical	22,810	14,682	19,872	15,523	20,165			
Administrative and								
support activities	73,221	56,409	55,139	51,079	47,363			
Public administration								
and defense;								
compulsory social	55.052	(1 110	76 242	E ( ) 41	76 505			
security	55,853	61,110	76,342	56,341	76,595			
Education	109,464	97,050	137,824	104,826	157,674			
Human health and social	F2 201	42.620	40.052	44 202	50.004			
work activities	53,281	42,620	49,052	44,292	58,904			
Arts, entertainment and	11 520	2.670	0.600	1 556	0.750			
recreation	11,520	3,678	9,699	1,556	9,758			
Other services	103,755	89,021	70,781	96,294	101,520			
Activities of households	160 521	120 011	120.000	110.025	15771			
as employers Activities of	160,531	129,811	129,898	118,935	157,616			
extraterritorial								
organization	5,373	2,648	5,763	1,571	932			
oi gaiiizatioii	3,3/3	4,040	3,703	1,3/1	732			

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

# 4.5 Actual hours worked (main and secondary jobs) per person in the working age population

Assessing the impact of the pandemic covid-19 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<sup>2</sup>.

Figure 4. 4: Actual hours worked (main and secondary jobs) 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 per person in working age in the reference week increased in November 2021 (Q4) as compared to August 2021(Q3), indicating a gain in actual hours worked. This may be due to some relaxation of the measures to contain COVID-19 including the limiting of the curfew hours resulting to the increase of daily working hours and the resuming of many businesses. The results also show that there has been an increasing trends of working hours in both rural and urban area as compared to the previous rounds as presented in in figure 4.5 below.

The Table 4.4 below also shows that Weekly actual working hours generally increased by 20.7% as compared to total hours actually worked from August 2021 to November 2021 during the reference period. The gain of working hours has been observed in both male and female workers as well as in both urban and rural areas. A comparison between the current round and the average weekly hours actually worked in the year 2019, which is considered as a period before covi-19 pandemic, shows a gain of 3.3 percent in total hours actually worked. A considerable gain in total hours worked was observed among females (8.9 percent), the adult population aged 30 years and above (9.4 percent) as well as among population residing in urban areas (7.6 percent), while the loss of actual working hours has been observed among youth population aged 16-30 years

<sup>&</sup>lt;sup>2</sup> https://www.ilo.org/global/topics/coronavirus/impacts-andresponses/WCMS 767028/lang--en/index.htm

Table 4. 6: Actual working hour's losses (main and secondary jobs)

	2019	20-May	20-Aug	20-Nov	21-Feb	21-May	21-Aug	21-Nov	Gain/loss 2019- Nov 21	Gain/loss Nov.21- Aug.21
Total	105,198,875	84,416,138	117,098,819	103,126,598	88,362,295	93,183,876	90,035,714	108,632,135	3.3%	20.7%
Male	64,635,008	52,617,053	72,251,880	60,979,912	51,748,176	56,681,455	55,087,647	64,439,448	-0.3%	17.0%
Female	40,563,867	31,799,085	44,846,939	42,146,686	36,614,119	36,502,420	34,948,066	44,192,687	8.9%	26.5%
Urban	36,260,159	25,918,707	37,901,284	38,427,010	24,165,883	33,837,044	30,195,330	39,031,707	7.6%	29.3%
Rural	68,938,716	58,497,431	79,197,535	64,699,588	64,196,413	59,346,831	59,840,383	69,600,429	1.0%	16.3%
16-30yrs	46,995,361	37,928,638	55,291,565	45,432,685	36,230,595	39,607,795	36,265,429	44,966,735	-4.3%	24.0%
30yrs+	58,203,514	46,487,500	61,807,254	57,693,913	52,131,701	53,576,080	53,770,284	63,665,400	9.4%	18.4%

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 November 2021(Q4), the unemployment rate in Rwanda rose at 23.8 percent compared to 19.4 percent in August 2021(Q3) and 23.5 in May 2021(Q2). The comparison between November 2021(Q4) and August 2021(Q3) shows that the unemployment rate has significantly increased by 4.4 percentage points. The highest increase was among females (5.1 percentage points) compared to males (3.5 percentage points). However, it should be noted that the increase in unemployment rate in the current round may be explained by a high number of population who transitioned from outside labour force into labour force The comparison of the current quarter with the same quarter a year back shows that the current unemployment rate increased by 2.5 percentage points at the national level, by 2.1 percentage points among males and by 5.3 percentage points among females. It is instructive to note that before the pandemic, in February 2020 (Q1), the unemployment rate was 13.1 percent at national level.



Figure 5. 1: Unemployment rate by sex.

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

The survey results of November 2021(Q4) reveals that the unemployment rate was higher among the population living in rural areas as compared to those living in rural areas of Rwanda (21.8 percent and 24.6 percent respectively). A comparison of results of the current quarter and the same quarter one year back shows that the unemployment rate slightly increased by 1.4 percentage points in urban areas and by 4.3 percentage points in rural areas. The comparison with February 2021(Q1), a period before Covid-19 pandemic, shows that there has been an increase of 12 percentage points among population living in rural areas and 7.3 percentage points among population living in urban areas.

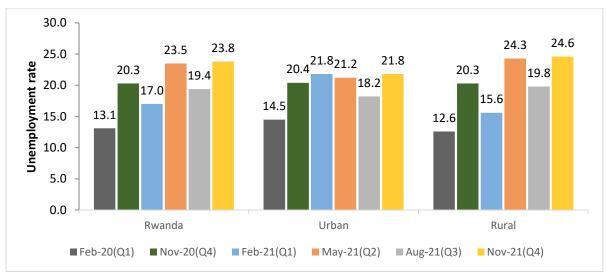


Figure 5. 2: Unemployment rate by area of residence.

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) has increased from 25.5 percent in August 2021 (Q3) to 29.8 percent in November 2021(Q4) while the unemployment rate among adults population (31+ years) has increased from 14.9 percent to 19.3 percent in the same period. A comparison of the current survey results with the survey results obtained one year back (November 2020) shows that the unemployment rate increased by 5.3 percentage points among youth and by 2.5 percentage points among adults.

25.5 Unemployment rate 24.6 23.5 23.8 21.7 20.3 19.9 19.4 19.3 17.0 17.3 16.8 13.7 14.9 13.1 9.8 Rwanda 16-30Yrs 31+Yrs ■ Feb-20(Q1) ■ Nov-2020(Q4) ■ Feb-21(Q1) ■ May-21(Q2) ■ Aug-21(Q3) ■ Nov-21(Q4)

Figure 5. 3: Unemployment rate among youth and Adult

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

The figure 5.4 below shows the trend of unemployment rate among selected age groups. It can be observed that unemployment has been increasing in all selected age groups throughout the year 2021. In November 2021(Q4) the highest unemployment rate was observed among those aged 16 to 24 years old (31.6 percent), while the lowest rate was among those aged 45 years and above (19.2 percent). The comparison between August 2021 (Q3) and November 2021(Q4) shows that the rate increased by 2.9 percentage among young aged 16-24 years old, 4.5 percentage points among those aged 24-44 years old and by 5.6 percentage points among those aged 45 years old and above.

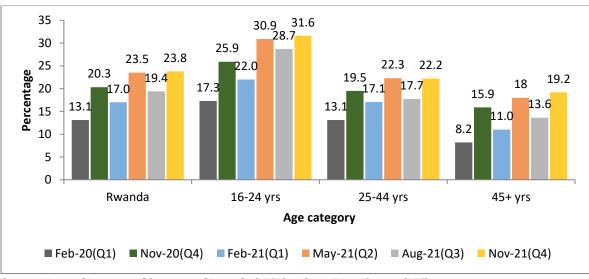


Figure 5. 4: Unemployment rate by selected age groups

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. To examine this issue, two age groups (16 to 24 years old) and (16 to 30 years old) are separately used in presenting the results in table 5.1. The full count of young population in the age group 16 to 24 years old, who were neither in employment nor in education or training, was

752,744 persons while for those aged between 16 and 30 years old, the total number was 1,180,800 persons in November 2021(Q4).

The share of young (16 to 24 years old) neither in employment nor in education or training (NEET) stood at 31.1 percent in November 2021(Q4) representing a decline of 3.4 percentage points as compared to August 2021(Q3)(34.5 percent). Quarter to quarter comparison shows that a significant decline of NEET was observed among young (16-24) females (5.3 percentage points) and those living in rural areas (4.1 percentage points) while it slightly increased by 1.1 percentage point among the young population living in urban areas.

The survey results also shows that the NEET rate among youth (16-30 years) was 33.0 percent in November 2021(Q4) with higher rate among females (37.9 percent) than among males (28.0 percent). As regard to the area of residence, higher rate was observed in rural areas (35.1 percent) than in urban areas (27.0 percent). The comparison of the current NEET rate with the results of the previous quarter shows that the NEET rate decreased by 4.7 percentage points at national level, by 5.2 percentage points among population living in urban area of Rwanda while it remained almost stable in rural areas. It has been also observed that NEET decreased by 5.6 percentage points among female and by 3.7 percentage points among male youth aged 16 to 30 years old..

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

				Estin	nate (N	EET)			Percentage change
Age group	sex/ Residence	20- Feb	20- Aug	20- Nov	21- Feb	21- May	21- Aug	21- Nov	Aug-21 to Nov-21
	Total	34	28.4	32.4	30.2	35.7	34.5	31.1	-3.4
16-24	Male	30.6	22.1	29.1	26.6	33.2	31.1	29.5	-1.6
	Female	37.2	34.5	35.6	33.6	38.2	37.8	32.5	-5.3
years	Urban	23.8	19.1	24.8	25.1	26.4	23.9	25.0	1.1
	Rural	36.8	30.8	35.1	31.3	38.6	37.1	33.0	-4.1
	Total	34.2	31.8	34.7	34.4	37.3	37.7	33.0	-4.7
16-30	Male	28.6	23	28.9	28.4	31.7	31.7	28.0	-3.7
	Female	39.4	40.2	40.4	40.1	42.8	43.5	37.9	-5.6
years	Urban	24.5	22.5	28.1	30.4	30.8	28.5	27.0	-1.5
	Rural	37.2	34.6	37.3	35.3	39.4	40.3	35.1	-5.2

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

#### 5.3. Labour Underutilization

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

The results presented in figure 5.5 shows that the composite measure of labour underutilization rate was 56.8 percent in November 2021(Q4). It declined by 3.2 percentage points as compared to 60.0 percent recorded in August 2021(Q3). The labour underutilization rate was higher among females (63.9 percent) than males (49.8 percent). The comparison of the results in November 2021(Q4) and August 2021(Q3) shows that the labour underutilization rate declined by about 3 percentage points among both males and females population.



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

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

The results presented in figure 5.6 below shows 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 2021(Q4) and August 2021(Q3) reveals that the labour underutilization declined among the population living both urban and rural areas of Rwanda by 4.6 percentage points and 2.1 percentage respectively. A comparison of the labour underutilization rate in the current quarter with the situation of the same quarter one year back reveals that the labour underutilisation decreased by 3 percentage points at the National level and by 4.3 percentage point in rural areas.

 $^{65.5} _{61.6} ^{63.863.9} _{61.8}$ 70.0 59.859.059.8 60 56.8 60.0 49.147.7<sub>46.4</sub> 41.8 50.0 42.9 Percentage 40.0 30.0 20.0 10.0 0.0 Rwanda Urban Rural Area of residence ■ Nov-20(Q4) ■ Feb-21(Q1) ■ May-21(Q2) ■ Aug-21(Q3) ■ Nov-21(Q4)

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

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

Figure 5.7 presents the results of the labour underutilization rate by age group (youth and adults). It is observed that the labour underutilization rate decreased by 4.3 percentage points among youth population from 65.2 percent in August 2021(Q3) to 60.9 percent in November 2021(Q4) and by 2.4 percentage points among the adults population.

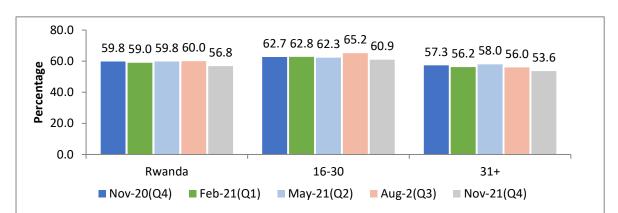


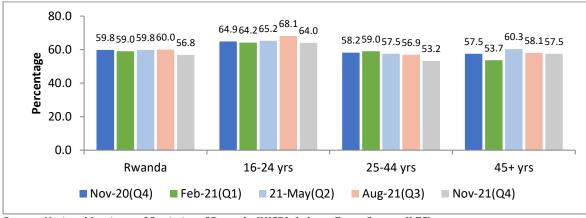
Figure 5. 7: Trend in labour underutilization rate by Youth and Adult.

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

The survey results presented in figure 5.8 below, reveals that the labour underutilisation rate was higher among population in lower age group than among adult population. In November 2021(Q4), the labour underutilization rate was 64.0 percent among youth in age group 16-24 while it was 53.2 percent among population aged 25-44 years and 57.5 percent among those in age group 45 and above.

A comparison between November 2021(Q4) and August 2021(Q3) revealed that the labour underutilisation rate decreased by 1.1 percentage points among those aged 16-24 years and by 3.7 among those aged 25-44 years old while it remained almost unchanged among population aged 45 years and above.

## 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 decreased to around 3,044,224 in November 2021(Q4) from 3,806,000 in August 2021(Q3) which is equivalent to a decrease of 20 percent. The comparison of the population outside labour force in November 2020(Q4) and November 2021(Q4) reveals that there have been a decrease of 7.4 percent...

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

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

Table 6.1 presents the main components of population outside the labour force. The population outside the labour force who was engaged in subsistence agriculture represented 33.5 percent in November 2021 (Q4). Those who were exclusively classified as students represented 28 percent while the remaining part represented 38.5 percent. The comparison with the previous quarter reveals tangible changes in both magnitude and distribution of the population outside labour force. The share of students increased by 7.5 percentage points, the share of subsistence agriculture decreased by 5.8 percentage point, while the share of other outside labour force decreased by 1.7 percentage points.

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

		L		% Change			
Main components	Aug-20 (Q3)	Nov- 20 (Q4)	Feb- 20 (Q1)	May- 21 (Q2)	Aug-21 (Q3)	Nov-21 (Q4)	Aug-21 (Q3) to Nov-21 (Q4)
Count(,000)	3,138	3,287	3,765	3,589	3,806	3044	-20
Total	100	100	100	100	100	100	100
Exclusively student	16	19.3	24.3	23.5	20.5	28	7.5
Subsistence agricultural farmers	50.4	52.7	43.4	38.7	39.3	33.5	-5.8
Other outside LFS	33.6	28	32.4	37.8	40.2	38.5	-1.7

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

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

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

The comparison of August 2021 (Q3) and November 2021 (Q4) reveals that the proportion of the population outside labour force decreased by 10.1 percentage points at the National level, 10.4 percentage points in rural areas and 8.4 percentage points decrease in urban areas. The comparison of November 2020 (Q4) and November 2021 (Q4) shows that the proportion of population outside labour force decreased by 4.6 percentage points at the national level, by 3 percentage points in urban areas and by 5.3 percentage points in rural areas.

It is also observed from Figure 6.1 that the proportion of population outside labour force is normally higher in rural areas relatively to urban areas. In November 2021(Q4), the urban-rural gap decreased to 9.9 compared to 11.8 percentage points observed in August 2021(Q3).

51.3<sub>49.3</sub>51.6 60.0 49.446 749.1 50.0 41.843.6 41.3 41 38.439.8 39 40.0 34.4 31.4 28.3 30.0 20.0 10.0 0.0 Urban Rwanda Rural ■ Aug-20(Q3) ■ Nov-20(Q4) ■ Feb-21(Q1) ■ May-21(Q2) ■ Aug-21(Q3) ■ Nov-21(Q4)

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

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

## 6.3 Population outside the labour force by age group

Figure 6.2 shows that the proportion of population outside labour force among youth (16-30 years old) decreased from 45.1 percent in November 2020 (Q4) to 42.7 percent in November 2021(Q4) and from 42 percent to 35.8 percent among adult (31 years and above), in the same period. The comparison of August 2021(Q3) with November 2021(Q4) illustrates that the population out of Labour force decreased by 10.4 percentage points among youth and 10 percentage points among adults.

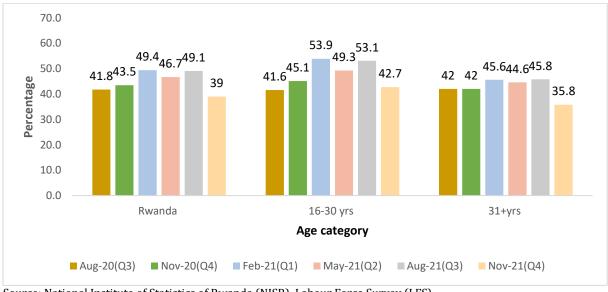


Figure 6. 2: Population outside the Labour force by Age category

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 revealed that the share of population outside the labour force in the working age population was lower among population who hold higher educational attainment as compared to those with lower education levels. From August 2021(Q3) to

November 2021 (Q4), the proportion of working age population outside the labour force decreased in all levels of educational attainment. The highest decrease was observed among holders of upper secondary level of education (19.1 percentage points) while the lowest decrease was observed among holders of lower secondary level of education (3.7 percentage points)

9.8 17.5 Universty 99 24.3 43.4 Upper secondary 41.1 31.5 28.9 61.1 62.0 Lower Secondary **Education level** 67.0 48.7 40.9 49.9 50.5 Primary 51.8 46.7 41.6 39.4 50.1 47.6 None 48.8 44.3 46.1 39.0 49.1 46.7 Rwanda 49.4 43.5 41.8 0.0 10.0 20.0 30.0 40.0 50.0 60.0 70.0 80.0 **Percentage** ■ Nov-21(Q4) Aug-21(Q3) ■ May-21(Q2)
■ Feb-21(Q1) ■ Nov-20(Q4) ■ Aug-20(Q3)

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

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

## **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 revealed that in December 2021(Q4), around 47.1 percent of working age population were involved in agriculture activity. It was slightly increased as compared to August 2021(Q3) (46.2 percent).

The proportion of agricultural persons in market-oriented agriculture increased by 6.7 percentage points as compared to the previous quarter (August 2021(Q3)) while the proportion of agricultural workers exclusively in subsistence agriculture decreased by 8.4 percentage points.

Table 7. 1: Works status in agriculture

Categories of agriculture	Aug- 20 (Q3)	Nov- 20 (Q4)	Feb- 21 (Q1)	May- 21 (Q2)	Aug- 21(Q3)	Nov-21 (Q4)
Market oriented agriculture as main job (a)	32.2	34.4	41.7	40.1	39.6	46.3
Subsistence agriculture exclusively (b)	51.2	51.6	48.1	50.8	51.0	42.6
Participated in Subsistence agriculture but have non-agriculture main job (c)	16.2	13.7	10.1	9	9.1	11
Market oriented agriculture as secondary job (d)	0.4	0.4	0.1	0.1	0.3	0.1
Total (100%)	100	100	100	100	100	100
Count ('000s)	3,702	4,276	4,023	3,653	3,584	3,679
Proportion of working age population	49.3	56.5	52.8	47.6	46.2	47.1

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 November 2021(Q4), the share of subsistence agriculture in all agricultural workers was 47.9 percent and it decreased by 8.4 percentage points as compared to August 2021(Q3) where this proportion was at 56.3 percent. The proportion of agricultural workers involved in market-oriented agriculture was 52.1 percent in November 2021(Q4) and it increased by 8.4 percentage points as compared to August 2021(Q3). The proportion of males engaged in market-oriented agriculture was 58.5 Percent in November 2021(Q4), it was greater than the corresponding proportion of females involved in the same activity (47.5 percent). Conversely, the proportion of females engaged in subsistence agriculture was higher than the corresponding proportion of males (52.5 percent and 41.5 percent respectively).

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

				Change			
		Nov- 20(Q4)	Feb- 20(Q1)	May- 21(Q2)	Aug- 21(Q3)	Nov- 21(Q4)	Aug-21 (Q3) to Nov- 21(Q4)
	Total	100	100	100	100	100	Aı
Both	Market oriented agriculture	40	46.4	44.2	43.7	52.1	8.4
	Subsistence agriculture	60	53.6	55.9	56.3	47.9	-8.4
	Total	100	100	100	100	100	0
Male	Market oriented agriculture	46.1	52.8	51.4	50.3	58.5	8.2
	Subsistence agriculture	54	47.2	48.6	49.7	41.5	-8.2
	Total	100	100	100	100	100	0
Female	Market oriented agriculture	35.9	42	39	38.9	47.5	8.6
	Subsistence agriculture	64.1	58	61	61.1	52.5	-8.6

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

Table 7.3 below presents the trend of the share of market oriented and subsistence agricultural workers among young and adult's persons separately. The share of adults farmers engaged in subsistence agriculture was slightly higher than the share of youth farmers in the same activity (49.9 percent and 43.2 percent respectively) in November 2021(Q4). The share of subsistence agriculture among youth decreased by 11.4 percentage points from August 2021(Q3) to November 2021 (Q3) and 7 percentage points among adults farmers.

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

							Change
		Nov- 20(Q4)	Feb- 21(Q1)	May- 21(Q2)	Aug-21 (Q3)	Nov- 21(Q4)	Aug-21(Q3) to Nov- 21(Q4)
	Total	100	100	100	100	100	Au; to ] 21(
Both	Market oriented agriculture	40	46.4	44.2	43.7	52.1	8.4
	Subsistence agriculture	60	53.6	55.9	56.3	47.9	-8.4
	Total	100	100	100	100	100	0
Young(16- 30)	Market oriented agriculture	39.2	49.3	50.9	44.7	56.2	11.5
	Subsistence agriculture	60.8	50.7	49.1	55.2	43.8	-11.4
	Total	100	100	100	100	100	0
Adults(31+)	Market oriented agriculture	40.5	44.9	40.8	43.1	50.1	7
	Subsistence agriculture	59.6	55.1	59.2	56.9	49.9	-7

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

		LFS rounds						
		Nov- 20(Q4)	Feb- 21(Q1)	May- 21(Q2)	Aug- 21(Q3)	Nov- 21(Q4)		
	Total	100	100	100	100	100		
	None	57.5	58.1	60.3	56.3	59.7		
Both	Primary	32.1	33.8	31.8	33.7	32.3		
DOUI	Lower secondary	5.8	4.4	4.4	5.7	4.3		
	Upper secondary	4	3.3	2.9	3.8	3.2		
	University	0.6	0.4	0.5	0.5	0.5		
	Total	100	100	100	100	100		
	None	66.7	64.7	64.7	62.1	65.7		
Market oriented agriculture	Primary	26.8	30.4	29	30.7	28.7		
Market oriented agriculture	Lower secondary	3.5	3	3.4	4.3	3.5		
	Upper secondary	2	1.7	2.5	2.6	1.7		
	University	1	0.2	0.5	0.2	0.5		
	Total	100	100	100	100	100		
	None	51.4	52.5	57.2	51.8	53.4		
Subsistence agriculture	Primary	35.6	36.7	33.9	36	36.1		
Subsistence agriculture	Lower secondary	7.4	5.6	5.3	6.8	5.2		
	Upper secondary	5.4	4.7	3.2	4.7	4.7		
	University	0.2	0.5	0.4	0.6	0.6		

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 62.9 percent in November 2021(Q4). It decreased by 1.9 percentage points as compared to August 2021(Q3). The proportion of female workers involved in agricultural activities in November 2021(Q4) (72.6 percent) is far higher than the one for male workers involved in the same activities (53 percent). Compared to November 2020(Q4), there was a decrease of 2.6 percentage points at the national level; 3.1 percentage points among males, and 2.4 percentage points among females.

90 79.1 76.7 <sub>74.5 72.6</sub> 80 70.3 66.6 64.8 62.9 65.5 70 60.6 56.1 55.2 <sub>53.0</sub> 55.1 60 50 40 30 20 10 0 Rwanda ■ Feb-21(Q1) ■ May-21(Q2) ■ Aug-21(Q3) ■ Nov-21(Q4) Nov-20(Q4)

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

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

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

The result reveals a declining trend of the share of agriculture workers in all levels of education apart from University as compared to previous quarter.

81.7<sub>79.6</sub> 76.6 75.9 76.7 71.9 68.6 65.6<sub>64.2</sub> 70.3 5 66.6 64.8 62.9 67.3 65.5 55.4 53.5 54.5 55.9 48.0 Percentage 32.7 32.6  $7.6_{\,5.9\,\,\,6}\,\,\,6.5\,6.3$ Rwanda None Primary University Upper Secondary Secondary ■ Nov-20(Q4) ■ Feb-21(Q1) ■ May-21(Q1) ■ Aug-21(Q3) ■ Nov-21(Q4)

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 three quarter of the PSUs and 24 households<sup>3</sup> were selected in a quarter of PSUs, with equal probabilities after a fresh listing of the households in the new sample PSUs. Thereafter, all household members in the sample are then selected for survey interview.

The sample size in the current quarter is about 4,608 households, composed of three rotation groups marked with the symbol r in the table. The proposed rotation design is 1-1-1, that is each sample household is interviewed three times, once every two quarters. Accordingly, a sample household is in the sample in one quarter, leaves the sample in the next quarter, returns in the sample in the following quarter, leaves again the sample in the subsequent quarter, and finally returns in the sample for the third time before leaving the sample altogether.

### · Sample weights

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

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

$$p_k = \eta \times N_k$$

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

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

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

<sup>&</sup>lt;sup>3</sup> The intake of 24 households in one fourth of PSUs is a consequence of sample size adjustment caused by the transition from bi-annual sample design to quarterly sample design in August 2018.

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

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

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

The old design calculated as,

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

The overall weight of the quarterly LFS, dk, is calculated as

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

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

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

The population projections were derived from the NISR census publication.<sup>4</sup> The projections were adjusted by deducting estimated values for the institutional population not living in private households. The calibration procedure followed the methodology of Deville and Sarndäl.<sup>5</sup> Accordingly, the final calibrated weights were obtained from the formula,

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

<sup>4</sup> National Institute of Statistics of Rwanda, Fourth Population and Housing Census, Rwanda, 2012, Thematic Report Population Projections, January 2014.

<sup>&</sup>lt;sup>5</sup> Deville, J.C., and Sarndäl, C.E., "Calibration Estimators in Survey Sampling," *Journal of the American Statistical Association*, Vol. 87, 1992, pp. 376-382.

### Data quality

Like in all sample surveys, the results of the LFS November 2021(Q4) are subject to sampling and different forms of measurement errors. This section provides information on sampling errors.

### Sampling errors

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

The table A.1 below gives the sampling errors of the main labour force estimates obtained from the LFS November 2021(Q4). They have been calculated based on the general principle that in multi-stage sample designs the variance contributed by the later stages of sampling is, under broad conditions, reflected in the observed variation among the sample results for first-stage units. Thus, the sampling variance of a variety of statistics, such as totals, means, ratios, proportions, and their differences can be obtained on the basis of totals calculated for the primary sampling units, here the localities<sup>6</sup>. The calculations took into account the fact that the sampling weights were calibrated and used the residual method proposed by Deville and Sarndäl p. 380.

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

Indicator	Estimate	Standard error	Relative Standard error	Confidence	e interval
				Lower	Upper
Population 16+ yrs	7,812,993	252,500	3.2%	7,315,770	8,310,215
Employment	333,132	146,546	4.0%	3,344,553	3,921,710
Unemployment	1,135,637	61,862	5.4%	1,013,819	1,257,456
Labour force	4,768,769	164,280	3.4%	4,445,269	5,092,270
Outside labour force	3,044224	129,225	4.2%	2,789,753	3,298,694

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), November 2021(Q4)

As an illustration of the use of the table, consider the fourth row of the table on the labour force. The total labour force is 4,768,769 estimated with a relative standard error of 3.4 percent. The true value at 95 percent confidence level lies within the interval 4,445,269 and 5,092,270.

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 23.8 percent has a standard error of 1.2 percentage

<sup>&</sup>lt;sup>6</sup> Verma, Vijay, *Sampling Methods*, Manual for Statistical Trainers Number 2, Statistical Institute for Asia and the Pacific (SIAP), Tokyo, Revised 2002.

points. This may be interpreted to mean that the true unemployment rate lies with 95 percent confidence within the interval, 21.5 percent to 26.1 percent.

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

Indicator	Estimata	Standard error	Confidence interval		
indicator	Estimate	Stanuaru error	Lower	Upper	
Labour Force Participation Rate	61.0%	1.0%	59.2%	62.9%	
Employment-Population Ratio	46.5%	1.2%	44.2%	48.8%	
Unemployment rate	23.8%	1.2%	21.5%	26.1%	

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Survey (LFS), November 2021(Q4

**Appendix B: Statistical Tables** 

Table B. 1: Summary labour force indicators, November-21 (Q4)

		S	ex	Residen	tial area	Dantisinated	Not
	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	participated in subsistence agriculture
Population 16 years old and over	7,812,993	3,680,379	4,132,614	1,864,571	5,948,421	2,788,021	5,024,973
Labour force	4,768,769	2,525,431	2,243,338	1,278,859	3,489,909	1,768,599	3,000,171
- Employed	3,633,132	2,002,299	1,630,832	1,000,048	2,633,083	1,221,561	2,411,571
- Unemployed	1,135,637	523,132	612,506	278,811	856,826	547,038	588,600
Outside labour force	3,044,224	1,154,948	1,889,276	585,712	2,458,512	1,019,422	2,024,802
Labour underutilization	3,292,645	1,433,205	1,859,441	612,949	2,679,695	1,690,754	1,601,892
- Unemployed	1,135,637	523,132	612,506	278,811	856,826	547,038	588,600
- Time-related underemployed	1,124,897	558,490	566,407	148,129	976,767	575,704	549,193
- Potential labour force	1,032,111	351,583	680,528	186,009	846,102	568,012	464,099
Labour force participation rate (%)	61.0	68.6	54.3	68.6	58.7	63.4	59.7
Employment-to-population ratio (%)	46.5	54.4	39.5	53.6	44.3	43.8	48.0
Time related underemployment rate	31.0	27.9	34.7	14.8	37.1	47.1	22.8
LU1 - Unemployment rate (%)	23.8	20.7	27.3	21.8	24.6	30.9	19.6
LU2 - Combined rate of unemployment and time-related underemployment (%)	47.4	42.8	52.6	33.4	52.5	63.5	37.9
LU3 - Combined rate of unemployment and potential labour force (%)	37.4	30.4	44.2	31.7	39.3	47.7	30.4
LU4 - Composite measure of labour underutilization (%)	56.8	49.8	63.6	41.8	61.8	72.4	46.2
Youth unemployment rate (16-30 yrs)(%)	29.8	25.7	34.3	27.9	29.8	38.5	26.1
Median monthly earnings at main job	26,000	26,000	20,800	52,000	20,800	20,800	26,000

Table B. 2: Population by sex and age group, November-21 (Q4)

	Takal	Se	ex
	Total	Male	Female
Population	12,896,714	6,230,439	6,666,276
0-4 yrs	1,543,628	768,633	774,995
5-9 yrs	1,627,244	826,410	800,835
10-14 yrs	1,612,174	800,358	811,816
15-19 yrs	1,606,314	807,668	798,646
20-24 yrs	1,118,597	538,293	580,304
25-29 yrs	988,170	473,030	515,139
30-34 yrs	895,895	446,924	448,971
35- 39 yrs	877,752	428,082	449,670
40-44 yrs	605,271	276,911	328,360
45-49 yrs	464,656	188,975	275,680
50-54 yrs	370,419	171,802	198,617
55-59 yrs	321,567	160,161	161,406
60-64 yrs	315,751	130,526	185,225
65-69 yrs	234,608	95,743	138,865
70-74 yrs	152,080	59,402	92,678
75+	162,588	57,521	105,067

Table B. 3: Households by household size, sex of head of household and urban/rural area, November-21 (Q4)

	Total number	Head of hou	sehold	Area o	Area of residence		
Household size	households	Male	Female	Urban	Rural		
	3,055,912	2,208,926	846,986	726,179	2,329,733		
1	314,716	184,307	130,409	130,686	184,030		
2	346,855	165,448	181,407	84,051	262,804		
3	523,750	348,593	175,157	117,310	406,440		
4	585,623	433,091	152,533	117,268	468,356		
5	495,925	401,665	94,259	99,406	396,519		
6	367,026	302,034	64,992	83,560	283,467		
7	213,562	185,647	27,916	45,595	167,968		
8	131,499	115,068	16,431	27,731	103,768		
9	42,999	40,493	2,506	9,762	33,237		
10+	33,956	32,580	1,377	10,811	23,145		

Table B. 4: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, November-21 (Q4)

			Labour fo	rce status		Labour	Employment	
	Total	Labour force	Employed	Unemploye d	Outside labour force	force participatio n rate (%)	Employment -population ratio (%)	Unemploymen t rate (%)
Total Population 16 yrs and over	7,812,993	4,768,769	3,633,132	1,135,637	3,044,224	61.0	46.5	23.8
16-24 yrs	2,424,236	1,117,681	764,705	352,976	1,306,554	46.1	31.5	31.6
25-34 yrs	1,884,065	1,547,686	1,166,992	380,694	336,378	82.1	61.9	24.6
35-54 yrs	2,318,098	1,733,085	1,402,201	330,884	585,013	74.8	60.5	19.1
55-64 yrs	637,318	278,770	228,507	50,263	358,548	43.7	35.9	18.0
65+ yrs	549,277	91,546	70,726	20,820	457,730	16.7	12.9	22.7
		-						
Male Pop. 16+ yrs	3,680,379	2,525,431	2,002,299	523,132	1,154,948	68.6	54.4	20.7
16-24 yrs	1,191,301	578,210	405,047	173,163	613,091	48.5	34.0	29.9
25-34 yrs	919,954	831,620	666,636	164,984	88,334	90.4	72.5	19.8
35-54 yrs	1,065,770	919,727	776,077	143,650	146,043	86.3	72.8	15.6
55-64 yrs	290,687	150,141	119,063	31,078	140,545	51.7	41.0	20.7
65+ yrs	212,667	45,732	35,476	10,256	166,935	21.5	16.7	22.4
Female Pop. 16+ yrs	4,132,614	2,243,338	1,630,832	612,506	1,889,276	54.3	39.5	27.3
16-24 yrs	1,232,934	539,471	359,658	179,813	693,463	43.8	29.2	33.3
25-34 yrs	964,111	716,066	500,356	215,710	248,044	74.3	51.9	30.1
35-54 yrs	1,252,328	813,357	626,124	187,233	438,970	64.9	50.0	23.0
55-64 yrs	346,632	128,628	109,443	19,185	218,003	37.1	31.6	14.9
65+ yrs	336,610	45,814	35,250	10,564	290,795	13.6	10.5	23.1
Urban Pop. 16+ yrs	1,864,572	1,278,859	1,000,048	278,811	585,712	68.6	53.6	21.8
16-24 yrs	584,027	291,153	205,305	85,848	292,875	49.9	35.2	29.5

			Labour fo	rce status		Labour	Employment	
	Total	Labour force	Employed	Unemploye d	Outside labour force	force participatio n rate (%)	Employment -population ratio (%)	Unemploymen t rate (%)
25-34 yrs	530,367	467,097	362,080	105,017	63,271	88.1	68.3	22.5
35-54 yrs	525,267	444,513	370,143	74,370	80,754	84.6	70.5	16.7
55-64 yrs	118,009	57,607	50,645	6,962	60,402	48.8	42.9	12.1
65+ yrs	106,901	18,490	11,876	6,614	88,411	17.3	11.1	35.8
						0.0	0.0	0.0
Rural Pop. 16+ yrs	5,948,421	3,489,909	2,633,083	856,826	2,458,512	58.7	44.3	24.6
16-24 yrs	1,840,208	826,528	559,400	267,128	1,013,680	44.9	30.4	32.3
25-34 yrs	1,353,697	1,080,591	804,913	275,678	273,107	79.8	59.5	25.5
35-54 yrs	1,792,831	1,288,572	1,032,058	256,514	504,259	71.9	57.6	19.9
55-64 yrs	519,309	221,163	177,862	43,301	298,146	42.6	34.2	19.6
65+ yrs	442,375	73,057	58,851	14,206	369,319	16.5	13.3	19.4

Table B. 5: Population 16 years old and over by labour force status and level of educational attainment, November-21 (Q4)

			Labour f	orce status		Labour force	Employment		
Marital status	Total	Total Labour force En		Unemployed	Outside labour force	participation rate (%)	Employment- population ratio (%)	Unemployment rate (%)	
Population 16 yrs and over	7,811,619	4,767,835	3,632,198	1,135,637	3,043,784	61.0	46.5	23.8	
None	3,623,236	2,194,293	1,738,770	455,523	1,428,944	60.6	48.0	20.8	
Primary	2,458,209	1,452,244	1,077,970	374,274	1,005,966	59.1	43.9	25.8	
Lower secondary	722,291	307,848	212,424	95,424	414,443	42.6	29.4	31.0	
Upper secondary	662,144	501,557	346,726	154,831	160,588	75.7	52.4	30.9	
University	345,738	311,895	256,309	55,586	33,844	90.2	74.1	17.8	

Table B. 6: Population 16 years old and over by labour force status and marital status, November-21 (Q4)

			Labour fo	rce status		Labour		
Marital status	Total	Labour force	Employed	Unemploye d	Outside labour force	force participatio n rate (%)	Employment -population ratio (%)	Unemploymen t rate (%)
Population 16 yrs and over	7,812,99 3	4,768,769	3,633,132	1,135,637	3,044,224	61.0	46.5	23.8
Married	2,711,042	1,791,503	1,444,375	347,128	919,539	66.1	53.3	19.4
Living together	1,311,337	1,015,581	770,308	245,273	295,756	77.4	58.7	24.2
Divorced/separate d	219,556	161,023	132,084	28,939	58,533	73.3	60.2	18.0
Single	2,990,612	1,590,735	1,107,118	483,617	1,399,877	53.2	37.0	30.4
Widow/widower	580,446	209,926	179,246	30,680	370,519	36.2	30.9	14.6

Table B. 7: Employed population by sex, age group, and urban/rural area, November-21 (Q4)

						Participated	Not
	Total	Se	ex	Residen	tial area	in	participated
	Total	Male	Female	Urban	Rural	subsistence	in subsistence
		Male	remale	orban	Kuldi	agriculture	agriculture
Employed population 16+	3,633,132	2,002,299	1,630,832	1,000,048	2,633,083	1,221,561	2,411,571
16-19 yrs	251,057	135,407	115,650	43,434	207,623	58,720	192,337
20-24 yrs	513,648	269,640	244,008	161,871	351,777	125,707	387,941
25-29 yrs	563,589	326,036	237,553	177,176	386,413	154,049	409,539
30-34 yrs	603,404	340,600	262,803	184,904	418,500	185,735	417,668
35- 39 yrs	554,011	322,875	231,136	153,515	400,496	187,975	366,037
40-44 yrs	381,972	211,102	170,870	105,995	275,977	152,697	229,275
45-49 yrs	278,618	135,619	142,999	69,172	209,446	130,422	148,196
50-54 yrs	187,601	106,481	81,120	41,461	146,139	92,940	94,660
55-59 yrs	141,217	78,749	62,468	33,950	107,267	57,329	83,888
60-64 yrs	87,290	40,314	46,976	16,695	70,595	44,555	42,734
65-69 yrs	48,646	24,167	24,479	5,030	43,617	22,723	25,924
70-74 yrs	13,994	7,235	6,759	3,055	10,939	6,002	7,993
75+	8,086	4,074	4,012	3,791	4,295	2,706	5,379

Table B. 8: Employed population by sex, occupation group, and urban/rural area, November-21 (Q4)

		0		D 11	1	Participated	Not
	Total	Sex		Residential area		in	participated
	Total	Male	Female	Urban	Rural	subsistence	in subsistence
		Marc	Telliale	Orban	Rurar	agriculture	agriculture
Occupation group (ISCO High level)	3,633,132	2,002,299	1,630,832	1,000,048	2,633,083	1,221,561	2,411,571
Managers	31,124	17,995	13,129	27,674	3,449	4,198	26,925
Professionals	238,827	140,320	98,506	110,316	128,511	31,515	207,312
Technicians and associate professionals	57,546	39,916	17,630	50,172	7,375	997	56,549
Clerical support workers	39,742	19,259	20,483	22,482	17,259	4802	34,940
Service and sales workers	508,960	227,962	280,998	238,364	270,595	99,680	409,279
Skilled agricultural, forestry and fishery	137,635	73,952	63,683	30,739	106,896	8,507	129,128
workers	137,033	73,732	03,003	30,737	100,070	0,507	127,120
Craft and related trades workers	277,768	204,079	73,689	110,126	167,642	79,194	198,575
Plant and machine operators and assemblers	87,496	86,797	699	49,503	37,993	3,166	84,330
Elementary occupations	2,254,034	1,192,020	1,062,014	360,672	1,893,362	989,502	1,264,532

Table B. 9: Employed population by sex, educational attainment, and urban/rural area, November-21 (Q4)

						Participated	Not
		S	ex	Resider	ntial area	in	participated
	Total						in
						subsistence	subsistence
		Male	Female	Urban	Rural	agriculture	agriculture
Employed population	3,632,198	2,001,366	1,630,832	999,750	2,632,448	1,220,926	2,411,272
None	1,738,770	941,198	797,572	262,841	1,475,928	726,069	1,012,701
Primary	1,077,970	593,907	484,063	270,564	807,406	396,507	681,464
Lower secondary	212,424	124,069	88,356	94,768	117,656	34,422	178,003
Upper secondary	346,726	196,199	150,527	179,596	167,129	48,713	298,013
University	256,309	145,994	110,315	191,980	64,328	15,216	241,093

Table B. 10: Employed population by sex, branch of economic activity, and urban/rural area, November-21 (Q4)

						Participated	Not
	Total	So	ex	Residen	tial area	in	participated
	Total	Male	Famala	Urban	Rural	subsistence	in subsistence
		Маје	Female	Ulball	Kurai	agriculture	agriculture
Employed population	3,633,132	2,002,299	1,630,832	1,000,048	2,633,083	1,221,561	2,411,571
Agriculture, forestry and fishing	1,704,624	796,605	908,019	139,331	1,565,292	817,272	887,352
Mining and quarrying	32,761	25,676	7,085	626	32,136	10,618	22,144
Manufacturing	162,787	73,995	88,792	61,003	101,783	42,932	119,854
Electricity, gas, steam and air conditioning supply	7,222	4,913	2,310	4,484	2,738	150	7,072
Water supply, sewerage and waste management	6,555	1,747	4,808	3,066	3,489	0	6,555
Construction	409,027	354,779	54,248	124,398	284,629	137,336	271,691
Wholesale, retail trade, repair of motor vehicles,	379,476	161,087	218,390	178,761	200,715	86,882	292,594
motorcycles							
Transportation and storage	182,777	174,938	7,839	64,971	117,806	31,654	151,123
Accommodation and food service activities	71,698	42,742	28,956	40,302	31,395	7,250	64,447
Information and communication	10,081	8,290	1,791	8,393	1,688	0	10,081
Financial and insurance activities	33,950	17,715	16,235	24,611	9,338	2,444	31,506
Real estate activities	1,648	1,648	0	1,648	0	306	1,342
Professional, scientific and technical activities	20,165	18,075	2,089	12,865	7,299	3,435	16,730
Administrative and support service activities	47,363	27,411	19,952	17,557	29,806	11,980	35,383
Public administration and defense	76,595	62,320	14,275	41,134	35,461	4,152	72,443
Education	157,674	80,159	77,515	61,783	95,891	35,737	121,936
Human health and social work activities	58,904	27,757	31,147	43,429	15,475	2,346	56,558
Arts, entertainment and recreation	9,758	7,602	2,156	9,537	221	221	9,537
Other service activities	101,520	54,609	46,911	55,421	46,100	16,662	84,858
Activities of households as employers	157,615	60,091	97,525	105,935	51,680	10,183	147,432
Activities of extraterritorial organizations and	932	140	792	792	140	0	932
bodies							

Table B. 11: Educational attainment and field of Education by Labour market status, November-21 (Q4)

Educational attainment	Employed	Unemployed	Outside labour force	Total
Total	46.5	14.5	39	100
None	48.0	12.6	39.4	100
Primary	43.9	15.2	40.9	100
Lower_secondary	29.4	13.2	57.4	100
Upper_secondary	52.4	23.4	24.3	100
University	74.1	16.1	9.8	100
Field of Education	Employed	Unemployed	Outside labour force	Total
Total	47.9	15.4	36.7	100
General education	48.3	14.9	36.8	100
Education	67	9.1	24	100
Humanity and art	38.2	18.1	43.7	100
Social Science busine	58.1	18.6	23.3	100
Science	34.6	18.6	46.8	100
Engineering, manufacturing	49.1	15.0	36.0	100
Agriculture	39.3	15.7	45.0	100
Health and welfare	66.2	16.1	17.7	100
Services	31.6	34.1	34.3	100

Table B. 12: Employed population by sex, status in employment, and urban/rural area, November-21 (Q4)

	Total	Sex		Residen	tial area	Participated in	Not participated
		Male	Female	Urban Rural		subsistence	in subsistence
						agriculture	agriculture
Employed population	3,633,132	2,002,299	1,630,832	1,000,048	2,633,083	1,221,561	2,411,571
Employee, Paid apprentice/intern	2,714,127	1,512,009	1,202,117	684,191	2,029,936	992,024	1,722,103
Employer	28,451	16,463	11,988	16,253	12,198	2,327	26,123
Own-account worker	815,543	453,486	362,057	275,351	540,192	216,627	598,916
Member of cooperative	1,637	705	931	1,089	547	547	1,089
Contributing family worker	73,375	19,636	53,739	23,165	50,210	10,036	63,339

Table B. 13: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, November-21 (Q4)

	Rwanda				Urban			Rural			
	Total	Male	Female	Total	Male	Female	Total	Male	Female		
Employed population	3,633,132	2,002,299	1,630,832	1,000,048	538,319	461,729	2,633,083	1,463,980	1,169,103		
less than 24 hours	833,348	398,640	434,708	107,757	49,574	58,183	725,591	349,066	376,526		
25-34 hours	557,581	257,713	299,869	73,646	25,584	48,062	483,936	232,129	251,806		
35-40 hours	811,889	428,708	383,180	176,866	98,193	78,673	635,023	330,515	304,507		
41-48 hours	763,204	475,689	287,515	308,391	178,889	129,502	454,813	296,800	158,013		
49-61 hours	427,952	274,482	153,471	223,520	124,943	98,577	204,432	149,538	54,894		
62-79 hours	203,731	137,825	65,906	91,433	47,984	43,449	112,298	89,841	22,457		
80 hours+	35,426	29,242	6,184	18,435	13,152	5,283	16,991	16,090	901		

Table B. 14: Youth Population by sex, and residential area, November-21 (Q4)

			Se	ex	Residen	tial area	Participated in	Not participated in	
	Age Group	Total	Male	Female	Urban	Rural	subsistence agriculture	subsistence agriculture	
Youth Population	n (16-30yrs)	3,575,161	1,756,797	1,818,364	914,075	2,661,086	838,283	2,736,878	
Employed	16-24 yrs	764,705	405,047	359,658	205,305	559,400	184,427	580,278	
Employeu	16-30 yrs	1,438,781	800,317	638,463	413,206	1,025,575	369,611	1,069,170	
Unamplayed	16-24 yrs	352,976	173,163	179,813	85,848	267,128	130,677	222,299	
Unemployed	16-30 yrs	609,741	276,938	332,803	159,643	450,098	231,415	378,326	
Outside Labour	16-24 yrs	1,306,554	613,091	693,463	292,875	1,013,680	162,924	1,143,631	
Force	16-30 yrs	1,526,639	679,541	847,098	341,226	1,185,413	237,257	1,289,382	

Table B. 15: Youth Unemployed (who looked for a job) by sex, duration of seeking employment, and urban/rural area, November-21 (Q4)

		Rwanda		Urb	oan	Rural	
	Total	Male	Female	Male	Female	Male	Female
Youth Unemployed (16-30 yrs)	591,210	269,105	322,105	61,350	94,294	207,755	227,812
0 – less than 3 months	242,724	120,357	122,367	17,382	20,096	102,976	102,271
3 – less than 6 months	159,901	78,712	81,189	19,061	27,712	59,652	53,477
6 – less than 12 months	72,793	30,682	42,111	8,942	19,483	21,740	22,628
1 – less than 2 years	59,424	21,483	37,941	8,475	14,807	13,009	23,134
2 years or more	56,368	17,870	38,497	7,491	12,196	10,379	26,302

Table B. 16: Youth not in employment and not currently in education nor in training by sex, age group, and urban/rural area, November-21 (Q4)

		Rwanda		Url	oan	Rural	
Young not in employment nor in education (16-30 yrs)	Total	Male	Female	Male	Female	Male	Female
	1,180,800	491,601	689,198	91,102	156,006	400,499	533,192
16-19 yrs	344,503	183,598	160,905	24,418	28,145	159,180	132,760
20-24 yrs	408,242	168,294	239,947	32,719	60,547	135,575	179,400
25-30 yrs	428,055	139,709	288,346	33,965	67,314	105,744	221,031
None	449,904	217,962	231,942	19,714	32,820	198,248	199,123
Primary	425,349	156,507	268,842	18,363	45,427	138,144	223,415
Lower secondary	119,002	41,883	77,119	9,581	23,381	32,302	53,738
Upper secondary	152,654	59,475	93,178	32,849	40,378	26,626	52,800
University	33,451	15,774	17,677	10,596	13,560	5,179	4,117

Table B. 17: Unemployed population by sex, broad age group and urban/rural area, November-21 (Q4)

		Sex		Residen	tial area	Participated in	Not participated in
	Total	Male	Female	Urban	Rural	subsistence agriculture	subsistence agriculture
Unemployed population 16+	1,135,637	523,132	612,506	278,811	856,826	547,038	588,600
16-24 yrs	352,976	173,163	179,813	85,848	267,128	130,677	222,299
25-34 yrs	380,694	164,984	215,710	105,017	275,678	173,714	206,980
35-54 yrs	330,884	143,650	187,233	74,370	256,514	195,188	135,696
55-64 yrs	50,263	31,078	19,185	6,962	43,301	30,810	19,454
65+ yrs	20,820	10,256	10,564	6,614	14,206	16,649	4,171

Table B. 18: Unemployed population by sex, level of educational and urban/rural area, November-21 (Q4)

		Sex		Area of R	esidence	Participated in	Not participated in
	Total	Male	Female	Urban	Rural	subsistence agriculture	subsistence agriculture
Unemployed population 16+	1,135,637	523,132	612,506	278,811	856,826	547,038	588,600
None	455,523	215,717	239,805	51,178	404,344	258,421	197,101
Primary	374,274	176,978	197,296	71,954	302,320	193,569	180,705
Lower secondary	95,424	33,663	61,761	40,597	54,827	38,734	56,690
Upper secondary	154,831	68,681	86,149	73,506	81,325	47,561	107,270
University	55,586	28,092	27,494	41,576	14,010	8,752	46,834

Table B. 19: Unemployed population (who looked for a job) by sex, method of seeking employment, and urban/rural area, November-21 (Q4)

		Se	Sex Area of Residence			Not	Number of	
						Participated	participated	responses
						in	in	per
	TT - 4 - 1	M.l.	P 1.	TT do .	Dl	subsistence	subsistence	search
	Total	Male	Female	Urban	Rural	agriculture	agriculture	method
Unemployed population who looked for a job	1,063,063	490,147	572,916	249,871	813,192	516,533	546,530	
Arranging for financial resources, applying for permits, licenses	210,951	76,739	134,211	70,314	140,637	106,244	104,706	232,438
Looking for land, premises, machinery, supplies, farming inputs	8,494	4,268	4,226	734	7,760	5,088	3,406	39,293
Seeking the assistance of friends, relatives or other types of intermediaries	245,236	120,392	124,844	94,213	151,023	109,974	135,262	344,019
Registering with or contacting public or private employment services	42,189	23,441	18,748	19,951	22,238	14,299	27,890	92,366
Applying to employers directly, checking at worksites, farms, factory gates, markets	523,259	253,897	269,361	55,005	468,253	268,731	254,528	756,371
Placing or answering newspaper or online job advertisements	23,942	8,753	15,189	6,494	17,448	7,664	16,278	101,750
Placing and updating resumes on professional or social networking sites online	8,992	2,656	6,336	3,159	5,833	4,533	4,459	49,121

Table B. 20: Unemployed population (who looked for a job) by sex, duration of seeking employment, and urban/rural area, November-21 (Q4)

				Participated in	Not participated		
		Se	ex	Area of Residence		subsistence	in subsistence
	Total	Male	Female	Urban	Rural	agriculture	agriculture
Unemployed population 16+	1,095,873	504,840	591,033	270,866	825,007	526,277	569,596
Less than 3 months	532,711	267,486	265,224	71,721	460,990	280,529	252,182
Less than 6 months	249,769	114,251	135,518	68,004	181,765	116,190	133,579
Less than 12 months	112,868	53,779	59,090	46,452	66,416	53,911	58,958
1 year to less than 2 years	100,584	38,962	61,621	43,444	57,140	43,862	56,722
2 years and above	99,941	30,361	69,580	41,246	58,695	31,785	68,156

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

			Sex	Residence area		
age group	Total	Male	Female	Urban	Rural	
Total	1,124,897	558,490	566,407	148,129	976,767	
16-24 yrs	245,841	126,745	119,096	31,922	213,920	
25-34 yrs	368,305	193,347	174,958	63,781	304,524	
35-54 yrs	408,863	186,210	222,653	44,768	364,095	
55-64 yrs	81,924	41,256	40,668	6,553	75,371	
65+ yrs	19,963	10,931	9,032	1,106	18,857	

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

#### NATIONAL COORDINATOR

MURANGWA Yusuf, DG, NISR MURENZI Ivan, DDG, NISR

#### TECHNICAL DIRECTOR

NDAKIZE RUGAMBWA Michel **BYIRINGIRO** James

#### **DATA COLLECTION**

#### **Survey Coordinators**

NDAKIZE RUGAMBWA Michel **BYIRINGIRO** James MUKUNDABANTU Jean Marc

#### **Survey Supervisors**

MUKUNDABANTU Jean Marc **TUYISENGE Methode UWAMAHORO** Pacifique NGIRINSHUTI Fidele MUGENZI Gilbert AYINGENEYE Seraphine

#### **DATA ANALYSIS & REPORT WRITING**

#### **LFS Data Analysts**

**BYIRINGIRO** James MUKUNDABANTU Jean Marc TUYISENGE Methode **UWAMAHORO** Pacifique NGIRINSHUTI Fidele **AYINGENEYE Seraphine UWAMAHORO** Sandrine NAHIMANA Samuel

#### **Data Processing**

MUKANSHIMIYE Peruth **HARELIMANA Massoud** 

#### **Report Editing & Design**

**TUYISENGE Methode** MUKUNDABANTU Jean Marc

