



# Labour Force Survey Trends

# -February 2019 (Q1)-





The Republic of Rwanda

## Labour Force Survey Trends

### February 2019 (Q1)

### April 2019

Labour Force Survey Trends, February 2019 (Q1) report is produced by the National Institute of Statistics of Rwanda (NISR).

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Recommended citation:

National Institute of Statistics of Rwanda (NISR), Labour Force Survey Trends, February 2019 report, April 2019

#### Foreword

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

The government of Rwanda needs updated information for monitoring progress on programmes and policies as stipulated in the first National Strategy for Transformation (NST1), Sustainable Development Goals (SDGs) as well as Vision 2020 and vision 2050. To monitor progress towards these goals and targets, relevant, reliable, coherent, timely and accessible labour statistics have to be produced.

The National Institute of Statistics of Rwanda introduced the labour force survey (LFS) program to provide key stakeholders, Ministry of Public Service and Labour and Ministry of Finance and Economic Planning, the Ministry of Education, International Labour Organization and other users, with needed labour statistics.

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 survey programme begun with a pilot survey conducted in February 2016. After the pilot survey, the Rwanda labour force survey was conducted twice a year since August 2016 to derive estimates of the main labour force aggregates. From February 2019 the survey was designed to be conducted on quarterly basis. The present report is for the first quarter 2019 whose the data collection was conducted in February 2019.

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

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

Yusuf MURANGWA



#### **Executive summary**

The sample design of labour force survey presents an advantage for estimating trend of labour market indicators with a higher precision due to its rotational design. In this report, the survey results are compared for February 2017, February 2018 and February 2019 (Q1). However, for the sake of completeness, the tables are presented in most cases with the complete time series including results of the August surveys.

In February 2019 (Q1), the working age population (16 years and above) was around 7.1 million and the population in the labour force constituted the majority of working age population. The proportion of population in labour force remained relatively stable compared to the previous February rounds of the survey. In February 2019 (Q1), the youth (16-30 years old) constituted 43.5 percent of the population in the labour force and this proportion remained relatively the same in all previous February rounds of the survey.

In the last three years, the unemployment rate in Rwanda had a declining trend. It declined for both male and female as well as in urban and rural areas. Overall, it decreased by 2.2 percentage points from 16.7 in February 2017 to 14.5 percent in February 2019 (Q1). Compared to the estimate of the previous year in February, it has decreased by around 1.5 percentage points from 16.0 percent.

The employment-to-population ratio has remained relatively stable over the same period. It was 45.5 percent in February 2017, 44.8 percent in February 2018, and 44.9 percent in February 2019 (Q1). As a result of stability in employment and decline in unemployment, the labour force participation rate has, however, steadily declined during the period, from 54.0 percent in February 2017, to 53.3 percent in February 2018, and 52.5 percent in February 2019 (Q1).

The proportion of the working age population outside the labour force remained relatively stable at around 47 percent as compared to the previous February rounds of LFS. Available non-job seekers constituted a substantial category of the population outside labour force. It represented 21.2 percent of the working age population in February 2019 (Q1) as compared to 18.9 percent in February 2018 and 20.9 percent in February 2017. The bulk of available non-job seekers are those involved in subsistence agriculture whose the share in outside labour force was 53.1 percent in February 2019.

The number of employed persons has increased during the past year from about 3,093,000 in February 2018 to more than 3,186,000 in February 2019 (Q1). The share of employment in manufacturing, mining and quarrying, transportation and storage, accommodation and food services has generally increased. On the other hand, the share of employment of domestic personnel by households and the share of employment in agriculture has generally decreased. Broadly, employment in agriculture sector declined by about 6 percentage point from February 2017 to February 2019 (Q1), employment in the industry sector increased by 4.6 percentage points in the same period and employment in the service sector slightly increased about 1.4 percentage points.

The full count of workers in the agriculture sector in February 2019 (Q1) was around 56 percent of the total working age population. The corresponding proportion for February 2018 was 58 percent.

The proportion of persons in market oriented agriculture has slightly decreased by 0.7 percentage points from February 2018 to February 2019 (Q1). The proportion of agricultural workers exclusively in subsistence agriculture has also decreased, but at the lower rate of 0.3 percentage points during that period.

#### LABOR FORCE SURVEY FEBRUARY 2019 (Q1)

The share of agricultural workers in total workforce has decreased by 2 percentage points from 66 percent in February 2018 to 64 percent in. It decreased by 3 percentage points among males and by 2 percentage points among females in the previous February rounds.

The labour force survey results show that employment increased in most occupational categories between February 2018 and February 2019 (Q1). The largest increase was recorded for Service and Sales Workers (104,000), Craft and Related Trades Workers (71,000) and for Skilled Agricultural, Forestry and Fishery Workers (41,000). On the other hand, the number of persons employed in Elementary Occupations declined by about 49,000 as compared to the previous round.

The February 2019 (Q1) results show a declining trend in the proportion of employees and an increasing trend in the proportion of own account workers. The number of own account workers increased by about 5 percentage points from February 2018 to February 2019 (Q1), and the proportion of employee has declined by about 4.3 percentage point in the same period.

In February 2019 (Q1), the unemployment rate in Rwanda was 14.5 percent compared to 16.0 percent in February 2018. The unemployment rate has declined among both males and females since February 2018. However, the analysis of the unemployment rate dynamics for males and females between February2018 and February 2019 (Q1) reveals a significant decline of unemployment rate among females (1.8 percentage points) as compared to the decline among males (1.1 percentage points). Also, the February 2018-to-February 2019(Q1) comparison shows a significant decline of the unemployment rate in urban areas (2 percentage points) as compared to rural areas (1.2 percentage points).

Labour underutilization which includes unemployment, time-related underemployment and potential labour force declined by 1.6 percentage point as compared to February 2017 (from 58.0 to 56.4 percent in February 2019(Q1)) but remained relatively the same in comparison with February2018. The labour underutilization rate has been higher among females as compared to males and the gap has slightly widened overtime.

	<b>6</b> persons	ion 16 years old a	nd over					
	ide the labou bloyed nor un 3,372,981 p	nemployed)	Labour force(The sum of employed and unemployed) 3,727,995 persons Labour force participation rate 52.5%					
Subsiste  Exclusively  Other outside    nce  students  LF(Elderly,    agricult  disable,    ure  discouraged job    seekers)		Employed (All who worked for pay or profit) 3,186,051 persons Employment to population ratio: 44.9			Vo Unemployed (All not employed but seeking and available to work for pay or profit) 541,944 persons Unemployment rate:14.5%			
			Agriculture excluding subsistence foodstuff production	Industry	Services	Unemployed but engaged in subsistence agriculture	Other unemployed	
53.1%	20.0%	26.9%	39.8%	19.0%	41.1 %	49.8%	50.2%	
Potent labour fo 1,513,0	orce	Others 1,859,936		Time related underemployedOther employed920,3422,265,709				
		Co	omposite measure	eremployed (9 of labour unde	20,342) + Poter erutilization (56	tial labour force (1,513,04	45)	

#### Rwanda Labour force survey, February 2019 (Q1): Summary labour force indicators

W/aml-ta

1 1 16

Source: National Institute of Statistics of Rwanda (NISR), Labour Force Surveys (LFSs), February, 2019 Q1.

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#### **Chapter 1: Introduction**

The Rwanda Labour Force Survey (LFS) started in 2016 with an annual sample spread into two rounds to provide bi-annual estimates of main labour market indicators at National level. From February 2019, the sample was spread into four rounds to provide estimates of labour market indicators at national level on quarterly basis. The 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 first quarter 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 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 a fixed number of households (16 households), in both urban and rural areas of Rwanda, are drawn within each sample PSU with equal probabilities, after a fresh listing of the households in the sample PSUs. All household members in the sample are then selected for survey interview.

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

The sample design of the labour force survey presents an advantage for estimating trend of labour market indicators with a higher precision due to its rotational design. In the present report, the survey results are compared for February 2017, February 2018 and February 2019 (Q1). However, for the sake of completeness, the tables are presented in most cases with the complete time series including results of the August surveys.

The resulting estimates of the main labour force indicators at the national level have standard errors of about 0.8 percent.

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

The survey results analyzed in this report are presented under seven chapters including this introduction. The other chapters deal with 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**

#### 2.1 Working age population

The sample design of labour force survey presents an advantage for estimating trend of labour market indicators with a higher precision due to its rotational design. The present chapter provides information on labour force trend of estimates of main indicators from the labour force survey since February 2017. The survey results are compared for February 2017, February 2018 and February 2019 (Q1). However, for the sake of completeness, the tables and figures are presented in most cases with the complete time series including results of the August surveys.

In February 2019 (Q1), the working age population (16 years old and above) was around 7.1 million and the population in the labour force constituted the majority of the working age population. The proportion of the population in the labour force remained relatively stable compared to the previous February rounds of the survey. In February 2019 (Q1), the youth (16-30 years old) constituted 43.5 percent of the population in the labour force and this proportion remained relatively the same in all February rounds of the survey.

Figure 2.1 shows the change in the working age population and its components over time. From February 2017 to February 2019 (Q1), the working age population increased from 6, 709,000 persons to 7,101,000 persons corresponding to an annual increase rate of about 2.9 percent.

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



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

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. From the previous February rounds it can be observed that the unemployment rate has steadily declined from 16.7 percent in February 2017, to 16.0 percent in February 2018, and to 14.5 percent in February 2019 (Q1).

The employment-to-population ratio has, however, remained relatively stable over the same period. It was 45.8 percent in February 2017, 44.8 percent in February 2018, and 44.9 percent in February 2019 (Q1).

Due to the decreasing unemployment rate and stable employment-to-population ratio, the labour force participation rate has somewhat declined during the period, from 54.0 percent in February 2017, to 53.3 percent in February 2018, and 52.5 percent in February 2019 (Q1).



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

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

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

#### 2.3: Population outside labour force

Figure 2.3 presents the trend of the proportion of the working age population who was outside the labour force according to different categories. The results show that the proportion of the working age population outside the labour force remained relatively the same (47.1 percent) as compared to the previous February rounds of LFS. Available non-job seekers constituted a substantial category of the population outside labour force. It represented 21.2 percent of the working age population in February 2019 (Q1) as compared to 18.9 in February 2018 and 20.9 percent in February 2017.

An important sub-category of the available non-job seekers is the discouraged jobseekers, i.e., those outside the labour force who did not "seek employment" for labour market-related reasons, such as past failure to find a suitable job, lack of experience, qualifications or jobs

matching the person's skills, lack of jobs in the area, considered too young or too old by prospective employers). The proportion of discouraged jobseekers among the working age population outside the labour force was 15.0 percent in February 2019 (Q1) as compared to 13.5 percent in February 2018 and 14.9 percent in February 2017.



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

#### 2.4: Subsistence foodstuff production participation rate

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

Figure 2.4 presents the trend of the proportion of the working age population who were outside the labour force but engaged in production of foodstuff for own use. It can be observed that the rate of participation in subsistence foodstuff production fluctuates across high and low seasons of agriculture: it is higher in February and lower in August. The comparison of the same period in two consecutive survey reveals a relatively stable rate in subsistence foodstuff production (about 25 percent).

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



Figure 2. 4: Trend of the 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: Unemployment, Time-related underemployment and Potential labour force. The 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 potential labour force to the extended labour force defined as the sum of labour force and potential labour force.

The results shown in figure 2.5 reveal that the trends of LU2, LU3 and LU4 were generally more stable than the trend of the unemployment rate LU1 except for LU3. The unemployment rate dropped by about 2.2 percentage points from February 2017 to February 2019 (Q1), while the corresponding drop was 0.9 percentage point for LU2, 2.5 percentage point for LU3 and 1.6 percentage point for LU4.



Figure 2. 5: Trend of the labour underutilization rate

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

#### **Chapter 3: Labour force participation**

#### 3.1: Labour force participation and sex

The labour force participation rate was 52.5 percent in February 2019 (Q1). It was higher for the male population (61.9 percent) than for the female population (44.2 percent). The February 2018 to February 2019 (Q1) comparison shows that the labour force participation rate has decreased by 0.8 percentage points and it has decreased for both males (by 1.1 percent points) and females (by 0.5 percent points). There was a significant decrease in the labour force participation rate of 1.5 percentage points from February 2017 to February 2019 (Q1), particularly among females (2.2 percentage points).





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

#### 3.2: Labour force participation and education

The analysis of the labour force participation rate (LFPR) by educational attainment of individuals shows that labour force participation was higher among those with relatively higher levels of education compared to those with lower levels of education. Generally, compared to the previous February round, LFPR has decreased or remained unchanged at most levels of education. February 2018 to February 2019 (Q1) comparison reveals that there was no change in LFPR for those with no level of education and for those with upper secondary education. However, the rate slightly increased by about 2 percentage points for those with lower secondary education. It decreased for those with primary education by about 2 percentage points and those with university education by about 5 percentage points. Low rates of labour force participation rate among people with lower secondary education (37 percent in February 2019(Q1)) may be attributed to the fact that some of them were still enrolled in schools. However, it is high after the exclusion of those who are enrolled in schools (65.4 percent in February 2019(Q1)). The calculation after the exclusion of those who were enrolled in schools shows that the labour force participation rate generally increases as the level of education increases.

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#### 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

The labour force participation rate among people in the core age group (31 to 54 years old) was higher than the overall labour force participation rate (64.8 percent compared to 52.5 percent at the national level). In February 2019 (Q1), the labour force participation rate among youth 16-30 years old was 50.4 percent, 2.1 percentage points lower than the national average. The rate has decreased by 0.6 percentage points compared to February 2018 and 1.6 percentage points compared to February 2017. Among the population aged 31-54 years old, labour force participation rate has decreased by 1.2 percent from February 2017 to February 2019 (Q1). Although labour force participation rate among the population aged 55 years and above has slightly increased by 1 percentage point from February 2017 to February 2019(Q1), it has relatively remained constant among adults.



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

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

#### 3.4: Labour force participation and area of residence

The analysis of labour force participation rate by area of residence (urban/rural) shows that the rate was higher in urban areas as compared to rural areas. This may be attributed to the diversity of job opportunities in urban areas as compared to rural areas where the number of employment opportunities is limited and most people are involved in subsistence agriculture. The February 2018 to February 2019 (Q1) comparison shows that the labour force participation rate slightly increased by 1 percentage point in urban areas and decreased by 0.9 percent points in rural areas. The February 2017 to February 2019 (Q1) LFS comparison reveals that there was a decline of labour force participation rate of 1.3 percentage points in rural areas while the increase in urban areas was 1.1 percentage points.



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

The analysis of employment trends reveals that the number of employed persons has generally increased overtime, from about 3,018,000 in February 2017 to about 3,093,000 in February 2018 and to more than 3,186,000 in February 2019 (Q1). In relative terms, the employment-to-population ratio has remained stable. The employment-to-population ratio, i.e, the percentage of the working age population who is employed, is an indicator of the performance of the national economy in providing employment to its growing population.

Figure 4.1 presents the employment-to-population ratio by area of residence. It may be observed that the employment-to-population ratio has slightly decreased in February 2019 (Q1) compared to February 2018 at national level as well as in both urban and rural areas. According to the results, between February 2018 and February 2019 (Q1), the employment-to-population ratio has remained unchanged at national level as well in rural areas but increased by 2.2 percentage points in urban areas.

It may also be observed that the employment-to-population ratio was higher in urban areas when compared to rural areas in all rounds of labour force survey. The gap between the employment-to-population ratio in urban and rural areas remained significant.

It can also be observed that the gap between the employment-to-population ratios in urban and rural areas widened in February 2019 (Q1) as compared to February 2017.



Figure 4. 1: Employment to population ratio 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 populations separately. It is instructive to note that there is a high gap between the employment-to-population ratio of males and females, and the gap is slightly increasing overtime. While in February 2018, the male employment-to-population ratio was 53.1 percent, the female rate was 37.5 percent, representing a gap of 15.6 percentage points. In February 2019 (Q1), the male employment-to-population ratio increased to about 53.3 percent, and the female rate remained essentially unchanged at 37.4 percent. Thus, the male and female gap

increased to 15.9 percentage points in February 2019 (Q1), compared to 15.6 percent point in February 2018.



Figure 4. 2: Employment to population ratio by sex

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

#### 4.2: Status in employment

Table 4.1 below reveals that employed population increased by about 93,000 persons from February 2018 to February 2019 (Q1), corresponding to an increase of about 3 percent. It is observed that the category of employees and paid apprentices/interns recorded the highest share of employment across all rounds of the labour force survey followed by own-account workers, contributing family workers, employers, and member of cooperatives respectively.

Status in employment	Employed persons(					
	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19(Q1)	
Total(count)	3,018,532	2,959,965	3,093,074	3,321,598	3,186,051	
Total (percent)	100	100	100	100	100	
Employee and paid apprentice/intern	71.8	68.1	70.6	66.8	66.6	
Employer	1.3	1.4	1.1	1.6	1.1	
Own-account worker	22.5	25.6	24.1	27.2	27.8	
Member of cooperative	0.5	0.4	0.1	0.2	0.6	
Contributing family worker	3.9	4.4	4.1	4.3	3.9	

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

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

Figure 4.3 shows the shares of the employed persons according to their status in employment. It reveals that the share of employees was declining overtime from 71.8 percent in February 2017 to 70.6 percent in February 2018 and to 66.6 percent in February 2019 (Q1) while the share of own-account workers kept increasing from 22.5 percent to 24.1 percent and to 27.8 percent in the same period. The figure also reveals that other categories (employers, members of cooperatives, and contributing family workers) have not shown a significant change.



#### Figure 4.3: distribution of employed persons by employment status

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

#### 4.3. Main occupation

The distribution of employed persons by occupational category over the five consecutive rounds of the Labour force Survey, showed that Elementary Occupations registered a highest share followed by Service and Sales Workers, and Craft and Related Trades Workers among others.

A comparison between February 2018 and February 2019 (Q1) indicates a decrease of 2.4 percentage points in Elementary Occupations, while Service and Sales Workers, and Craft and Related Trades Workers registered an increase of 1 percentage point and 0.7 percentage points respectively.

Nation Operation Course	Employed persons						
Major Occupation Group	Feb-17	Aug-17	Feb-18	Aug-18	Feb-19(Q1)		
Total employed	3,018,532	2,959,965	3,093,074	3,321,598	3,186,051		
Total (percent)	100	100	100	100	100		
Legislators, Managers and Senior Officials	1.3	1.5	1.2	1.5	1.2		
Professionals	5.7	6.3	6.3	6.3	5.7		
Technicians and Associate Professionals	1.6	1.4	1.1	1.6	1.4		
Clerical Support Workers	1.0	0.9	1.0	0.9	0.9		
Service and Sales Workers	17.2	19.2	17.9	19.9	18.9		
Skilled Agricultural, Forestry and Fishery Workers	5.4	6.9	6.7	7.5	7.5		
Craft and Related Trades Workers	8.2	7.5	7.5	9.1	8.2		
Plant and Machine Operators and Assemblers	2.7	2.5	2.8	3.0	2.9		
Elementary Occupations	57.0	53.9	55.6	50.3	53.3		

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

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

#### 4.4. Main Economic activity

According to the results of the Labour force survey February 2019 (Q1) presented in Table 4.3 below, the majority of employed persons were engaged in Agriculture, forestry and fishing (39.8 percent). Other sectors that employed a substantial number of persons were: Whole sale and retail trade; repair of motor vehicles and motorcycles (14.4 percent), Construction (9.2 percent), Manufacturing (6.4), Activities of households as employers (5.9 percent), transportation and storage (4.9 percent), Education (3.4 percent), Mining and quarrying (3.1 percent).

A comparison between February 2018 and February 2019 (Q1) shows that only three economic activities have shown a change of at least 1 percentage point. These are Agriculture forestry and fishing with a decline of 2.9 percentage points, Mining and quarrying which recorded an increase of 1.3 percentage points and Transportation and storage, which showed an increase of 1.1-percentage points. . "Activity of household as employers" sector has also declined in employment by around 1 percentage point.

	Employed Persons						
Economic activities	Feb-17 Aug-17		Feb-18	Aug-18	Feb-19 (Q1)		
Total employed	3,018,532	2,959,965	3,093,074	3,321,598	3,186,051		
Total (Percent)	100	100	100	100	100		
Agriculture forestry and fishing	45.9	37.8	42.7	36.4	39.8		
Mining and quarrying	1.4	1.9	1.8	2.1	3.1		
Manufacturing	4.6	6.1	6.1	6.6	6.4		
Electricity gas stream and air conditioning supply	0.3	0.3	0.3	0.1	0.2		
Water supply, gas and remediation services	0.3	0.4	0.3	0.2	0.2		
Construction	7.9	10.3	9.1	10.9	9.2		
Whole sale and retail trade; repair of motor vehicles and motorcycles	15.0	16.5	14.4	15.4	14.4		
Transportation and storage	4.3	4.0	3.8	5.0	4.9		
Accommodation and food service activities	1.3	1.6	1.8	2.5	2.4		
Information and communication	0.3	0.5	0.5	0.4	0.2		
Financial and insurance activities	0.8	0.7	0.8	1.0	1.2		
Real estate activities	0.1	0.1	0.1	0.1	0.1		
Professional, scientific and technical activities	0.7	0.9	0.6	0.9	0.6		
Administrative and support activities	1.5	1.0	1.6	1.6	1.7		
Public administration and defense; compulsory social security	1.8	2.4	1.7	2.0	1.8		
Education	3.5	3.9	3.5	3.2	3.4		
Human health and social work activities	1.5	1.8	1.5	1.5	1.4		
Arts, entertainment and recreation	0.2	0.5	0.3	0.3	0.3		
Other services	1.5	2.1	1.9	2.3	2.5		
Activities of households as employers	7.1	6.8	6.8	6.8	5.9		
Activities of extraterritorial organizations and bodies	0.2	0.6	0.6	0.5	0.4		

Table 4. 3: Changes in percentage distribution of employed population by branch of economic activity.

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 persons not in employment who express an interest in this form of work, but for whom existing conditions limit their active job search or their availability for employment.

#### 5.1. Unemployment rate

The unemployment rate is defined as the ratio of the number of unemployed persons to the labour force. It is the most commonly used indicator of the labour market. It is sometimes used in a general sense as an indicator of the health of the economy, not just the labour market.

According to the Labour Force Survey results of the February 2019 (Q1), the unemployment rate in Rwanda was 14.5 percent compared to 16.0 percent in February 2018 and 16.7 percent in February 2017. The unemployment rate has declined among both males and females from February 2018. The analysis of the unemployment rate dynamics for males and females between February2018 and February 2019 (Q1) reveals a higher decline in the female unemployment rate (1.8 percentage points), than the decrease in the male unemployment rate (1.1 percentage points).





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

Also, the February 2018-to-February 2019(Q1) comparison shows that the decline of the unemployment rate was larger in urban areas with a decrease of 2 percentage points than in rural areas where a decrease stood at 1.3 percentage points.





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

Figure 5.3 shows the trend in the unemployment rate for selected age groups and compares the youth and adult unemployment rates. In Rwanda, the youth population is defined as young person with 16 to 30 years of age. The results show that the unemployment rate among the youth aged 16-30 has been relatively higher than the unemployment rate among adults. The youth unemployment rate stayed almost the same between February 2018(19.6 percent) and February 2019 (Q1)(19.3 percent), while the unemployment rate for adults (31+ years old) has significantly decreased from 13.2 percent to 10.8 percent during the same period.



Figure 5. 3: Unemployment rate among youth and Adult

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

The comparison from February 2017- to February 2019 (Q1) shows a decline of the unemployment rate in all selected age groups as presented in figure 5.4. The highest decrease was observed among adults 30 years or older for whom it decreased from 13.2 percent in February 2017 to 10.9 percent in February 2019 (Q1).





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 achieve self-sufficiency. In this report, two age groups (16 to 24 years old) and (16 to 30 years old) are separately used in presenting the results in table 5.3. The full count of youth in the age group 16 to 24 years old, who were neither in employment nor in education or training, was 721,804 persons while for those aged between 16 and 30 years old, the count was 1,105,291 persons in February 2019 (Q1).

The share of youth (16 to 24 years old) neither in employment nor in education or training (NEET) stood at 33.3 percent in February 2019(Q1), representing a slight increase compared to February 2018 (32.0 percent). The February 2018 to February 2019(Q1) round comparison showed that the increase of the NEET rate was essentially among youth living in rural areas where it changed from 34.5 percent in February 2018 to 35.8 percent in February 2019 (Q1). In urban areas, the NEET rate remained essentially unchanged at about 24 percent.

The share neither of youth persons (16-30 years old) not in employment nor in education or training was 34.4 percent in February 2019 (Q1), representing a slight increase compared to the previous February rounds of the survey where it stood at 33.7 percent.

It may be observed that the youth NEET rate was higher among females than males and higher in rural areas compared to urban areas.

	sex	Estimate	Percentage point change				
Age group		Feb-17	Aug-17	Feb-18	Aug-18	Feb- 2019(Q1)	Feb-18      to        Feb-      2019(Q1)
	Total	30.9	31.9	32	29.5	33.3	1.3
16.04	Male	24.8	25.5	25.3	23	26.8	1.5
16-24 yrs	Female	36.5	38	38.1	35.6	39.7	1.6
	Urban	20.7	20.4	23.8	20.6	23.6	-0.2
	Rural	34.7	35.8	34.5	32.5	35.8	1.3
	Total	33.8	34.6	33.7	31.7	34.4	0.6
	Male	26	25.6	25	22.8	26.1	1.1
16-30yrs	Female	41.1	42.9	41.8	39.9	42	0.2
	Urban	24.1	23.5	24.9	22.4	25.5	0.6
	Rural	37.5	38.6	36.6	35	36.9	0.3

Table 5. 1: Trends in share of youth not in employment nor in education or training (NEET) by sex and residence area

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).

Figure 5.5 shows that the composite measure of labour underutilization rate stood at 56.8 percent in February 2019 (Q1), essentially the same as in February 2018 (56.7 percent), but slightly lower than the value in February 2017. The labour underutilization rate was higher among females than males. The February 2017 to February 2019 (Q1) comparison shows that the labour underutilization rate decreased by 2.2 percentage points among males while it remained approximately stable among females.




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

The comparison of February 2017 to February 2019, (Q1) shows also that the labour underutilization rate (LU4) was higher among people living in rural areas than those living in urban areas. The labour underutilization rate (LU4) decreased by 2.2 percentage points in urban areas and by 1.3 percentage points in rural areas. The February 2018 to February 2019 comparison shows that the underutilization rate stayed the same in both urban and rural areas.



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

Figure 5.7 presents the labour underutilization rate by age group. It can be observed that the labour underutilization rate has remained unchanged among youth (16-30 years old) but showed a decline among adults (31+ years) between February 2017 and February 2019 (Q1).

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



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

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

Generally the labour under utilisation rate decreased from February 2017 to February 2019 (Q1) among all selected group of ages. The results presented on the figure 5.8 show that the labour underutilization rate declined by 2.1 percentage point among people aged 16-24 years from February 2017 to February 2019 (Q1). It, however, increased by 1 percentage point and 0.4 percentage points for those aged 25-44 years and 45+years respectively, over the same period.

Figure 5.8: Trend in labour underutilization rate by selected age group



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

## **Chapter 6: Population outside the labour force**

The population outside the labour force constitutes a large part of the working age population. It includes persons engaged exclusively in activities for producing goods or services such as subsistence production of goods, own use production of services, volunteer production of goods or services and unpaid trainee or apprentice work, who have not carried out any activity for pay or profit during the reference period. It also includes students who are enrolled in schools, persons who currently don't seek for employment opportunities (no job seeker) such as discouraged job seekers. A particular characteristic of countries with large subsistence foodstuff production is the fact that the size of the working age population outside the labour force may be larger than the size of the labour force itself.

The population outside labour force was 3,224,000 in February 2018 and increased to 3,373,000 in February 2019 (Q1), representing a growth rate of 4.6 percent.

#### 6.1: Main components of people outside the labour Force

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

Table 6.1 presents the main components of persons outside labour force. A year to year comparison (February 2018 to February 2019 (Q1)) shows a growth rate of 4.6 percent of the working age population outside labour force. By contrast, we observe a slight decrease among students (exclusive) as well as among persons exclusively involved in subsistence agriculture (1 and 1.8 percentage points respectively). The remaining part (other outside LF) has increased by 2.8 percentage points from February 2018 to February 2019.

				% Change
Main components	Feb_17	Feb_18	Feb-19 (Q1)	Feb_18 to Feb-19 (Q1)
Count(,000)	3,084	3,224	3,373	4.6
Total	100	100	100	
Exclusively student	25.1	25	24	-1
Exclusively in subsistence agriculture	53.3	52.4	50.6	-1.8
Other outside LFS	21.6	22.6	25.4	2.8

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

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

# 6.2 Population outside the labour force by area of residence

It can be observed from Figure 6.1 that the proportion of persons outside labour force among the working age population was higher in rural areas relative to urban areas, and the urban-rural gap has been increasing over time.

The comparison between February 2017 and February 2019 (Q1) shows that the proportion of persons outside labour force increased from 46.0 percent to 47.5 percent in February 2019 (Q1) at the national level and from 49.2 percent to 50.5 percent in rural areas. It however decreased in urban areas from 35.5 percent to 34.4 in the same period.





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

# 6.3 Population outside the labour force by age group

It can be observed from Figure 6.2 that the proportion of persons outside labour force among the working age population was higher for youth than for adults.

The comparison between February 2017 and February 2019 (Q1) shows that the rate increased from 47.8 percent to 49.6 percent among youth and from 44.3 percent to 45.8 percent among adults.



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

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

# 6.4 Population outside the labour force by level educational attainment

It is observed that the share of persons outside the labour force in the working age population was lower among people with high educational attainment as compared to persons with lower education levels. The high rates among people with lower secondary education may be due to the fact that many of them were still enrolled in schools. The proportion of people outside the labour force in the working age population computed for those who were not enrolled in schools substantially decreased among persons with lower secondary school level as compared to other levels of education.





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 labor 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 analyze the work in agriculture sector as whole.

## 7.1: Agricultural status of workers

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

The full count of workers in the agriculture sector, as presented in table 7.1, shows that in February 2017, 60 percent of the working age population was involved in agriculture activity, the proportion in February 2018 decreased to 58.1 and continued decreasing in February 2019(Q1) to 56 percent.

Workers engaged exclusively in subsistence agriculture constitute the majority of agriculture workers, followed by those engaged in market-oriented agriculture as their main job in February 2017, February 2018 and February 2019(Q1).

The proportion of persons in market-oriented agriculture has slightly decreased by 0.7 percentage points from February 2018 to February 2019 (Q1). The proportion of agricultural workers exclusively in subsistence agriculture has also decreased, but at the lower rate of 0.3 percentage points during that period.

Categories of agriculture	Feb-17	18-Feb	Feb-19 (Q1)
Market oriented agriculture as main job (a)	34.3	32.7	32
Subsistence agriculture exclusively (b)	52.8	53.1	52.8
Participated in Subsistence agriculture but have non – agriculture main job (c)	12.2	13.8	14.6
Market oriented agriculture as secondary job (d)	0.7	0.4	0.6
Total (100%)	100	100	100
Count ('000s)	4,038	4,014	3,978
Proportion of working age population	60.2	58.1	56.0

Table 7. 1: Works status in agriculture

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

## 7.2 Characteristics of agricultural workers

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

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

The labour force surveys conducted in February 2017 to February 2019 (Q1) show a slight declining trend of the share of persons involved in market-oriented agriculture at national level and among females, but remained stable among males.

		Estimates	change		
Sex	Sex		18-Feb	Feb- 19(Q1)	Feb_17 to Feb-
	Total	100	100	100	19( Q1)
Both	Market oriented agriculture	39.4	38.2	37.6	-1.8
	Subsistence agriculture	60.6	61.8	62.4	1.8
	Total	100	100	100	
Male	Market oriented agriculture	44.8	45	45	0
	Subsistence agriculture	55.2	55	55	0
	Total	100	100	100	
Female	Market oriented agriculture	35.8	34	33	-2.8
	Subsistence agriculture	64.2	66	67	2.8

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

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

Table 7.3 presents the trend of the share of market oriented and subsistence agricultural workers among young persons and adults, separately. The level of participation of the agricultural young population in subsistence agriculture was almost the same as the one of the agricultural adult population.

	Estimates	Estimates			
Age group			Feb-18	Feb- 19(Q1)	Feb_ 18 to Feb- 19( Q1)
	Total	100	100	100	
Both	Market oriented agriculture	39.4	38.2	37.4	-0.8
	Subsistence agriculture	60.6	61.8	62.6	0.8
	Total	100	100	100	
Young (16-30)	Market oriented agriculture	39.2	39.9	39	-0.9
	Subsistence agriculture	60.8	60.1	61	0.9
	Total	100	100	100	
Adults(31+)	Market oriented agriculture	39.5	37.4	36.6	-0.8
	Subsistence agriculture	60.5	62.6	63.4	0.8

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

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

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

Level of educational attainment				Change	
		Feb-17	18-Feb	Feb-19(Q1)	Feb_18 to Feb- 19(Q1)
	Total	100	100	100	
	None	63.8	64.4	62.3	-2.1
	Primary	29.1	29.1	30.8	1.7
Total	Lower secondary	3.9	3.3	3.6	0.3
	Upper secondary	2.8	2.9	3	0.1
	University	0.4	0.3	0.3	0
	Total	100	100	100	
	None	69.8	70.2	69.2	-1
Market oriented agriculture	Primary	25.5	25.9	25.5	-0.4
	Lower secondary	2.3	2.1	2.5	0.4
	Upper secondary	1.9	1.5	2.4	0.9

Table 7 4	Trand of	nronortion	of agricultural	workorg by	loval of	adjugation	attainmont
Table 7.4	. ITenu or	proportion	of agricultural	workers by	level of	euucation	attainneint

Level of educational attainment				Change	
		Feb-17	18-Feb	Feb-19(Q1)	Feb_18 to Feb- 19(Q1)
	University	0.5	0.3	0.4	0.1
	Total	100	100	100	
	None	59.9	60.8	58.1	-2.7
	Primary	31.4	31.1	34	2.9
Subsistence agriculture	Lower secondary	4.9	3.9	4.3	0.4
	Upper secondary	3.4	3.8	3.4	-0.4
	University	0.4	0.3	0.2	-0.1

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

# 7.5. Share of agriculture in the total work force

This final section provides data on the proportion of agricultural workers in the total work force defined as the sum of total employment and the number of workers engaged in subsistence agriculture.

The results show a decline in the share of workers in agriculture at national level and among selected demographic characteristics. The share of agricultural workers in total workforce decreased by 2 percentage points from 66 percent in February 2018 to 64 percent in February 2019 (Q1). It decreased by 3 percentage points among males (from 55 to 52 percent) and by 2 percentage points among females (from 76 to 74 percent) in the same period.

The share of agriculture workers in total workforce is strongly 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 February 2017 to February 2019 comparison shows a declining trend of the share of agriculture workers in total workforce for almost all levels of educational attainment (Figure 7. 5 below).







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

## **APPENDIX B: 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 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 a fixed number of households (16 households), is drawn within each sample PSU with equal probabilities, after a fresh listing. All household members in the sample are selected for survey interview.

The sample size in each quarter is about 4608 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 Nk 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

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

where 16 is the fixed sample-take in enumeration area k and Nk' is the listed or estimated number of households in the enumeration area k.

The designed sampling weights for the quarterly LFS are labeled "Qweight". They are calculated as a function of the weights calculated earlier for the bi-annual survey, called here "Oldweight". The Qweight is obtained from the Oldweight as follows,

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,

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

where the response rate  $r_k$  in enumeration area k is the percentage number of responding households among the total eligible households in the sample enumeration area.

Finally, the adjusted weights were calibrated to known population projections for four demographic groups: Males and females 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>1</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>2</sup> Accordingly, the final calibrated weights were obtained from the formula,

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

• Data quality

Like in all sample surveys, the results of the LFS February 2019(Q1) are subject to sampling and different forms of measurement errors. This section provides information on sampling errors.

#### Sampling errors

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

The following table gives the sampling errors of the main labour force estimates obtained from the LFS February 2019(Q1). They have calculated based on the general principle that in multi-stage sample designs the variance contributed by the later stages of sampling is, under broad conditions, reflected in the observed variation among the sample results for first-stage units.

<sup>&</sup>lt;sup>1</sup> National Institute of Statistics of Rwanda, *Fourth Population and Housing Census, Rwanda, 2012, Thematic Report Population Projections*, January 2014.

<sup>&</sup>lt;sup>2</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.

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 localities3. 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.

		Standard	Relative Standard	Confidenc	e interval
Indicator	Estimate	error	error	Lower	Upper
Labour force	3,727,995	97,623	2.6%	3,535,755	3,920,234
Employment	3,186,051	87,563	2.7%	3,013,622	3,358,479
Unemployment	541,944	22,660	4.2%	497,291	586,598
Outside labour					
force	3,372,981	79,392	2.4%	3,216,641	3,529,320

		T. I
B.2: Sampling errors	of estimates of mair	1 Labour force aggregates

Source: RLFS February 2019(Q1)

As an illustration of the use of the table, consider the second row of the table on the labour force. The total labour force, 3,727,995 is estimated with a relative standard error of 2.6 percent. The true value at 95 percent confidence level lies within the interval 3,535,755 and 3,920,234.

The next table gives the estimated sampling errors for the main labour force indicators expressed in rates or percentages. For example, the results indicate that the unemployment rate estimated at 14.5 percent has a standard error of 0.6 percentage points. This may be interpreted to mean that the true unemployment rate lies with 95 percent confidence within the interval, 13.4 to 15.7 percent.

B.3: Sampling errors of estimates of main labour force indicators

			Confidenc	e interval
Indicator	Estimate	Standard error	Lower	Upper
Labour Force Participation Rate	52.5%	0.8%	50.9%	54.1%
Employment-Population Ratio	44.9%	0.8%	43.3%	46.4%
Unemployment rate	14.5%	0.6%	13.4%	15.7%

Source: RLFS February 2019(Q1)

<sup>&</sup>lt;sup>3</sup>Verma, Vijay, *Sampling Methods*, Manual for Statistical Trainers Number 2, Statistical Institute for Asia and the Pacific (SIAP), Tokyo, Revised 2002.

# **APPENDIX C: STATISTICAL TABLES**

# Table C. 1: Summary labour force indicators, Feb-2019 (Q1)

		S	ex	Residen	tial area		Not
	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	participated in subsistence agriculture
Population 16 years old and over	7,100,976	3,335,618	3,765,357	1,328,848	5,772,127	3,437,678	3,663,298
Labour force	3,727,995	2,064,618	1,663,377	871,631	2,856,363	1,645,670	2,082,325
- Employed	3,186,051	1,778,663	1,407,388	734,707	2,451,343	1,336,532	1,849,519
- Unemployed	541,944	285,955	255,989	136,924	405,020	309,138	232,806
Outside labour force	3,372,981	1,271,000	2,101,980	457,217	2,915,764	1,792,008	1,580,973
Labour underutilization	2,975,331	1,267,015	1,708,316	421,528	2,553,803	1,983,853	991,479
- Unemployed	541,944	285,955	255,989	136,924	405,020	309,138	232,806
- Time-related underemployed	920,342	447,698	472,644	111,136	809,206	551,678	368,664
- Potential labour force	1,513,045	533,362	979,683	173,468	1,339,577	1,123,037	390,009
Labour force participation rate(%)	52.5	61.9	44.2	65.6	49.5	47.9	56.8
Employment-to-population ratio(%)	44.9	53.3	37.4	55.3	42.5	38.9	50.5
Time related underemployment rate(%)	28.9	25.2	33.6	15.1	33	41.3	19.9
LU1 - Unemployment rate(%)	14.5	13.9	15.4	15.7	14.2	18.8	11.2
LU2 - Combined rate of unemployment and time- related underemployment(%)	39.2	35.5	43.8	28.5	42.5	52.3	28.9
LU3 - Combined rate of unemployment and potential labour force(%)	39.2	31.5	46.8	29.7	41.6	51.7	25.2
LU4 - Composite measure of labour underutilization(%)	56.8	48.8	64.6	40.3	60.9	71.7	40.1
Youth unemployment rate (16-30 yrs)(%)	19.3	16.6	22.4	19.7	19.3	24.9	15.9
Median monthly earnings at main job	20,800	26,000	18,200	50,000	20,800	18,200	26,000

Table C. 2: Population by sex, age group, Feb-2019(Q1)

	Total	Sex		
	Total	Male	Female	
Population	12,067,439	5,821,365	6,246,074	
0-4 yrs	1,609,402	817,346	792,055	
5-9 yrs	1,512,734	727,013	785,722	
10-14 yrs	1,539,222	779,313	759,909	
15-19 yrs	1,430,632	734,194	696,438	
20-24 yrs	1,039,900	492,555	547,346	
25-29 yrs	866,840	401,839	465,001	
30-34 yrs	829,046	409,447	419,599	
35- 39 yrs	766,137	364,355	401,783	
40-44 yrs	519,313	242,418	276,895	
45-49 yrs	426,628	189,856	236,772	
50-54 yrs	344,637	160,566	184,071	
55-59 yrs	363,970	148,359	215,611	
60-64 yrs	282,189	121,121	161,068	
65-69 yrs	230,203	105,531	124,673	
70-74 yrs	118,354	57,466	60,887	
75+	188,230	69,987	118,243	

Household size	Total number households	Head of hou	sehold		
				Participated in	Not participated in
		Male	Female	subsistence agriculture	subsistence agriculture
	2,780,152	2,044,219	735,933	1,465,558	1,314,594
1	252,701	137,002	115,698	89,615	163,086
2	299,429	142,160	157,268	140,830	158,599
3	468,939	317,203	151,736	263,010	205,928
4	498,393	371,565	126,827	270,828	227,564
5	493,263	394,926	98,337	270,782	222,481
6	358,444	309,289	49,156	201,801	156,643
7	219,707	195,379	24,328	129,192	90,514
8	109,024	103,753	5,271	59,314	49,711
9	36,551	34,097	2,454	18,976	17,575
10+	43,703	38,845	4,857	21,211	22,492

# Table C. 3: Households by household size, sex of head of household, and by participation in agriculture, Feb-2019(Q1)

				I ala a	famaa atatua	I ala anna fanna a	<b>E</b> ]	
				Labo	ur force status	Labour force Participation	Employmen	Unemployme
					Outside	rate	t to population	nt rate
Age groups	Total	Labour force	Employed	Unemployed	labour force	Tate	ratio	
Total Population 16	Total	Labour force	Linployed	onemployeu	labour force		1410	
yrs and over	7,100,975	3,727,995	3,186,051	541,944	3,372,981	52.5	44.9	14.5
16-24 yrs	2,165,428	886,603	695,335	191,268	1,278,824	41.0	32.1	21.6
25-34 yrs	1,695,886	1,204,679	1,036,904	167,775	491,207	71.0	61.1	13.9
35-54 yrs	2,056,716	1,281,439	1,126,789	154,650	775,276	62.3	54.8	12.1
55-64 yrs	646,159	267,937	242,272	25,665	378,222	41.5	37.5	9.6
65+ yrs	536,787	87,336	84,751	2,585	449,451	16.3	15.8	3.0
Male Pop. 16+ yrs	3,335,618	2,064,618	1,778,663	285,955	1,271,000	61.9	53.3	13.9
16-24 yrs	1,064,674	471,133	382,207	88,926	593,541	44.3	35.9	18.9
25-34 yrs	811,286	666,442	587,704	78,738	144,844	82.2	72.4	11.8
35-54 yrs	957,195	727,711	626,747	100,964	229,484	76.0	65.5	13.9
55-64 yrs	269,480	141,933	126,185	15,748	127,546	52.6	46.8	11.1
65+ yrs	232,984	57,399	55,820	1,579	175,585	24.6	24.0	2.7
Female Pop. 16+ yrs	3,765,357	1,663,377	1,407,388	255,989	2,101,980	44.2	37.4	15.4
16-24 yrs	1,100,753	415,471	313,128	102,343	685,283	37.8	28.5	24.6
25-34 yrs	884,600	538,237	449,200	89,037	346,363	60.8	50.8	16.5
35-54 yrs	1,099,521	553,729	500,043	53,686	545,792	50.4	45.5	9.7
55-64 yrs	376,679	126,003	116,086	9,917	250,676	33.5	30.9	7.9
65+ yrs	303,803	29,937	28,932	1,005	273,866	9.8	9.5	3.4
Urban Pop. 16+ yrs	1,328,848	871,631	734,707	136,924	457,217	65.6	55.3	15.7
16-24 yrs	441,038	201,301	163,865	37,436	239,737	45.6	37.2	18.6
25-34 yrs	393,632	313,030	256,170	56,860	80,601	79.5	65.1	18.2
35-54 yrs	360,983	293,563	259,022	34,541	67,420	81.3	71.7	11.8
55-64 yrs	83,984	55,305	47,217	8,088	28,679	65.8	56.2	14.5
65+ yrs	49,211	8,433	8,433	-	40,778	17.1	17.1	0.0

Table C. 4: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, Feb-2019(Q1)

				Labo	ur force status	Labour force	Employmen	Unemployme
						Participation	t to	nt rate
					Outside	rate	population	
Age groups	Total	Labour force	Employed	Unemployed	labour force		ratio	
Rural Pop. 16+ yrs	5,772,128	2,856,363	2,451,343	405,020	2,915,764	49.5	42.5	14.2
16-24 yrs	1,724,390	685,303	531,470	153,833	1,039,087	39.8	30.8	22.4
25-34 yrs	1,302,255	891,648	780,733	110,915	410,606	68.5	60.0	12.4
35-54 yrs	1,695,733	987,878	867,768	120,110	707,855	58.3	51.2	12.1
55-64 yrs	562,175	212,632	195,054	17,578	349,543	37.8	34.7	8.3
65+ yrs	487,576	78,903	76,318	2,585	408,673	16.2	15.7	3.3

Table C. 5: Population 16 years old and over by sex, level of educational attainment and urban/rural area, Feb-2019(Q1)

	Total	Sex			Participated in subsistence agriculture	Not participated in subsistence agriculture	
		Male	Female	Urban	Rural		
Total	7,027,545	3,293,552	3,733,993	1,581,539	5,446,006	3,133,960	3,893,585
None	3,446,699	1,546,831	1,899,868	374,336	3,072,363	1,934,872	1,511,827
Primary	2,070,332	984,916	1,085,416	433,722	1,636,610	946,090	1,124,242
Lower secondary	597,574	299,118	298,455	226,795	370,779	122,965	474,608
Upper secondary	591,235	279,300	311,936	305,766	285,469	111,665	479,570
University	321,705	183,386	138,319	240,920	80,785	18,368	303,337

Marital status	Total	Labour force	status			Labour force participation	Employment- population	Unemployment rate
		Labour	Employed	Unemployed	Outside	rate	ratio	
		force			labour			
					force			
Population 16 yrs and over	7,100,975	3,727,995	3,186,051	541,944	3,372,981	52.5	44.9	14.5
Married	2,706,591	1,507,259	1,320,501	186,758	1,199,332	55.7	48.8	12.4
Living together	1,058,120	696,872	607,114	89,758	361,248	65.9	57.4	12.9
Divorced/separeted	207,785	139,420	126,748	12,672	68,365	67.1	61.0	9.1
Single	2,615,073	1,228,352	991,914	236,438	1,386,721	47.0	37.9	19.2
Widow/widower	513,406	156,091	139,773	16,318	357,315	30.4	27.2	10.5

Table C. 6: Population 16 years old and over by labour force status, sex, marital status, and urban/rural area, Feb-2019(Q1)

Table C. 7: Employed population by sex, age group, and urban/rural area, Feb-2019(Q1)

		Se	ex	Reside	ntial area	Participated in	Not participated
	Total	Male	Female	Urban	Rural	subsistence agriculture	in subsistence agriculture
Employed population 16+	3,186,051	1,778,663	1,407,388	734,707	2,451,343	1,336,532	1,849,519
16-19 yrs	240,287	133,939	106,348	45,455	194,832	82,402	157,885
20-24 yrs	455,048	248,269	206,779	118,410	336,637	164,614	290,434
25-29 yrs	498,392	278,984	219,408	134,042	364,350	170,731	327,661
30-34 yrs	538,511	308,720	229,792	122,128	416,384	229,242	309,269
35- 39 yrs	443,324	254,578	188,746	107,064	336,260	202,898	240,425
40-44 yrs	286,601	166,968	119,634	71,478	215,123	134,508	152,093
45-49 yrs	242,009	120,445	121,565	52,392	189,617	118,138	123,872
50-54 yrs	154,855	84,757	70,098	28,088	126,767	65,548	89,307
55-59 yrs	151,203	75,757	75,446	27,507	123,696	77,272	73,932
60-64 yrs	91,068	50,428	40,640	19,710	71,358	47,052	44,016
65-69 yrs	51,560	35,944	15,616	5,509	46,051	26,247	25,313
70-74 yrs	24,346	14,881	9,465	1,700	22,645	11,007	13,339
75+	8,846	4,995	3,851	1,223	7,623	6,874	1,972

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		Se	ex	Reside	ntial area		Not
	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	participated in subsistence agriculture
Occupation group (ISCO High level)	3,186,051	1,778,663	1,407,388	734,707	2,451,343	1,336,532	1,849,519
Managers	39,444	28,312	11,132	32,348	7,096	3,474	35,971
Professionals	181,015	100,019	80,996	91,404	89,611	29,570	151,445
Technicians and associate professionals	44,299	34,638	9,661	30,113	14,186	5,290	39,009
Clerical support workers	28,997	13,654	15,344	21,596	7,401	0	28,997
Service and sales workers	602,741	302,095	300,646	206,510	396,231	241,176	361,565
Skilled agricultural, forestry and fishery workers	237,950	130,415	107,536	10,398	227,552	24,040	213,910
Craft and related trades workers	260,817	179,042	81,775	76,294	184,524	93,974	166,843
Plant and machine operators and assemblers	93,495	91,617	1,878	40,810	52,685	6,446	87,050
Elementary occupations	1,697,290	898,870	798,420	225,234	1,472,056	932,562	764,728

Table C. 8: Employed population by sex, occupation group, and urban/rural area, Feb-2019(Q1)

# Table C. 9: Employed population by sex, educational attainment, and urban/rural area, Feb-2019(Q1)

		S	ex	Reside	ntial area	Participated in	Not participated
	Total	Male	Female	Urban	Rural	subsistence agriculture	in subsistence agriculture
Employed population	3,186,051	1,778,663	1,407,388	734,707	2,451,343	1,336,532	1,849,519
None	1,583,528	872,021	711,507	174,691	1,408,838	821,590	761,938
Primary	961,345	542,493	418,852	204,752	756,593	413,516	547,829
Lower secondary	166,455	98,353	68,102	68,817	97,638	35,053	131,402
Upper secondary	269,720	141,053	128,668	125,307	144,413	46,009	223,711
University	205,003	124,743	80,259	161,141	43,862	20,363	184,639

		S	ex	Reside	ntial area		Net
	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Employed population	3,186,051	1,778,663	1,407,388	734,707	2,451,343	1,336,532	1,849,519
Agriculture, forestry and fishing	1,268,968	589,917	679,051	55 <i>,</i> 697	1,213,271	737,888	531,079
Mining and quarrying	98,591	90,535	8,057	3,935	94,656	36,026	62,565
Manufacturing	203,342	101,147	102,194	53,153	150,189	80,879	122,462
Electricity, gas, steam and air conditioning supply	5,003	5,003	0	2,938	2,065	1,481	3,521
Water supply, sewerage and waste management	7,524	5,898	1,625	2,237	5,286	2,990	4,534
Construction	291,638	227,241	64,397	48,375	243,263	135,193	156,445
Wholesale, retail trade, repair of motor vehicles, motorcycles	459,156	218,208	240,948	162,014	297,142	178,782	280,375
Transportation and storage	155,825	150,427	5,398	46,954	108,871	30,522	125,303
Accommodation and food service activities	75,197	37,217	37,981	27,519	47,678	27,155	48,043
Information and communication	6,933	5,590	1,344	6,186	747	0	6,933
Financial and insurance activities	37,033	17,264	19,769	21,754	15,279	4,261	32,772
Real estate activities	2,398	2,398	0	201	2,197	187	2,212
Professional, scientific and technical activities	19,998	15,093	4,905	12,093	7,906	1,226	18,772
Administrative and support service activities	54,548	35,012	19,536	20,307	34,241	15,400	39,148
Public administration and defence	56,908	43,065	13,844	29,867	27,041	3,723	53,185
Education	109,109	55,060	54,049	34,869	74,240	28,528	80,581
Human health and social work activities	45,546	24,190	21,355	35,118	10,428	2,579	42,967
Arts, entertainment and recreation	10,387	8,492	1,896	9,338	1,049	1,384	9,003
Other service activities	78,508	53,220	25,288	32,333	46,176	30,865	47,643
Activities of households as employers	186,444	85,354	101,089	119,351	67,093	16,455	169,989
Activities of extraterritorial organizations and bodies	12,994	8,332	4,662	10,468	2,526	1,007	11,987

Table C. 10: Employed population by sex, branch of economic activity, and urban/rural area, Feb-2019(Q1)

		Employment status		Tatal
Educational attainment	Employed	Unemployed	Outside labour force	Total
Total	44.9	7.6	47.5	100
None	45.3	6.4	48.3	100
Primary	44.9	7.1	48.0	100
Lower secondary	28.9	8.0	63.1	100
Upper secondary	45.0	13.6	41.4	100
University	71.6	13.6	14.8	100
Field of Education				
Total	42.6	11.3	46.2	100
Education	62.9	5.6	31.5	100
Humanity and art	37.5	11.4	51.1	100
Social Science business	50.8	14.6	34.6	100
Science	30.5	9.5	60.0	100
Engineering, manufacturing	42.0	10.3	47.7	100
Agriculture	42.6	17.0	40.3	100
Health and welfare	61.8	12.3	25.9	100
Services	27.4	16.7	55.9	100

Table C. 11: Educational attainment and field of Education by Labour market status, Feb-2019(Q1)

Table C. 12: Employed population by sex, status in employment, and urban/rural area, Feb-2019(Q1)

		Se	ex	Resider	ntial area	Participated in	Not participated
	Total	Male	Female	Urban	Rural	subsistence agriculture	in subsistence agriculture
Employed population	3,186,051	1,778,663	1,407,388	734,707	2,451,343	1,336,532	1,849,519
Employee,Paid apprentice/intern	2,122,796	1,191,421	931,375	483,175	1,639,621	984,981	1,137,815
Employer	36,081	30,903	5,178	16,692	19,389	7,478	28,603
Own-account worker	884,165	516,939	367,227	207,329	676,836	304,689	579,476
Member of cooperative	17,815	10,879	6,936	3,725	14,091	3,728	14,088
Contributing family worker	125,193	28,521	96,672	23,786	101,407	35,656	89,537

		Rwanda	Rwanda Urban Rural			Rural			
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employed	3,183,681	1,777,181	1,406,499	733,226	398,453	334,773	2,450,455	1,378,728	1,071,727
Less than 24 hours	791,372	349,362	442,010	84,376	36,163	48,213	706,996	313,199	393,797
25-34 hours	454,819	224,302	230,517	48,445	21,971	26,474	406,375	202,331	204,044
35-40 hours	661,215	357,975	303,240	105,398	63,958	41,440	555,818	294,018	261,800
41-48 hours	523,640	322,815	200,825	187,950	103,436	84,513	335,690	219,378	116,311
49-61 hours	394,805	260,338	134,467	151,494	80,146	71,348	243,311	180,192	63,118
62-79 hours	271,539	192,296	79,243	118,242	66,582	51,661	153,297	125,714	27,583
80 hours+	86,291	70,094	16,198	37,322	26,198	11,124	48,970	43,896	5,074

Table C. 13: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, Feb-2019(Q1)

Table C. 14: Youth Population by sex, and residential area, Feb-2019(Q1)

			Se	ex	Resid	lential area	Participated in	Not participated in
	Age group	Total	Male	Female	Urban	Rural	subsistence agriculture	subsistence agriculture
Youth (16-30yrs)		3,214,239	1,544,168	1,670,071	700,031	2,514,208	1,151,516	2,062,723
Employed	16-24 yrs	695,335	382,207	313,128	163,865	531,470	247,015	448,320
	16-30 yrs	1,307,517	718,025	589,492	322,588	984,929	465,067	842,450
Unemployed	16-24 yrs	191,268	88,926	102,343	37,436	153,833	96,202	95,067
	16-30 yrs	312,611	142,928	169,683	78,972	233,638	153,890	158,720
Outside Labour	16-24 yrs	1,278,824	593,541	685,283	239,737	1,039,087	350,781	928,043
Force	16-30 yrs	1,594,111	683,214	910,897	298,470	1,295,641	532,559	1,061,552

		Sex		Resider	ntial area	Participated in	Not participated in
	Total	Male	Female	Urban	Rural	subsistence agriculture	subsistence agriculture
Youth Unemployed (16-30 yrs)	296,776	133,911	162,866	31,747	45,072	102,163	117,794
0 – less than 3 months	123,323	55,858	67,465	9,638	15,101	46,220	52,364
3 – less than 6 months	85,089	45,341	39,748	9,024	11,741	36,316	28,007
6 – less than 12 months	29,663	9,898	19,765	2,447	4,207	7,451	15,559
1 – less than 2 years	34,581	15,977	18,605	6,268	7,328	9,709	11,277
2 years or more	24,119	6,837	17,283	4,370	6,695	2,467	10,588

# Table C. 15: Youth Unemployed by sex, duration of seeking employment, and urban/rural area, Feb-2019(Q1)

# Table C. 16: Youth not in employment and not currently in education or training by sex, age group, and urban/rural area, Feb-2019(Q1)

		Se	X	Resider	ntial area	Participated in	Not participated in
Youth not in employment	Total	Male	Female	Urban	Rural	subsistence agriculture	subsistence agriculture
Nor in education (16-30 yrs)	1,105,291	403,261	702,029	56,961	121,663	346,301	580,366
16-19 yrs	323,480	138,940	184,541	13,758	19,267	125,182	165,273
20-24 yrs	398,324	145,989	252,335	20,855	50,317	125,134	202,018
25-30 yrs	383,486	118,333	265,153	22,348	52,079	95,985	213,074
None	433,248	171,422	261,826	10,356	23,175	161,066	238,650
Primary	380,903	126,621	254,282	13,081	33,335	113,540	220,947
Lower secondary	98,632	30,491	68,141	5,507	11,662	24,984	56,479
Upper secondary	154,047	59,439	94,609	21,033	36,922	38,406	57,686
University	38,461	15,288	23,172	6,984	16,569	8,304	6,603

		Sex		Resid	lential area		Not
	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	participated in subsistence agriculture
Unemployed population 16+	541,944	285,955	255,989	136,924	405,020	309,138	232,806
16-24 yrs	191,268	88,926	102,343	37,436	153,833	96,202	95,067
25-34 yrs	167,775	78,738	89,037	56,860	110,915	82,019	85,756
35-54 yrs	154,650	100,964	53,686	34,541	120,110	107,638	47,013
55-64 yrs	25,665	15,748	9,917	8,088	17,578	20,921	4,744
65+ yrs	2,585	1,579	1,005	-	2,585	2,359	226

# Table C. 17: Unemployed population by sex, broad age group and urban/rural area, Feb-2019(Q1)

Table C. 18: Unemployed population by sex, level of educational, and urban/rural area, Feb-2019(Q1)

	Total	Sex		Area of Resid	lence	Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural	]	
Unemployed population 16+	541,944	309,138	232,806	136,924	405,020	309,138	232,806
None	223,569	127,363	96,206	24,136	199,434	157,441	66,129
Primary	152,030	78,144	73,886	31,178	120,851	102,273	49,756
Lower secondary	46,103	21,264	24,839	14,000	32,103	21,768	24,334
Upper secondary	81,230	40,813	40,416	38,315	42,915	25,436	55,794
University	39,013	18,371	20,641	29,294	9,718	2,220	36,793

		Se	x	Resid	ential area		Not
	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	participated in subsistence agriculture
Unemployed population who looked for a job	499,325	262,273	237,052	132,573	366,753	280,292	219,034
Arranging for financial resources, applying for permits, licences	58,106	23,225	34,881	21,227	36,879	32,771	25,335
Looking for land, premises, machinery, supplies, farming inputs	3,524	654	2,870	807	2,717	1,292	2,232
Seeking the assistance of friends, relatives or other types of intermediaries	138,948	71,023	67,926	37,401	101,548	70,076	68,872
Registering with or contacting public or private employment services	26,600	17,581	9,019	9,452	17,148	9,017	17,583
Applying to employers directly, checking at worksites, farms, factory gates, markets	240,089	134,119	105,970	41,005	199,084	160,397	79,691
Placing or answering newspaper or online job advertisements	24,650	12,635	12,015	16,286	8,364	5,256	19,394
Placing and updating resumes on professional or social networking sites online	7,408	3,036	4,372	6,396	1,012	1,481	5,927

Table C. 19: Unemployed population(who looked for a job) by sex, method of seeking employment, and urban/rural area, Feb-2019(Q1)

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

		Sex		Resi	dential area		Not
	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	participated in subsistence agriculture
Unemployed population 16+	499,117	262,273	236,844	132,364	366,753	280,292	218,825
Less than 3 months	217,757	118,237	99,520	42,257	175,499	136,530	81,227
Less than 6 months	136,203	79,762	56,441	30,387	105,817	78,484	57,719
Less than 12 months	50,195	22,143	28,052	16,349	33,846	24,496	25,699
1 year to less than 2 years	55,415	26,743	28,672	23,058	32,357	27,657	27,758
2 years and above	39,547	15,388	24,159	20,313	19,234	13,124	26,423

Table C. 20: Unemployed population(who looked for a job) by sex, duration of seeking employment, and urban/rural area, Feb-2019(Q1)

Table C. 21: Time related under employment by age group sex and area of residence, Feb-2019(Q1)

Age group		Se	ex	Residence area		
	Total	Male	Female	Urban	Rural	
Total	920342	447698	472644	111136	809206	
16-24 yrs	192,189	93,384	98,805	21,459	170,730	
25-34 yrs	338,586	154,159	184,426	34,147	304,439	
35-54 yrs	312,770	158,871	153,899	50,296	262,474	
55-64 yrs	57,773	24,789	32,983	4,305	53,467	
65+ yrs	19,024	16,494	2,530	927	18,096	

#### **APPENDIX D: SURVEY PERSONNEL**

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