The Republic of Rwanda

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NATIONAL INSTITUTE OF
STATISTICS OF RWANDA

Labour Force Survey Trends

-February 2018-

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Foreword

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

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

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

The ultimate goal of the labour force survey is to collect data on employment and labour underutilization characteristics of the population on a continuous basis, providing bi-annual estimates of the main labour force aggregates.

This report presents findings of the labour force surveys whose the data collection was conducted in February and March 2018, following other bi-annual labour fource survey rounds conducted by NISR since August 2016.

NISR congratulates all those who contributed in one way or the other in this exercise. In particular, NISR expresses its gratitude to the Government of Rwanda and the world bank for resourcing the survey under the programme for results, the Ministry of Public service and labour for the close collaboration thought out the survey and the Rwanda – German Development Cooperation for providing technical assistance by Farhad Mehran in the design and analysis of the survey as part of its technical cooperation project GIZ Eco-Emploi. Also, NISR expresses its gratitude to all survey coordinators, supervisors, team leaders, interviewers and drivers for their commitment in all stages of this survey. Finally, NISR is grateful to respondents who generously gave their valuable time to provide the information that forms the basis of this report.

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

Yusuf MURANGWA
Director General of NISR

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Executive summary

According to the survey results, the population 16 years and above continued its increasing trend from 6.7 million in February 2017 to 6.9 million in February 2018. During the same period, the employed population grew by around 78 thousand persons while the labour force grew by around 62 thousand persons.

Over the year, the unemployment rate in Rwanda slightly decreased by 0.7 percentage point from 16.7 in February 2017 to 16.0 percent in February 2018. The number of unemployed persons has declined by around 15 thousand persons between February 2017 and February 2018. Compared to the estimate of the previous round, it has decreased by 1.1 percentage point from 17.8 percent obtained in August 2017.

The employment to population ratio stood at 44.8 percent in February 2018 as compared to 43.4 percent in August 2017 and to 45 percent in February 2017.

The labour force participation rate observed in February 2018 was 52.4 percent and it has slightly increased compared to 51.9 percent observed in the previous round and slightly decreased by 0.6 percentage point as compared to the one of February 2017.

The proportion of the working age population out of the labour force in February 2018 was 46.6 percent, slightly higher than the estimate for February 2017 (46 percent). More than a half of the population outside the labour force, representing 25.7 percent of working age population, was exclusively involved in subsistence agriculture in February 2018; slightly lower than 26.3 percent of February 2017. The remaining population outside labour force were mainly enrolled in schools, or engaged in housework or family commitment.

Agriculture employment remained predominant with a proportion of 42.3 percent in February 2018 with an increase of 4.5 percentage point as compared to the previous round. The branch of economic activity with the next highest number of employed persons was trade (14.4 percent) followed by construction (9.0 percent) and activities of households as employers of domestic personnel (6.8 percent). The sectors represent almost the same percentage as compared to the previous round except the "Wholesale, retail trade, repair of motor vehicles, motorcycles" for which the number of employed persons declined by 2 percentage point as compared to the previous round. The results show that even though employment in the agriculture sector is gaining in absolute terms compared with the previous round, there is a decline in relative terms, from 3.6 percentage point observed in February 2017.

The full count of agriculture activities including agriculture employment and subsistence foodstuff production reveals that in February 2018, around 3,988,000 people, representing 58 percent of working age population, were engaged in agriculture activities in one way or the other.

The proportion of market oriented agricultural in total agriculture was 38 percent in February 2018 and it has decreased by 1.0 percent point compared to the corresponding proportion in February 2017. It has also decreased by 1.7 percentage point among females while it has slightly increased by 0.4 percentage point among males

The share of agricultural work in the total workforce (employment + subsistence agriculture) has decreased by 4 percentage point from 68 percent in February 2017 to 66 percent in February 2018.

The labour force survey results show that employment increased in most occupation categories between August 2017 and February 2018. The largest increase was recorded in workers in elementary occupations (121 000), machine and plant operators and assemblers (13, 000), and craft and related trade workers (9,300). The number of persons employed in services and sales worker, technicians and associate professionals declined by about 9000 and 8 600 persons, respectively as compared to the previous round.

A year-to-year comparison shows a continuous decline in the number of technicians and associate professionals.

Chapter 1: Introduction

The Rwanda Labour Force Survey (LFS) is conducted by the National Institute of Statistics of Rwanda every six months since August 2016. 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 needed 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.

This survey is conducted among private households, in both urban and rural areas of Rwanda.

The survey uses a rotation sample scheme with a sample size of 9,344 households per round, selected by means of a stratified two-stage probability design based on information from the 2012 Population and Housing Census; This information was updated at the second stage of sampling with fresh listing of new enumeration areas. The resulting estimates of the main labour force indicators at the national level have standard errors of about 0.6 percent.

The focus of the present report is the analysis of the 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. In addition to this report, another comprehensive annually report which will include estimates at district level is envisaged to be produced after pulling together the results of the February and August 2018 rounds of the survey.

The survey results analyzed in this report are presented under seven chapter including this introduction, historical trend, labour force participation, employment, unemployment and labour underutilization, population outside labour force and work in agriculture.

Chapter 2: Historical Trends

2.1. Working age population

Figure 2.1 shows the evolution of working age population and its components over time. In Rwanda, working age population is defined as those who are aged 16 years old or above. According to presented results, the working age population has increased at slightly different pace over time. In February 2018, it was estimated at 6,903,839 while it was 6,812,977 in August 2017. The calculated increase between those two periods is 0.7 percent, while the corresponding increase between February 2018 and August 2018 was 0.8 percent and the one between August 2016 and February 2017 was 0.9 percent.

The population in the labour force constitutes the majority of working age population and it shows a slightly increasing trend over time with small fluctuations between high and low season of agriculture.

The population in working age who are outside the labour force does not have the same statuses. Some are involved in subsistence agriculture, other are students etc. As shown in the figure below a substantial part of the population outside the labour force is involved in foodstuff production for own use. The historical pattern of population in this category which makes around a quarter of working age population is the same as the labour force.

The number of students not involved in any economic activity is slightly increasing over time, according to the results. From February 2017 to February 2018, this number increased by 40,700 students. The proportion of students in working age population was estimated at 9.6 percent in February 2018 while it was 9.3 percent in February 2017.

The remaining part of working age population outside the labour force consists of elderly persons, disables, and discouraged jobs seekers, etc. Their proportion seems to be higher during the low agricultural season (August) as compared to high agriculture season (February).

Figure 2. 1: Main components of working age population (,000s)
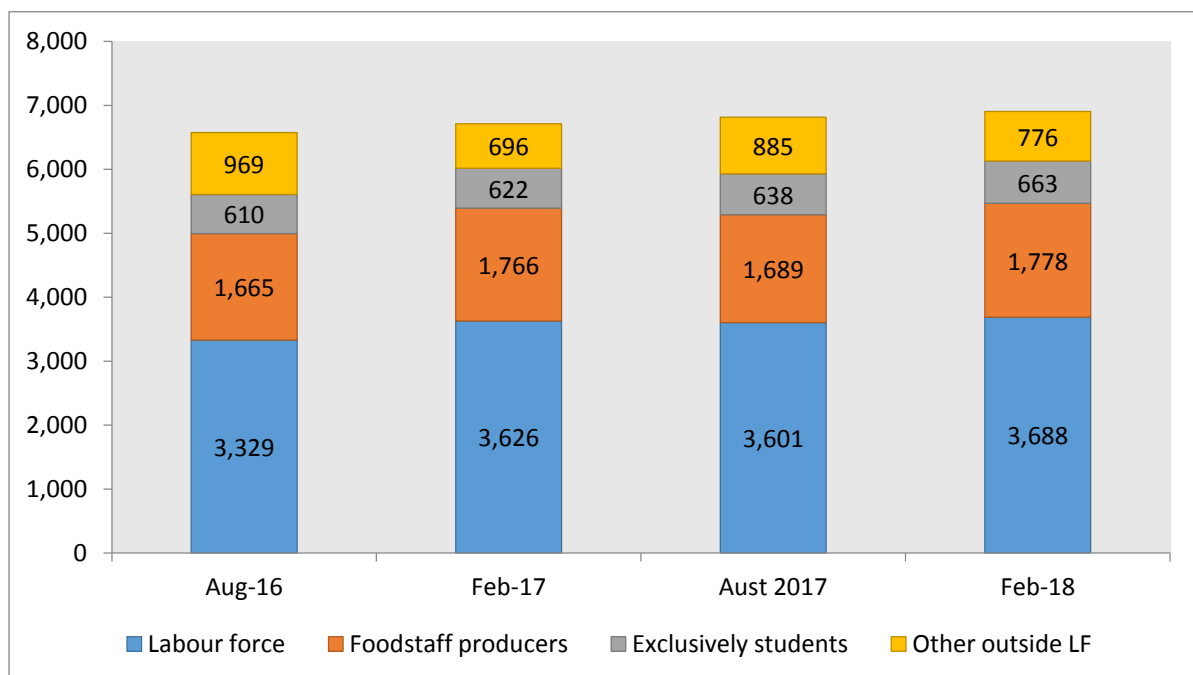
2.2. Labour force participation rate, employment to population ratio and unemployment rate

The sample design of labour force survey presents an advantage for estimating trend of labour market indicators with a higher precision due to the rotational design of the LFS sample. The present chapter provides information on historical trend of estimates of main indicators from the labour force survey since the first round conducted in August 2016. The present round is the fourth and was conducted from February to March 2018.

Figure 2.1 below illustrates the historical trends of some main labour force indicators. The results show that the unemployment rate fluctuates across low and high season of agriculture with a slight decreasing trend over time. It decreased from 18.8 percent in August 2016 to 17.8 percent in August 2017 and from 16.7 percent in February 2017 to 16 percent in February 2018. It is important to remind that August is a low season period of agriculture activities while February corresponds to a relatively high agriculture period. The employment to population ratio and labour force participation rate have the similar patterns over time. Both indicators have increased between August 2017 and August 2018 but registered a slight decrease between February 2017 and February 2018.

Figure 2. 2: Historical trend of LFPR, EPR and UR
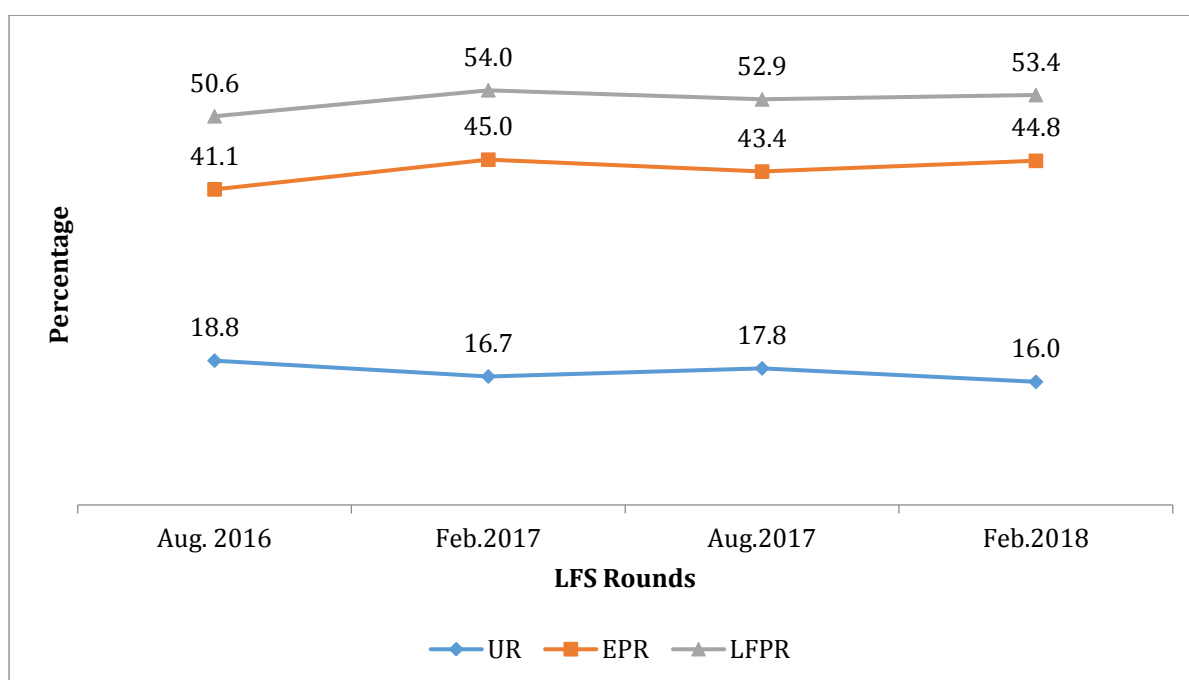
Source: LFSs

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

2.2. Foodstuff production participation rate

Figure 2.1 above shows a relatively low labour force participation rate which reflects the relatively high share of persons outside labour force. However, all population outside the labour in Rwanda are not necessary inactive. In Rwanda, there is a substantial number of working age persons who are involved in subsistence agriculture and consequently excluded in the labour force according to the 2013 international standards on statistics of work, employment and labour underutilisation.

Figure 2.2 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 from the figure that the rate of participation in subsistence foodstuff production fluctuates across high and low seasons of agriculture: it is higher in August and lower in February. The comparison of the same period in two consecutive years reveals a decreasing rate in subsistence foodstuff production. It decreased by 0.5 percentage point from August 2016 to August 2017 and by 0.6 percentage point from February 2017 to February 2018.

Figure 2. 3: Historical trend of ffoodstuff production participation rate
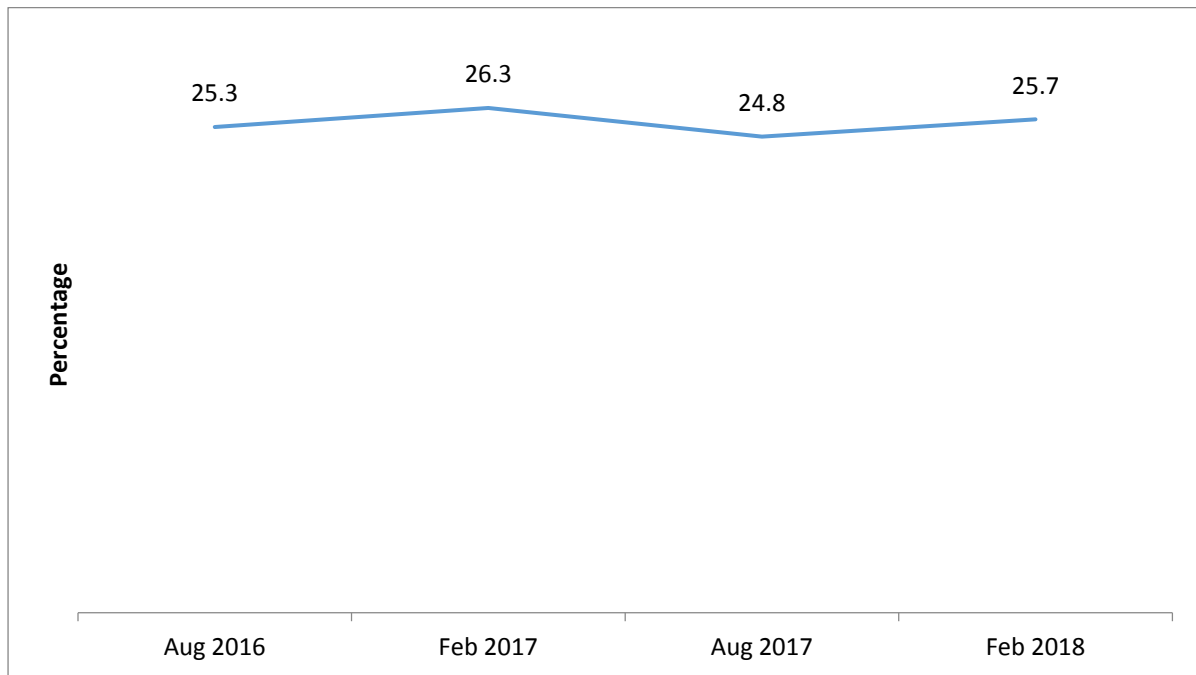
Source: LFSs

2.3. Labour underutilization rates

Unemployment is a particular form of labour underutilization. Potential labour force together with time-related underemployment and unemployment are different dimensions of labour underutilization. In addition to the unemployment rate and time-related underemployment rate, other underutilization components are the combined rate of unemployment and time-related underemployment (LU2) and the combined rate of unemployment and potential labour force (LU3). Finally, LU4 is the composite measure of labour- underutilization which is the ratio of the sum of people in time-related underemployment, those in unemployment and those in potential labour force to the extended labour force (the sum of labour force and potential labour force).

The results presented in figure 2.3 reveals that the trend has been decreasing over time for most of the components of labour underutilization (LU2, LU3 and LU4). The overall underutilization rate, however, decreased by around 6 percentages points from 62.3 percent in August 2016 to 56.0 percent in February 2018. The year-to-year comparison shows that there has been a decrease of 4 percentage point between August 2016 and August 2017 and a decrease of 2 percentage point between February 2017 and February 2018.

LU3, which is the ratio of persons in unemployment and those in potential labour force to the potential labour force, has slightly decreased by 0.7 percentage point between February 2017 and February 2018. Similarly, LU2 decreased by 2 percentage point from 40 percent in February 2017 to 38 percent in February 2018.

The trend of time-related underemployment rate is however different from that of the other underutilisation components. While other components show a decreasing trend between August 2017 and February 2018, the time-related underemployment rate increased by 1.5 percentage point between the same period, and it stayed unchanged as compared to the estimates found in February 2017 (30 percent).

Figure 2. 4: Historical trend of labour underutilization rates
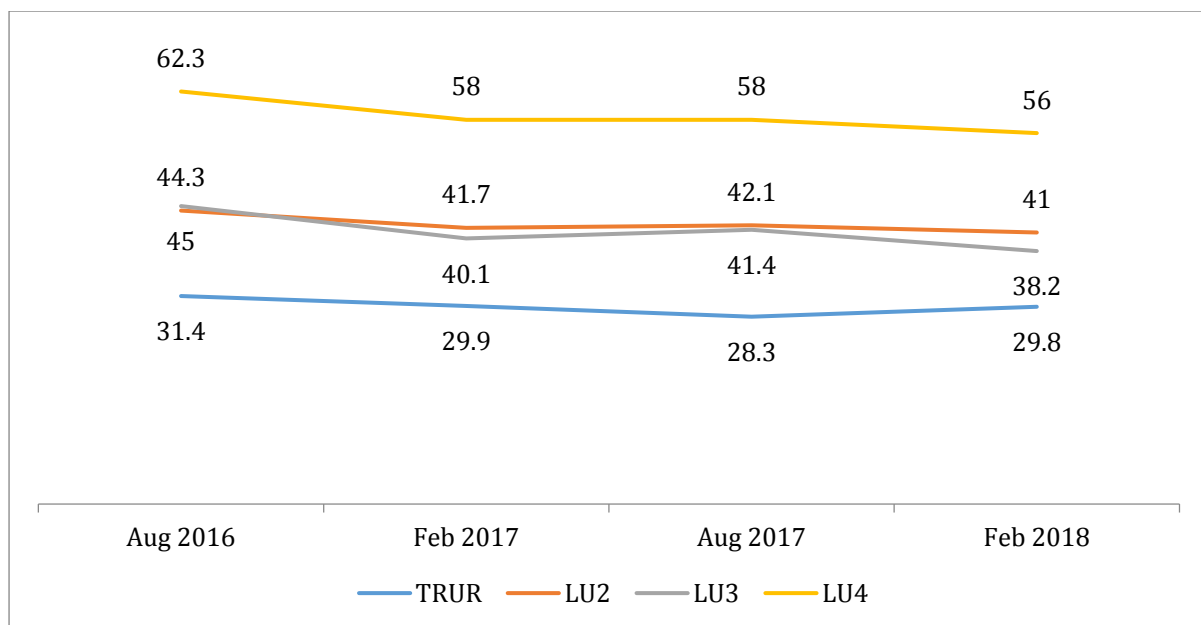
Source: LFSs

2.4. Population outside labour force

Figure 2.4 presents the trend of the proportion of working age population who are outside the labour force according to different categories of persons outside labour force. According to the results, the proportion of the working age population outside the labour force has decreased from 49.4 percent in August 2016 to 46.0 percent in February 2017. It has then slightly increased to 47.1 percent in August 2017 but decreased again to 46.6 percent in February 2018. Available non-job seekers constitute an important category of the population outside labour force. It represented 19 percent of the working age population in February 2018 as compared to 21 percent in August and February 2017 and 24 percent in August 2016.

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 the working age who are discouraged workers seems to be higher in low agriculture season as compared to the high agriculture season and it has a downward year-to-year trend. It has decreased from 17.2 percent to 16.1 percent from

August 2016 to August 2017 and from 15 percent in February 2017 to 13.5 percent in February 2018.

Figure 2. 5: Ratio of population outside labour force to working age population
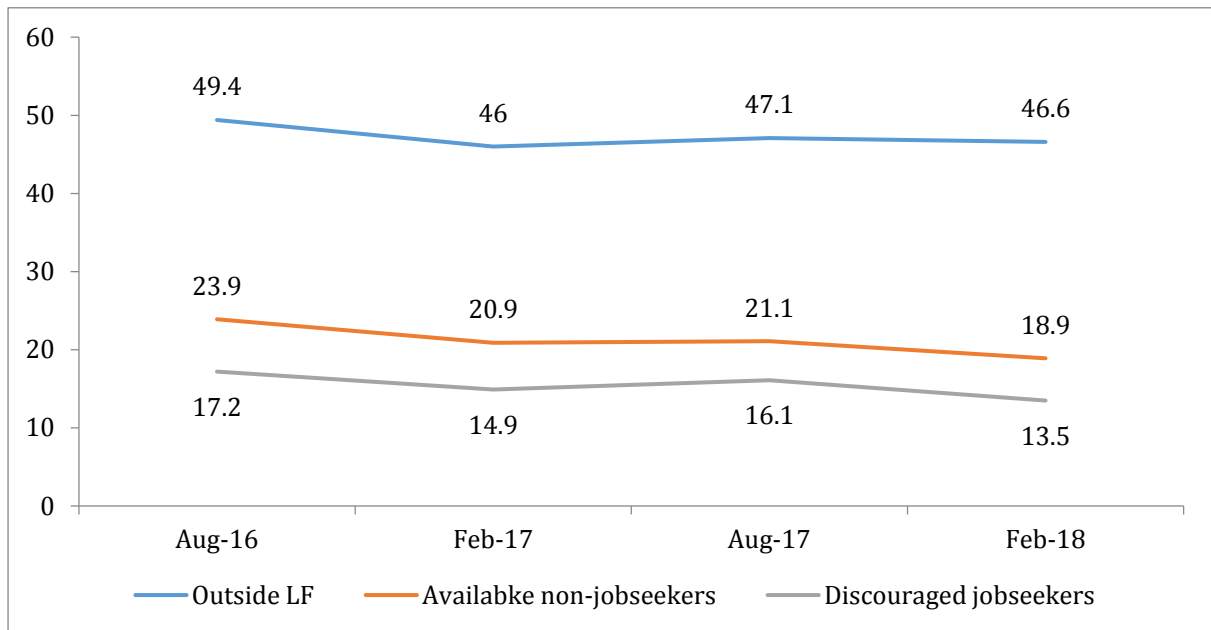
Source: LFSs

Chapter 3: Labour force participation

3.1. Labour force participation and sex

The labour force participation rate was 53.4 percent in February 2018 and remained relatively unchanged though with a slight increase of 0.5 percentage point compared to the August 2017 round. Year-to-year comparison shows that the labour force participation rate has declined by 0.6 percentage points. Changes in labour force participation rates are more pronounced among females than among males. The labour force participation rate has decreased by 1 percent point from Feb 2017 to February 2018 among females while among males it has decreased by only 0.1 percent point during the same period.

Figure 3. 1: Change in the labour force participation rate by sex
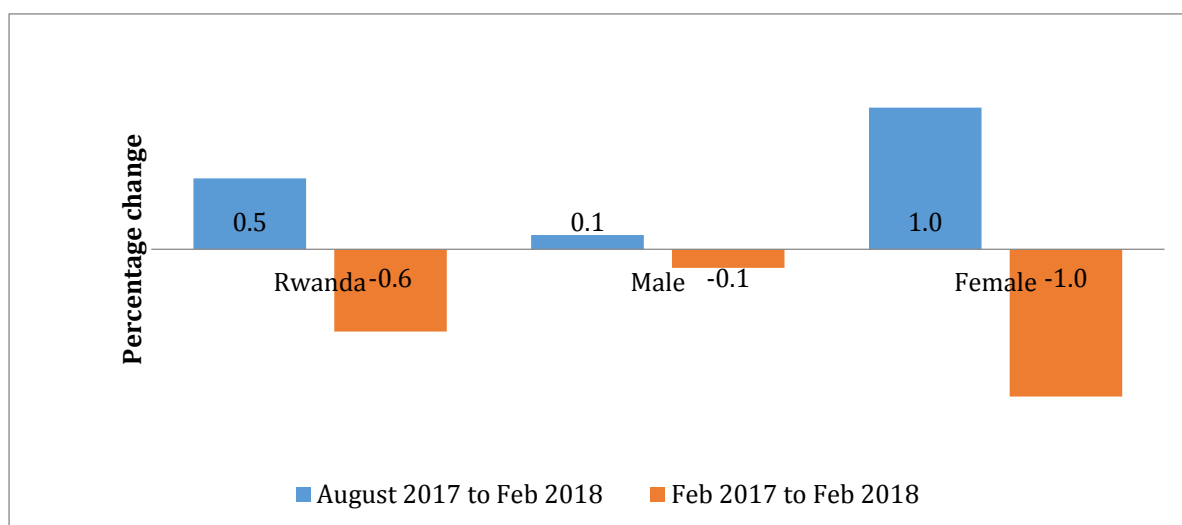
Source: LFSs

3.2. Labour force participation and education

The analysis of the labour force participation rate (LFPR) by the educational attainment of the individuals shows that the labour force participation rate is higher among educated person compared to less educated person. Generally, compared to the previous round, the LFPR increased slightly in all education level, except for persons with upper secondary education. The year-to-year comparison reveals an upward trend for all levels of education, except for lower secondary for which the labour force participation rate decreased by 3 percentage point from 38 percent in February 2017 to 35 percent in February 2018. The low level of labour force participation rate among holders of the lower secondary is due to the fact that some of them are still enrolled in schools. The exclusion of the population who were enrolled in school during the survey in the calculation labour force participation rate has an impact of increasing the February 2018 labour force participation rate of lower secondary school graduates by around 30 percentage points.

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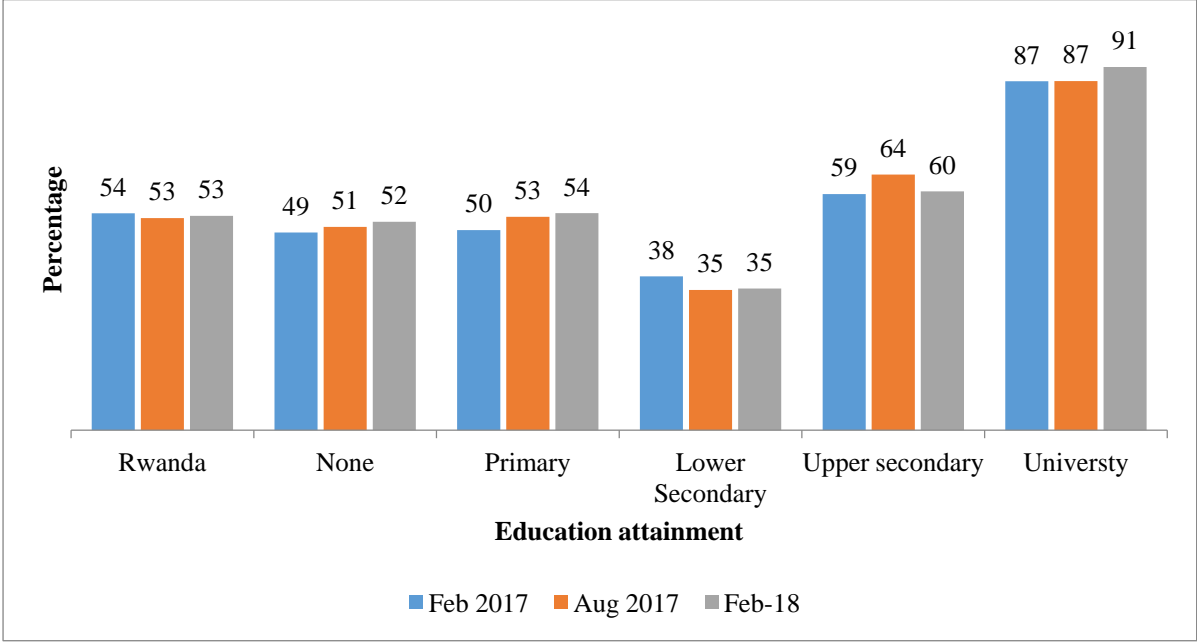
Source: LFSs

3.3. Labour force participation and age

The labour force participation rate among people aged 31 to 54 years old was higher than the overall labour force participation rate (66.0 percent compared to 53.4 percent at the national level).The labour force participation rate among youth 16-30 years old was 51.1 percent, slightly lower than the national average. The labour force participation rate has increased by 3 percentage point from 26 percent in August 2017 to 29 percent in February 2018 among adult person aged 55 years old and above. The year-to-year comparison of labour force participation rate by age group reveals that it has been almost stable over time regardless of age group.

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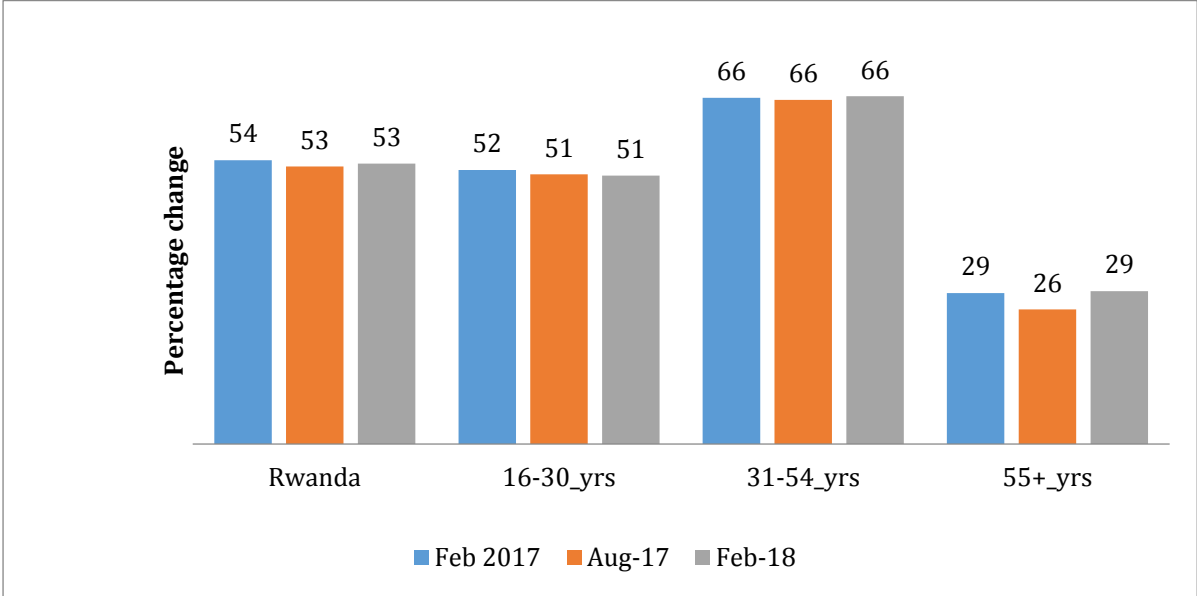
Source: LFSs

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 is higher in urban areas compared to rural areas with very little annual variations among survey rounds in both urban and rural areas.

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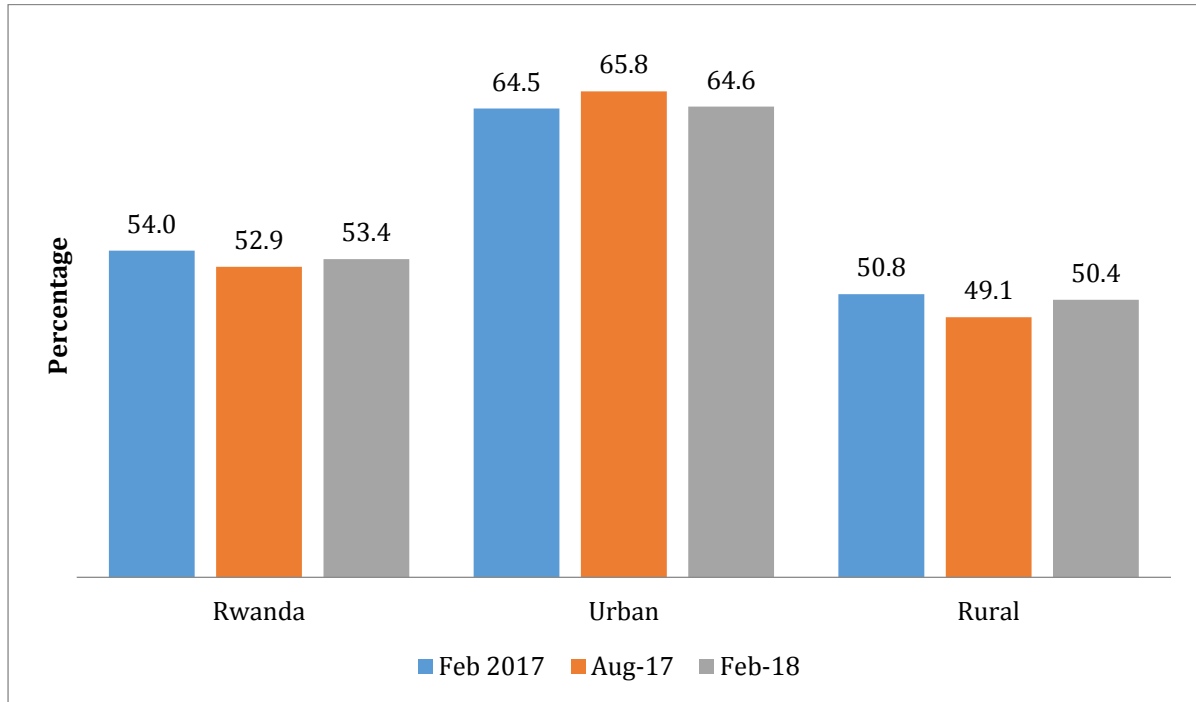
Source: LFSs

Chapter 4: Employment

4.1. Employment to population ratio

The analysis of employment trends over three consecutive rounds of the labour force survey in February 2017, August 2017 and February 2018 reveals that the number of employed persons decreased as we move from February to August rounds and increased on the other way around. In February 2018, the number of employed persons was 3,096,278 while it was 2,959,965 in Aug 2017 and 3,018,532 in Feb 2017. These changes can be attributed to agriculture seasonality of Rwanda whereby February is the high season of agriculture, where a lot of people are involved in agricultural activities rather than in August which is considered as a low season of agriculture activities.

Figure 4.2 presents the employment-to-population ratio by area of residence. It is observed that the employment-to-population ratio varied according to the seasonality of economic activities; it was higher in February relative to August at the national level as well as in rural areas. By contrast, it decreased from 45.0 percent in February 2017 to 43.4 percent in August 2017 and again it increased in February 2018 (44.8 percent) at the national level. On the other hand, it is observed that in urban areas of Rwanda, the employment-to-population ratio decreased to 53.2 percent compared to the previous round. The year-to-year comparison shows little variation in the employment to population ratios.

Figure 4. 1: Employment to population ratio by area of residence
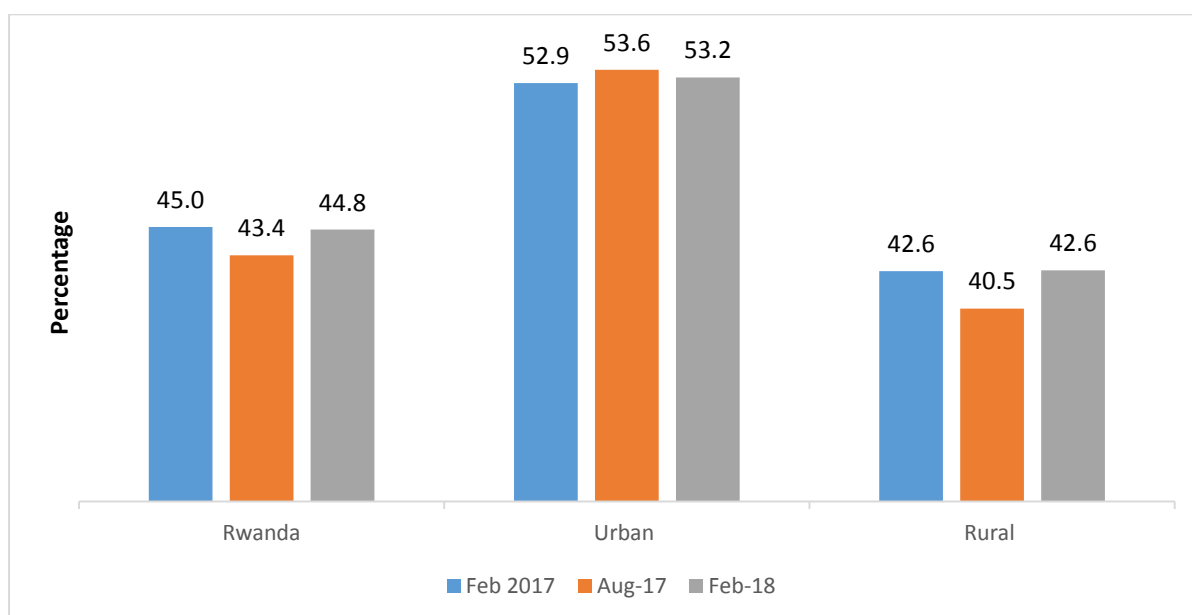
Source: LFSs

The change in the employment-to-population ratio is more pronounced among females, where the rate increased by 2.5 percentage point compared to the previous round from 35.0 to 37.5 percent. A year-to-year comparison shows that the female employment-to-population ratio declined by almost one percent. Variations among males and females are very small but males are supplying more to the labour market compared to females.

Figure 4. 2: Employment to population ratio by sex
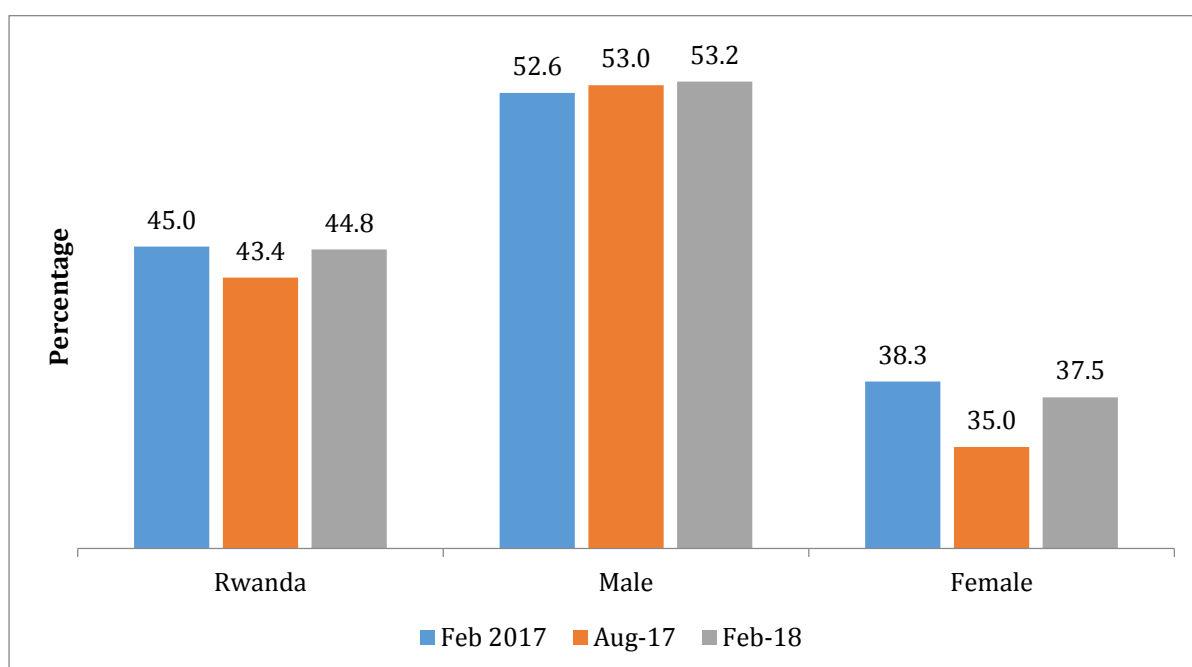
Source: LFSs

4.2. Status in employment

It is observed that the share of employees in paid jobs in total employment has increased as compared to the previous round by about 2.4 percentage points. The year-to-year comparison shows a slight increase of employment mostly due to the increase in the number of own account workers (1.7 percent). The other categories of status in employment show a decline in the proportion of the total number of employed persons.

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

Status in employment	Feb-17	Aug-17	Feb-18	August 2017 to Feb 2018		Feb 2017 to Feb 2018	
	Estimate			Change			
Total	**100**	**100**	**100**		**-**		**-**
Employee,paid apprentice/intern	71.8	68.1	70.5		2.4	-	1.2
Employer	1.3	1.4	1.2	-	0.3	-	0.1
Own-account worker	22.5	25.6	24.2	-	1.5		1.7
Member of cooperative	0.5	0.4	0.1	-	0.3	-	0.4
Contributing family worker	3.9	4.4	4.0	-	0.4		0.1
Other	0.0	0.0	0.0	-	0.0	-	0.0

4.3. Main occupation

Employment increased in five of 9 major occupations; the highest increase (more than one percent) was recorded in elementary occupations (1.5 percent). However, there has been a decline of in percentage of 1.1 percent among persons employed as service and sales workers.

The year-to- year changes reflect the employment gains recorded in 5 of the 9 major occupations with the largest observed increase observed for skilled agricultural workers (1.3 percent), and the highest decline of 1.6 percent for workers in elementary occupations.

Table 4. 2: Changes in percentage distribution of employed population by major occupation group

Major Occupation Group	Estimate			Change	
	Feb-17	Aug-17	Feb-18	August 2017 to Feb 2018	Feb 2017 to Feb 2018
Total	100.0	100.0	100.0	-	-
Legislators, Managers and Senior Officials	1.3	1.5	1.2	-0.3	-0.1
Professionals	5.6	6.3	6.3	0.0	0.7
Technicians and Associate Professionals	1.6	1.4	1.0	-0.3	-0.5
Clerical Support Workers	1.0	0.9	1.0	0.1	-0.0
Service and Sales Workers	17.2	19.2	18.1	-1.1	0.9
Skilled Agricultural, Forestry and Fishery Workers	5.4	6.9	6.7	-0.2	1.3
Craft and Related Trades Workers	8.2	7.5	7.5	0.0	-0.8
Plant and Machine Operators and Assemblers	2.7	2.5	2.8	0.3	0.1
Elementary Occupations	57.0	53.9	55.4	1.5	-1.6

4.3. Main Economic activity

Among the 21 branches of economic activities shown in the above table, it is observed that an increase of the share of employed persons can be observed in 10 branches of economic activities. The largest increase is in agriculture, forestry and fishing with 4.5 percent as compared to the previous round. Other sectors like administrative and support service activities, manufacturing and activities of households as employers show a relative low increase of less than one percent point each.

On the other hand, there has been a decrease in wholesale, retail trade, repair of motor vehicles motorcycles (2.1 percent), construction (1.2 percent), and other sectors like public administration and defense, education. Some others also show a decline which is less than one percent each.

Year-to- year changes (February 2017 to February 2018) show an increase among 16 of 21 main branches of economic activity. Among all sectors, the increase of more than one percent

was observed in manufacturing (1.6 percent) and construction (1.1percent). The highest decline of 3.6 percentage point was observed in agriculture, forest and fishing.

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

Indicators	Estimate			Change	
	Feb- 2017	Aug-2017	Feb- 2018	August 2017 to Feb 2018	Feb 2017 to Feb 2018
Total	3,018,532	2,959,965	3,096,278	136,313	77,746
	100	100	100	4.6	2.6
Agriculture, forestry and fishing	45.9	37.8	42.3	4.5	-3.6
Mining and quarrying	1.3	1.8	1.8	0.0	0.5
Manufacturing	4.5	6.1	6.2	0.1	1.6
Electricity, gas, steam and air conditioning supply	0.3	0.3	0.3	-0.1	-0.1
Water supply, sewerage and waste management	0.3	0.4	0.3	-0.1	0.0
Construction	7.9	10.3	9.0	-1.2	1.1
Wholesale, retail trade, repair of motor vehicles, motorcycles	14.9	16.5	14.4	-2.1	-0.6
Transportation and storage	4.3	4.0	3.8	-0.2	-0.5
Accommodation and food service activities	1.3	1.6	1.8	0.2	0.5
Information and communication	0.3	0.5	0.5	0.1	0.3
Financial and insurance activities	0.8	0.7	0.7	0.0	0.0
Real estate activities	0.1	0.1	0.1	0.0	0.0
Professional, scientific and technical activities	0.7	0.9	0.6	-0.2	0.0
Administrative and support service activities	1.5	1.0	1.5	0.5	0.0
Public administration and defense	1.8	2.4	1.9	-0.5	0.2
Education	3.5	3.9	3.5	-0.5	0.0
Human health and social work activities	1.5	1.8	1.6	-0.2	0.0
Arts, entertainment and recreation	0.2	0.5	0.3	-0.2	0.1
Other service activities	1.5	2.1	1.9	-0.3	0.4
Activities of households as employers	7.1	6.8	6.8	0.0	-0.3
Activities of extraterritorial organizations and bodies	0.2	0.6	0.6	0.1	0.4

Source: LFSs

Chapter 5: Unemployment and Labour under utilization

Unemployment is a particular form of labour underutilization. It reflects the pressure on the labour market as it is measured in terms of the number of persons without employment, actively seeking and available for employment. Labour underutilization is a more general concept. It refers to mismatches between labour supply and demand, which translate into an unmet need for employment among the population. Labour underutilization includes unemployment, time-related underemployment, and 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 LFS results of the February 2018, the unemployment rate in Rwanda was 16.0 percent compared to 17.8 percent in August 2017. It has slightly decreased by about 0.7 percentage point from 16.7 percent observed in February 2017. The unemployment rate has declined among males in all rounds of LFS while it fluctuated for females with higher rates in August as compared to the males' rates. This may indicate that it is easier for males to find alternatives jobs during off-agriculture season than for females. The analysis of the changes of the male and female unemployment rates between February 2017 and February 2018 reveals that males experienced an unemployment rate decrease of around 1.1 percentage point while it stayed relatively the same for females with a decrease of about 0.2 percentage points. The unemployment rate was higher in urban areas compared to rural areas in Rwanda and showed a decline of 2 percentage point in rural area as compared to the previous round. The year-to-year comparison shows that the unemployment rates decreased in both urban and rural areas with a higher decrease in rural areas as compared to urban areas

Figure 5. 1: unemployment rate by sex and by residential area
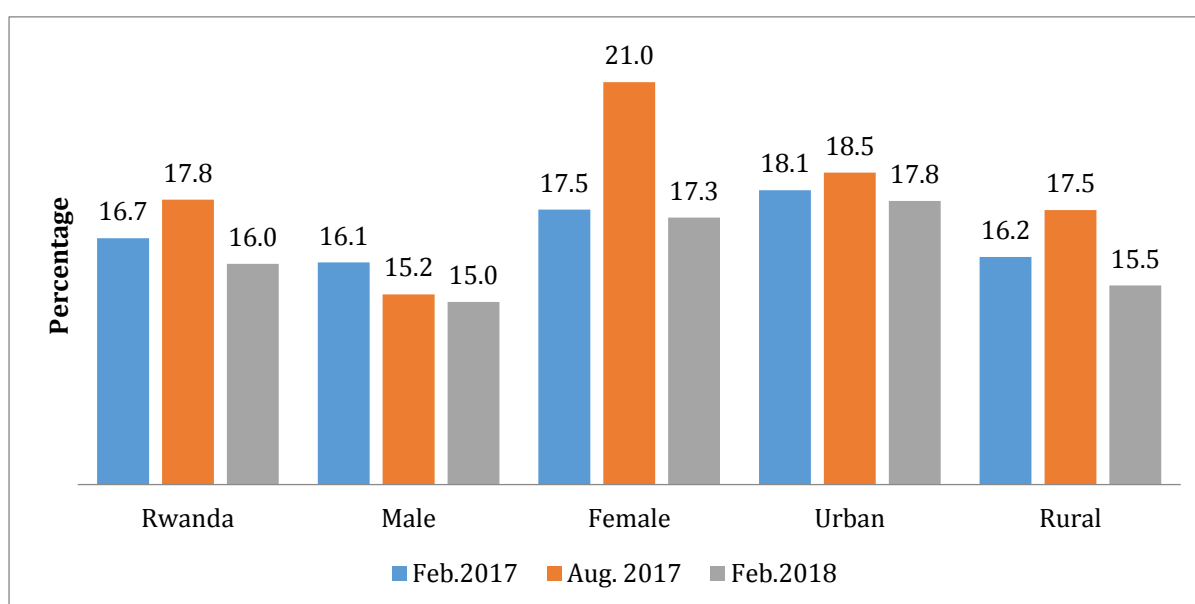
Source: LFSs

The analysis of the trend of the unemployment rate by province reveals that the unemployment rate has declined compared to the previous round of LFS in all the provinces with the exception of the Northern Province where it increased by 1.4 percent. The highest decline of the unemployment rate was found in the Western Province where the unemployment rate fell from 25 percent in August 2017 to 16.6 percent in February 2018. Despite the increase in its unemployment rate compared to the previous round, the Northern Province achieved a high unemployment rate decrease of 6.2 percentage point between February 2017 and February 2018. In the same way, the Western Province registered a high decrease of the unemployment rates of 5.6 percentage point during the same period. On the other hand, the unemployment rate increased in the Eastern Province, the City of Kigali and the Southern Province between February 2017 and February 2018.

Figure 5. 2: Unemployment rate by Province
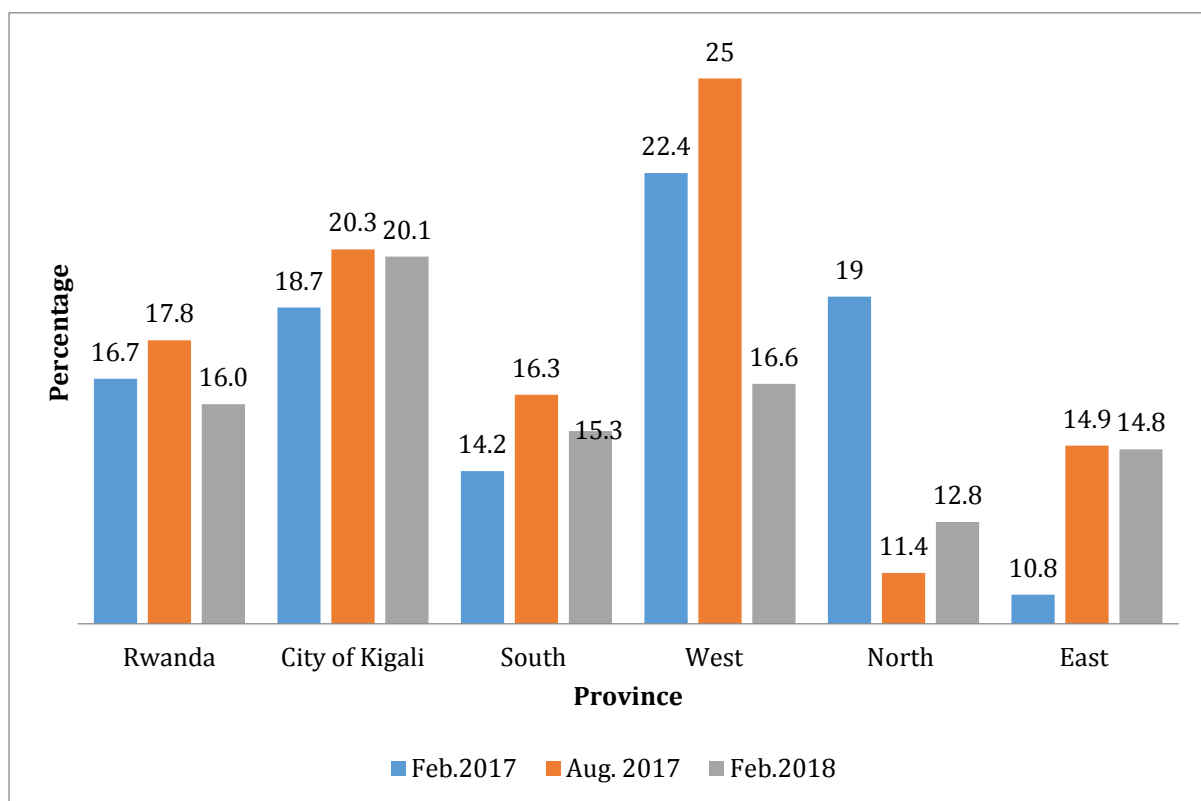
Source: RLFS

In Rwanda, the youth population is defined as young person's 16 to 30 years of age. Figure 5.3 shows the trend in the unemployment rate for selected age groups and compares the youth and adult unemployment rates. It shows that the unemployment rate for youth aged 16-30 is relatively higher than the adults'. The young unemployment rate decreased by 1.3 percentage point from 21 percent in February 2017 to 19.7 percent in February 2018 while the rate for adults (31+ years old) remained stable at 23 percent during the same period.

In the same way, a year-to-year comparison shows a decline of the unemployment rate by 1.4 percentage point in the age group 25-44 yrs and slight declines in other age group categories of adult population (31 years and above).

Figure 5. 3: Unemployment rate by selected age groups
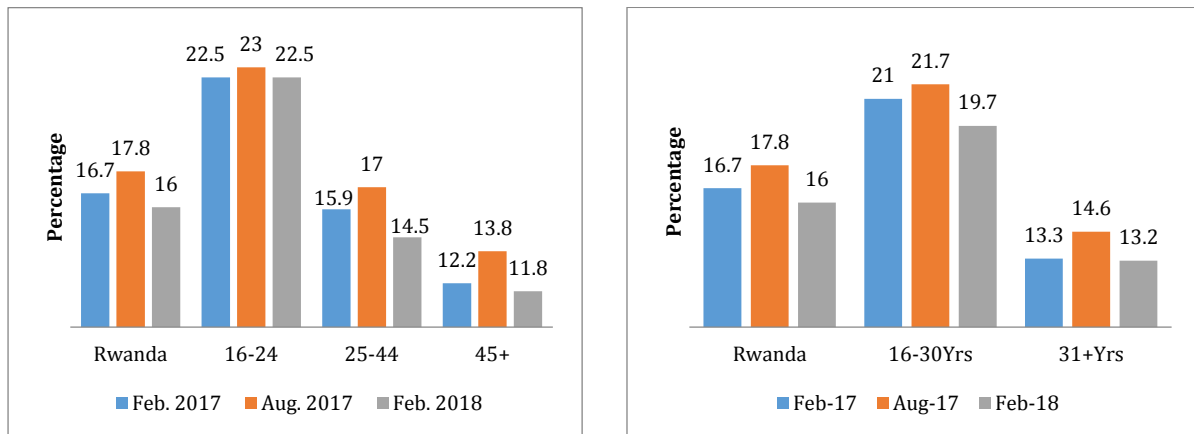
The round-to-round comparison of the changes of the unemployment rate for selected age groups shows that the unemployment rate has gone down in all selected age groups with the greatest decline of 3.5 percentage point among person aged 25-44 years old.

5.2. Youth and young not in employment, education or training

Participation in employment, education or training is important for youth in their transition to the labour market and to achieve self-sufficiency. In Rwanda the official definition of youth includes persons aged 16 to 30 years old, however the age group 16 to 24 years old has also considered in this analysis. The full count of all youth aged 16 to 30 years old not in employment nor in education or training was 1,0670,850 of which 669,784 were aged 16 to 24 years old in February 2018.

The share of youth (16-24 years old) neither in employment nor in education or training (NEET) stood to 32.2 percent in February 2018 and has slightly increased by 0.3 percent point compared to the previous round. The round-to-round increase was more pronounced among youth living in urban areas. It increased from 20.4 percent in August 2017 to 24.0 percent in February 2018. The year-to-year comparison shows that the share of NEET among youth aged 16 to 24 years old has increased by 1.3 percentage points.

The results presented in the same table reveal that the NEET for youth aged 16 to 30 years old was 34 percent in February 2018 and no noticeable variations could be observed among in the different rounds of the LFS conducted from February 2017 to February 2018.

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

Age group and sex		Estimate			Change	
		Feb- 2017	Aug- 2017	Feb- 2018	Aug. 2017 to Feb 2018	Feb 2017 to Feb 2018
16-24	Total	30.9	31.9	32.2	0.3	1.3
	Male	24.8	25.5	25.6	0.1	0.8
	Female	36.5	38	38.2	0.2	1.7
	Urban	20.7	20.4	24	3.6	3.3

Age group and sex		Estimate			Change	
		Feb- 2017	Aug- 2017	Feb- 2018	Aug. 2017 to Feb 2018	Feb 2017 to Feb 2018
	Rural	34.6	35.8	34.7	-1.1	0.1
16-30	Total	33.8	33.8	33.9	0.1	0.1
	Male	26	25.2	25.2	0	-0.8
	Female	41.1	41.9	42	0.1	0.9
	Urban	24.1	25.3	25.3	0	1.2
	Rural	37.5	36.7	36.7	0	-0.8

Source: LFSs

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 5.4 below shows that the combined labour underutilization rate stood at 56.6 percent in February 2017 and has declined from 58.0 percent as compared to the previous round at the national level. It was higher among females and among people living in rural areas of Rwanda.

The rate has increased among males by almost 10 percentage point as compared to the previous round while it has decreased by 2 percentage point among females.

A year-to-year comparison shows that the labour underutilization rate of males has increased from 51 percent in February 2017 to 59 percent in February 2018, while the rate of females decreased by 1 percentage point from 65 percent to 64 percent during the same period.

There has been 3 percentage point decline of the labour underutilization rate in urban areas and 2 percentage point decline in rural areas.

Figure 5. 4: Labour under-utilization rate by sex and residential areas

Source: LFSs

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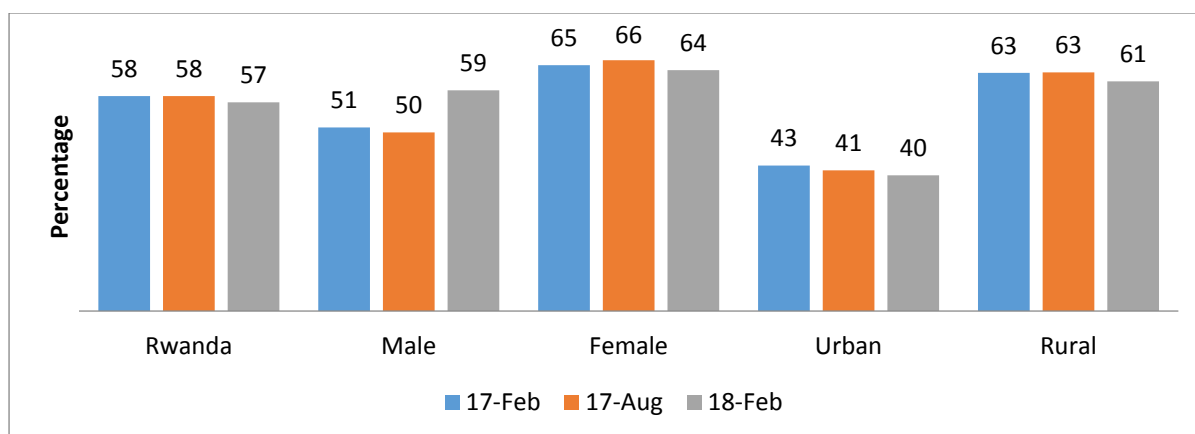
Figure 5.5 presents the trend in the labour underutilization rate by province. The round-to--round changes show that the rate of labour underutilization has declined in the West and North Provinces by 7 and 2 percentage point respectively. It can also be observed that the labour underutilization rate has remained relatively constant in the City of Kigali and in the East province, but an increase in South Province.

The year-to-year changes reveal that the labour underutilization rate has increased by 4 percent points in the Southern Province and by 1 percentage point in the Eastern Province. In the City of Kigali, it remained unchanged while idecreased by 4 percentage point in the Northern Province and 2 percentage point in the Western Province.

Figure 5. 5: Trend in labour underutilization by province
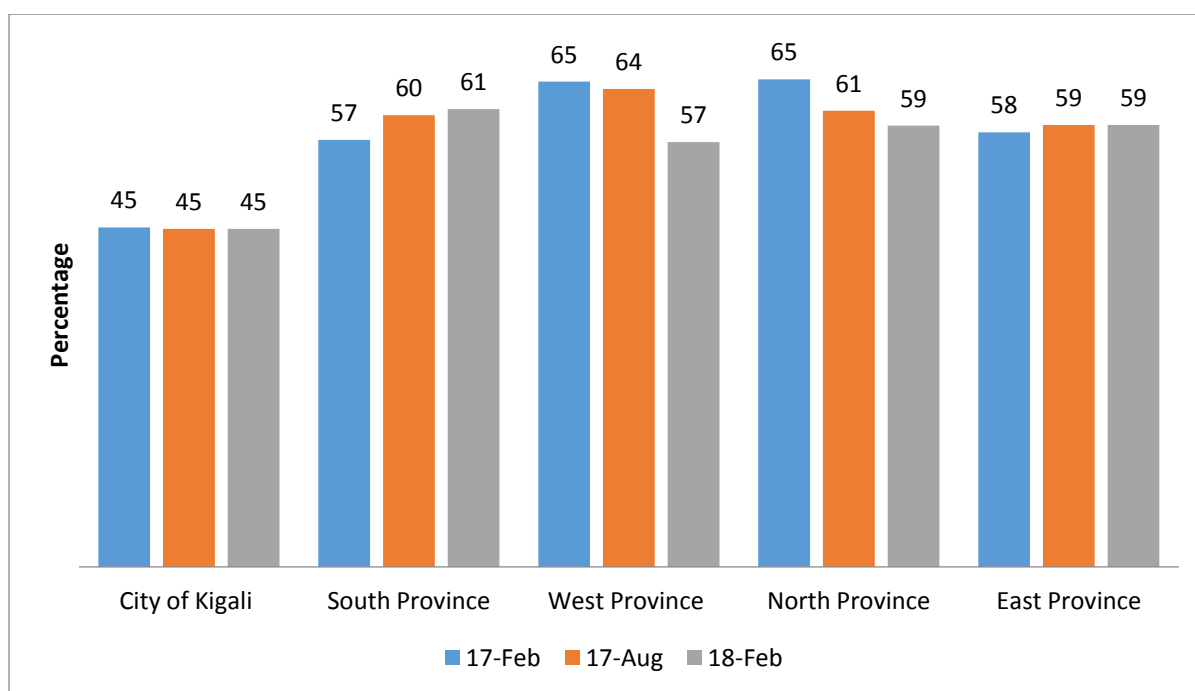
Figure 5.6 presents the labour underutilization rate by age group. According to the results, it can be observed that the labour underutilization rate decreased by 1 percentage point between February 2017 and February 2018 among young people aged 16 to 30 years old while it increased by the same level for youth aged 16-24 years old. For adults, the rate has declined by 2 percentage point in the same period.

The labour underutilization rate according to selected age group has been declining compared to the estimated rate in the previous survey round except for the youth (16-24 years old) for which it increased by 1 percentage point.

Figure 5. 6: Trend in labour underutilization rate by selected age group
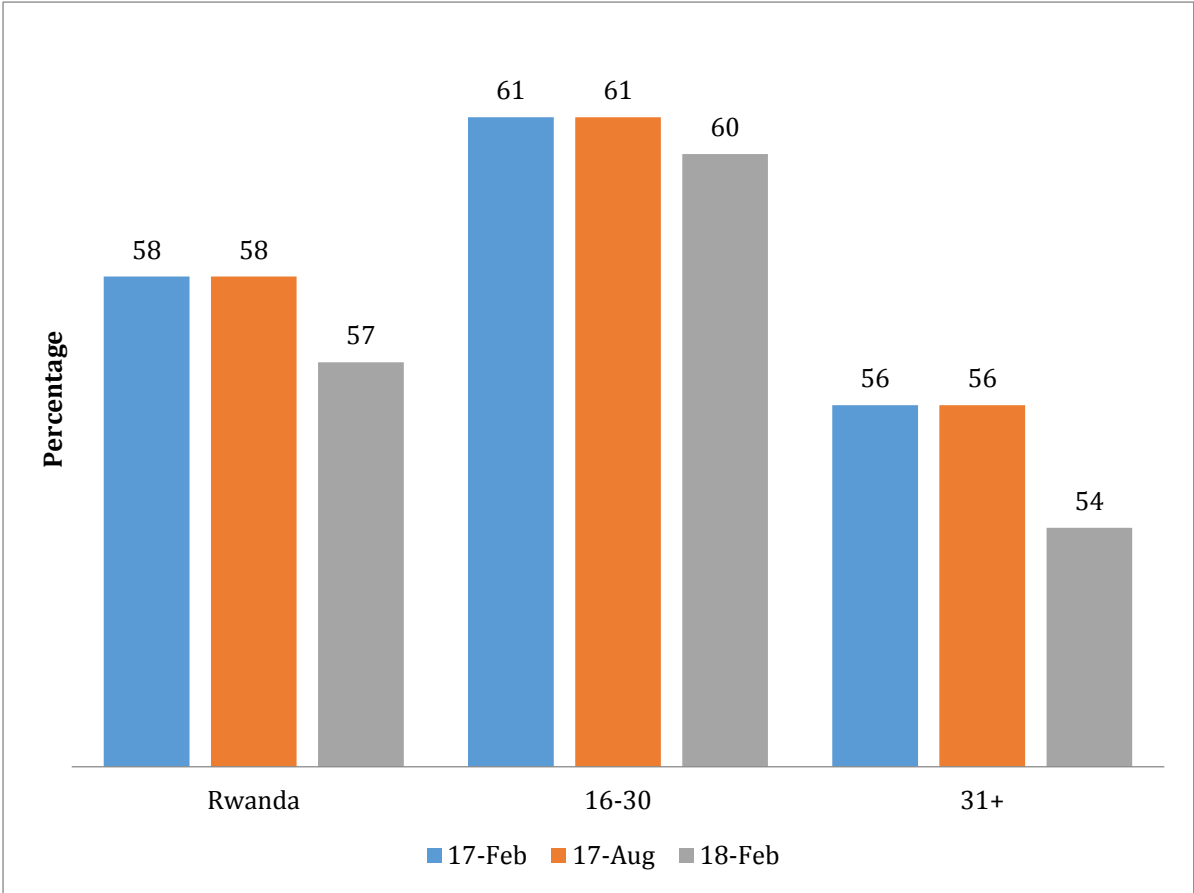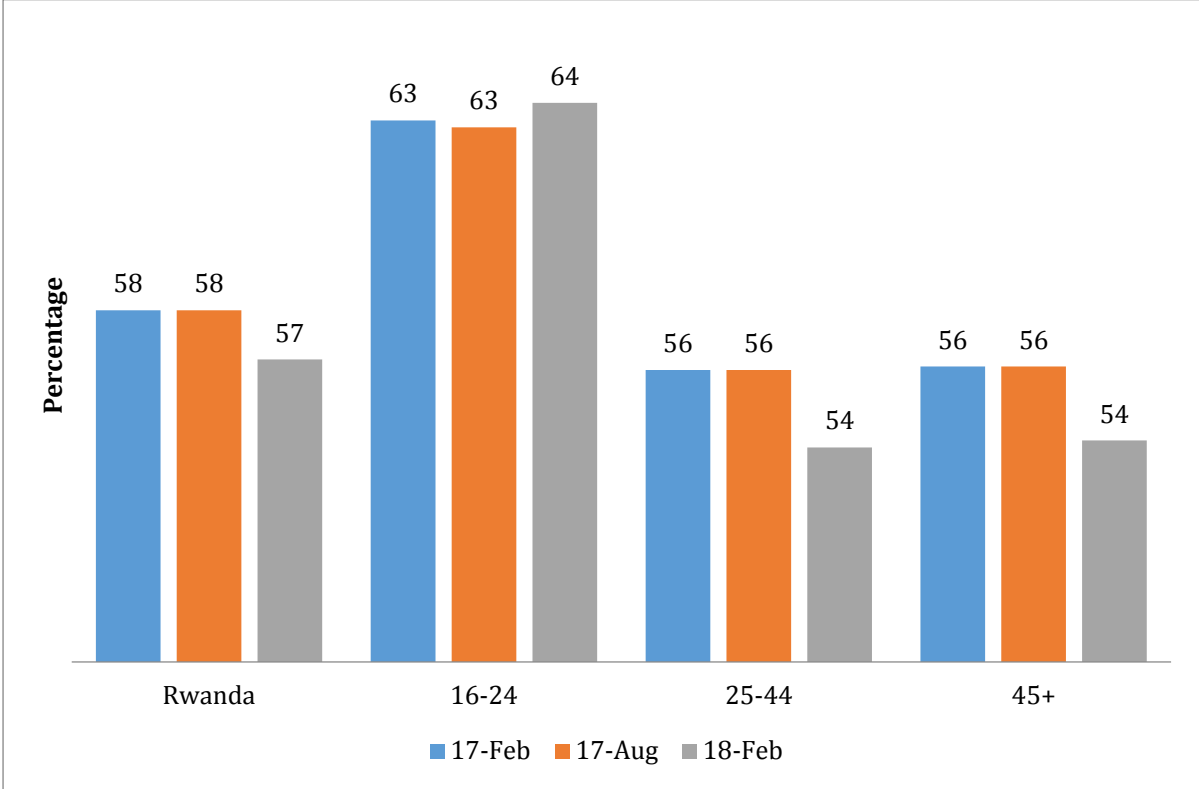
Source: LFSs

Chapter 6: Population outside 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 that are not done for pay or profit such as subsistence production of goods, own use production of services, volunteer production of goods or services and unpaid trainee or apprentice work.

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.

Table 6.1 below presents the self-reported status of people outside the labour force. In general, there was not much variation in the number of people outside the labour force in different rounds of of the survey. The share of persons who reported themselves to perform domestic work increased by 3.4 percentage point between August 2017 and February 2018. The look on changes after a one-year period indicates that there has been a slight increase of less than one percentage point. People who reported themselves as unemployed decreased by 5.1 percentage point from August 2017 to February 2018, while their proportion has slightly increased by less than one percentage point between February 2017 and February 2018. Year-to-year comparisons show a decline of 1.7 percentage point among persons performing a job such as unpaid work in a family business or apprenticeship of.

Table 6. 1: Persons outside the labour force by self-reported status

Indicators	Estimate			Change	
	Feb- 2017	Aug- 2017	Feb- 2018	August 2017 to Feb 2018	Feb 2017 to Feb 2018
Total	**3,083,654**	**3,212,062**	**3,215,933**	**3,871**	**132,279**
Unemployed	27.1	32.8	27.7	-5.1	0.6
Performing a job such as unpaid work in a family business or apprenticeship or traineeship	2.0	0.3	0.3	0.0	-1.7
Pupil, student, post graduate	23.9	22.1	23.7	1.6	-0.2
Retirement or early retirement or given up business activity	9.9	11.3	10.6	-0.7	0.7
Permanently unable to work due to longstanding health problems	8.1	8.1	8.5	0.4	0.4
In compulsory civilian service	0.3	0.2	0.3	0.1	0.0
Person fulfilling domestic task in own household	28.0	25.0	28.4	3.4	0.4
Finish school, waiting for results	0.4	0.1	0.4	0.3	0
other status, Specify	0.3	0.2	0.2	0.0	-0.1

Source: LFSs

Chapter 7: Work in agriculture

Due to the importance of 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 underutisation 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 part are brought together to analyze the work in agriculture sector as whole.

7.1. Agricultural status of workers

Workers engaged in agriculture sectors were subdivided in four parts: Those who are engaged in market oriented agriculture as main job, working for pay or self-employed; those who are exclusively engaged in subsistence agriculture; those who have the main job out of agriculture but performed foodstuff production activities for own use and finally, those who were involved in market oriented agriculture as their secondary job.

The full count of workers in agriculture sector as presented in table 7.1 reveals that in February 2018, around 58 percent of working age population were involved in agriculture activity. The correspondence proportion one year before (February 2017) was 60 percent and it was 54 percent in August 2017.

Workers engaged exclusively in subsistence agriculture present the majority of agriculture sector, followed by those engaged in market oriented agriculture as their main job.

The proportion of market oriented agricultural has slightly increased by 1 percentage point between February 2017 and February 2018 while the proportion of agricultural workers exclusively in subsistence agriculture stayed relatively the same during that period.

The look on round to round trend reveals that there has been a decrease in the proportion of subsistence agricultural from 55.6 percent in August 2017 to 53.1 percent in February 2018. On the other hand, the proportion of those engaged in market oriented agriculture as main job increased by around 3 percentage points.

Table 7. 1: Works status in agriculture

Categories of agriculture	Feb-17	Aug-17	Feb-18
Market oriented agriculture as main job(1)	33.9	30.0	32.7
Subsistence agriculture exclusively (2)	52.8	55.6	53.1
Participated in Subsistence agriculture but have non – agriculture main job (3)	12.5	13.8	13.8
Market oriented agriculture as secondary job(4)	0.8	0.6	0.4
Total	**100**	**100**	**100**
Count(,000s)	**4,038**	**3,685**	**3,988**
Proportion of working age population	**60.2**	**54.1**	**57.8**

7.2. Characteristics of agricultural workers

The focus of the following sections are 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 is involved in subsistence agriculture with more predominance in August of each year than in February, and among females as compared to males. In February 2018, the proportion of workers in subsistence agricultural among the number of agricultural workers was 62 percent and has increased by 1 percent point as compared to the situation in February 2017; while the corresponding proportion in August 2017 was 65 percent. The predominance of subsistence agriculture during the low agriculture season compared to the high agriculture season is due to the increase of salaried workers in agriculture in high agriculture season as compared to low agriculture season. Looking in more details at the 4-digit ISCO category of crop farm labourers in August and February round reveals that in February 2018, there were around 1,059,000 salaried workers in agriculture corresponding to 34 percent of total employment while in August 2017 their estimate was 870,000 corresponding to 29 percent of total employment.

The proportion of workers in market-oriented agriculture was 38 percent in February 2018 and it has decreased by 1 percent point compared to the corresponding proportion in February 2017. It has also decreased by 1.7 percentage point among females while is has slightly increased by 0.4 percentage point among males

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

Sex		Estimate			Change	
		Feb-2017	Aug-2017	Feb- 2018	August 2017 to Feb 2018	Feb 2017 to Feb 2018
Both	Total	**100**	**100**	**100**		
	Market oriented agriculture	39.08	35.0	38.1	3.1	-1.0
	Subsistence agriculture	60.9	65.0	61.9	-3.1	1.0
Male	Total	100	100	100		
	Market oriented agriculture	44.32	41.6	44.7	3.1	0.4
	Subsistence agriculture	55.68	58.4	55.3	-3.1	-0.4
Female	Total	100	100	100		
	Market oriented agriculture	35.63	30.8	33.9	3.1	-1.7
	Subsistence agriculture	64.37	69.2	66.1	-3.1	1.7

Table 7.3 presents the trend of the share of agricultural workers by category for young and adult age groups, separately. The level of participation of the young population in subsistence agriculture is almost the same as the one of adult population, but the participation of young population in subsistence agriculture has slightly decreased over time while the one for adults has increased. The proportion of young workers who were engaged in subsistence agriculture in August 2018 was 60.2 percent and it has decreased by 4.8 percentages points compared to the corresponding proportion in August 2017 which was 0.9 percentage point as compared to the estimate of February 2017. On the other hand, the proportion of adults engaged in subsistence agriculture has increased by 2 percentage point from February 2017 to February 2018.

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

Age group		Estimate			Change	
		Feb-2017	Aug-2017	Feb-2018	August 2017 to Feb 2018	Feb 2017 to Feb 2018
Both	Total	**100.0**	**100.0**	**100.0**		
	Market oriented agriculture	39.1	35.0	38.1	3.1	-1.0
	Subsistence agriculture	60.9	65.0	61.9	-3.1	1.0
Young (16-30)	Total	100.0	100.0	100.0		
	Market oriented agriculture	39.0	35.0	39.8	4.8	0.9
	Subsistence agriculture	61.0	65.0	60.2	-4.8	-0.9
Adults (31+)	Total	100.0	100.0	100.0		
	Market oriented agriculture	39.2	35.0	37.2	2.2	-2.0
	Subsistence agriculture	60.9	65.0	62.8	-2.2	2.0

The distribution of agricultural workers by education attainment as presented in table 7.4 below reveals that the higher the level of educational attainment is the lower the probability to participate in agricultural activities for both market-oriented and subsistence agriculture. The proportion of agricultural workers who have not completed any level of education fluctuates around 64 percent over time while the proportion of agriculture workers having completed at least lower secondary education is lower than 5 percent. It seems that there have been no significant changes in the distribution of agricultural workers by level of educational attainment over time.

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

Level of educational attainment		Estimate			Change	
		Feb-2017	Aug-2017	Feb-2018	August 2017 to Feb 2018	Feb 2017 to Feb 2018
Total	Total	**100**	**100**	**100**		
	None	63.8	63.0	64.4	1.4	0.6
	Primary	29.1	30.2	29.1	-1.1	0.0
	Lower secondary	3.9	3.7	3.3	-0.4	-0.6
	Upper secondary	2.8	2.8	2.9	0.2	0.2
	University	0.5	0.4	0.3	-0.1	-0.2
Market oriented agriculture	Total	**100**	**100**	**100**		
	None	69.8	69.3	70.1	0.8	0.3
	Primary	25.5	26.8	25.9	-1.0	0.4
	Lower secondary	2.2	2.0	2.2	0.2	0.0
	Upper secondary	1.8	1.4	1.5	0.1	-0.3
	University	0.6	0.4	0.2	-0.1	-0.3
Subsistence agriculture	Total	**100**	**100**	**100**		
	None	59.9	59.5	60.8	1.3	0.9
	Primary	31.4	32.0	31.1	-0.9	-0.3
	Lower secondary	4.9	4.5	3.9	-0.6	-1.0
	Upper secondary	3.4	3.5	3.8	0.3	0.5
	University	0.4	0.4	0.3	-0.1	-0.1

Source: LFSs

7.3. Share of agriculture in workforce

The present section shed light on the proportion on agricultural workers in the total work force defined as the sum of total employment and the number of workers engaged in subsistence agriculture.

The series of labour force survey conducted in Rwanda shows a decline in the share of work in agriculture at national level and among selected demographic characteristics. The share of agricultural workers in total workforce increased by 3 percentage point as compared to the previous round. Both the male and female shares have increased by 2 percentage point as compared to the previous round. The share of employment in agriculture work is strongly correlated with the level of education attainment - less educated persons are more likely to join agricultural work as compared to more educated persons.

A year-to-year comparison shows a decline in the share of agriculture workers according to the selected characteristics. It has declined by 4 percentage point among males and by 2 percentage point among females. It has also declined for almost all levels of educational attainment. The share of agricultural in the total work force among university graduates decreased by 3 percentage point and by 6 percentage point among lower secondary graduates. The share of agricultural workers among upper secondary graduates has remained unchanged between February 2017 and February 2018 while is has decreased by 3 percentage point and by 2 percentage point among holders of primary level of education and among those without any level of education, respectively.

Figure 7. 1: Share of workers in agriculture by sex and education attained
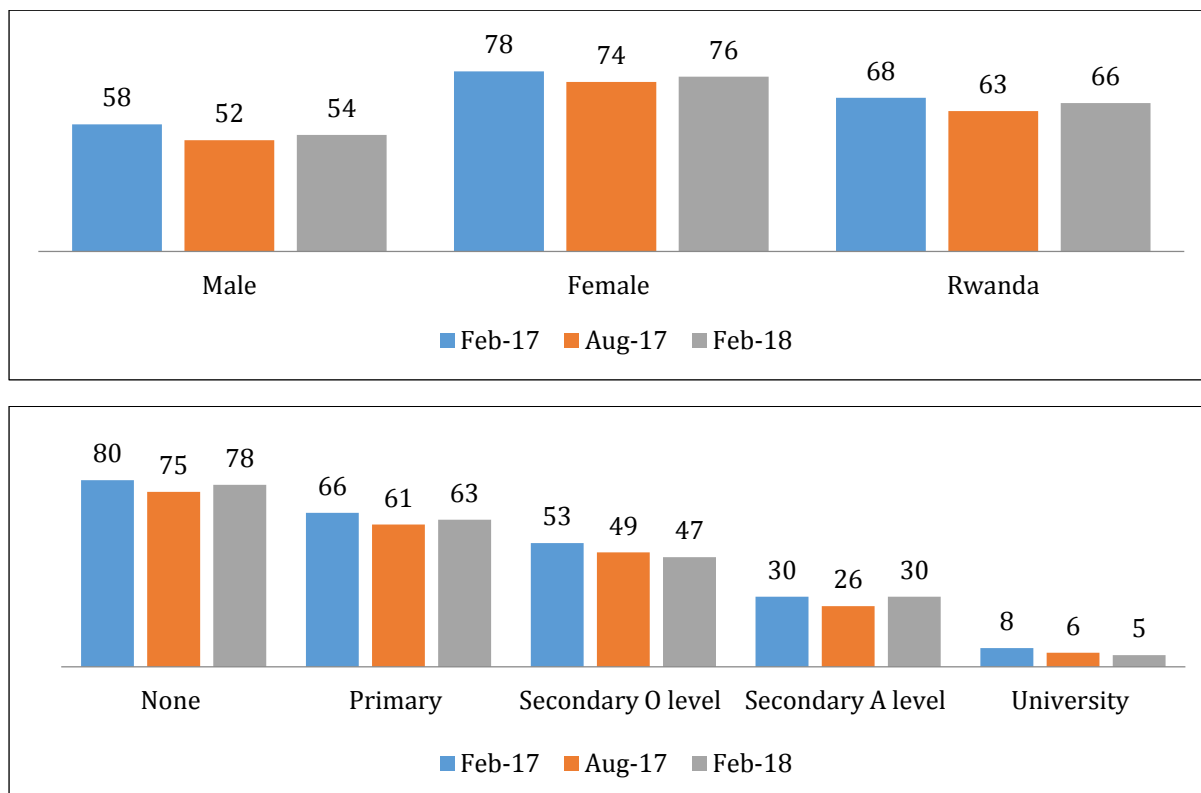
Annex A. Main concepts and definitions

The main concepts and definitions used in the survey are in line with the international standards on statistics of work, employment, and labour underutilization adopted by the 19th International Conference of Labour Statisticians (Geneva, 2013).[1] They are briefly described below.

- **Work**

The starting point of the international standards on statistics of work, employment and labour underutilization is the concept of work. Work comprises any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for own use.

The international standards recognize different forms of work: Own-use production work; employment; unpaid trainee work; volunteer work; and other forms of work. The RLFS focuses on the measurement of employment and labour underutilization and separately on own-use production work.

- **Working age population**

The working age population in Rwanda is defined as all persons 16 years old and over. Accordingly, the main indicators presented in this report are based on the 16 years old limit.

- **Employment**

Employment is a particular form of work. Persons in employment are defined as all those above a specified age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit.

- **Labour underutilization**

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

- **Unemployment**

Persons in unemployment are defined as all those above a specified age who (a) were not in employment; (b) carried out activities to seek employment during a specified recent period; and (c) were currently available to take up employment given a job opportunity.

Time-related underemployment

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

Potential labour force

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

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

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

A1. Main labour force and labour underutilization indicators

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

Annex B. Survey methodology and data quality

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

Sample size

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

The application of this principle with the choice of parameters described below leads to a sample size requirement of 18,691 households for measuring annual unemployment with margin of errors of +/- 0.3% at 95% confidence level. In these calculations, the main indicator is the ratio of unemployment to the working age population, set at r=0.024 according to the 2012 population census of Rwanda. The design effect (deff) is set at 3, within the range of values (3 to

4) generally used for labour force surveys. The margin of errors (ME = 0.0026) is twice the standard error of the estimate.[2]

Because the sample size should be a multiple of 2x4x16 for two survey rounds per year, four rotation groups per round and 16 sample households per Primary Sampling Unit (PSU), the required annual sample size has been rounded to 18688 households. For the August 2017 round, the sample size was therefore set at Sample size of LFS August 2017 = 18688/2 = 9344 households.

Sample rotation

The main purpose of sample rotation is to improve the precision of the trend estimates. It also allows obtaining data on labour force flows by matching sample individuals common in different survey rounds. The sample rotation scheme adopted for the Rwanda LFS programme builds on the possibility of transiting to quarterly sub-rounds after a few years of half-annual sub-rounds.

B.1 Rwanda LFS: Sample rotation design

2016		2017		2018	
February	**August**	**February**	**August**	**February**	**August**
	4 (R1)				
	3 (R2)	4 (R2)			
	2 (R3)	3 (R3)	4 (R3)		
	1 (R4)	2 (R4)	3 (R4)	4 (R4)	
Pilot survey		1 (R5)	2 (R5)	3 (R5)	4 (R5)
			1 (R6)	2 (R6)	3 (R6)
				1 (R7)	2 (R7)
					1 (R8)
Sample size:			Sample overlap:		
Annual: 18688 households			Round-to-round overlap = 75%		
Semi-annual: 9344 households			Year-to-year same half-year overlap = 50%		
One rotation group: 2336 households			Year-to-year overlap = 60%		

According to the sample rotation design, the annual sample size is distributed into two bi-annual rounds in February and August of each year, except for the first year when the Pilot Survey was conducted. The LFS August 2016 begins with a half-sample of 9,344 households. From 2017, the survey uses the full sample of 18,688 households evenly spread over February and August, and the process continues in 2018 and beyond unless a decision is taken to transit to quarterly sub-rounds.

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.

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

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

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

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

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

where the response rate rk 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 of 16 years old and over.

The population projections were derived from the NISR census publication.3 The projections were adjusted by deducting estimated values for the institutional population not living in private households. The calibration procedure followed the methodology of Deville and Sarndäl.4 Accordingly, the final calibrated weights were obtained from the formula,

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

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

Data quality

Like in all sample surveys, the results of the LFS February 2018 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.

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

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

The following table gives the sampling errors of the main labour force estimates obtained from the LFS February 2018. They have calculated based on the general principle that in multi-stage sample designs the variance contributed by the later stages of sampling is, under broad conditions, reflected in the observed variation among the sample results for first-stage units. Thus, the sampling variance of a variety of statistics, such as totals, means, ratios, proportions, and their differences can be obtained on the basis of totals calculated for the primary sampling units, here the localities5. 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.

B.2: Sampling errors of estimates of main labour force aggregates

Indicator	Estimate	Standard error	Relative standard error	Confidence interval	
				Lower	Upper
Population 16+ yrs	6,904,000	116,000	1.7%	6,676,000	7,132,000
Labour force	3,688,000	71,000	1.9%	3,548,000	3,827,000
Employment	3,096,000	64,000	2.1%	2,971,000	3,221,000
Unemployment	592,000	20,000	3.4%	553,000	631,000
Outside labour force	3,216,000	70,000	2.2%	3,078,000	3,354,000

Source: RLFS February 2018

As an illustration of the use of the table, consider the second row of the table on the labour force. The total labour force, 3,688,000 is estimated with a relative standard error of 1.9 percent. The true value at 95 percent confidence level lies within the interval 3,548,000 and 3,827,000.

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 16 percent has a standard error of 0.5 percentage points. This may be interpreted to mean that the true unemployment rate lies with 95 percent confidence within the interval, 15.1 to 17 percent.

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

Indicator	Estimate	Standard error	Confidence interval	
			Lower	Upper
Labour Force Participation Rate	53.4%	0.6%	52.3%	54.6%
Employment-Population Ratio	44.8%	0.6%	43.7%	46.0%
Unemployment rate	16.0%	0.5%	15.1%	17.0%

Source: RLFS February 2018

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[5]Verma, Vijay, *Sampling Methods*, Manual for Statistical Trainers Number 2, Statistical Institute for Asia and the Pacific (SIAP), Tokyo, Revised 2002.

Annex C: Statistical tables

Table C. 1. Summary labour force indicators, February 2018

Main indicators	Total	sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture	Old definition
		Male	Female	Urban	Rural			
Population 16 years old and over	6,903,839	3,233,175	3,670,664	1,455,81	5,447,958	3,512,011	3,391,828	6,903,839
Labour force	3,687,906	2,022,946	1,664,960	941,178	2,746,728	1,734,473	1,953,433	5,465,444
- Employed	3,096,278	1,719,527	1,376,751	773,971	2,322,307	1,393,171	1,703,107	5,215,118
- Unemployed	591,628	303,419	288,209	167,207	424,421	341,302	250,326	250,326
Outside labour force	3,215,933	1,210,229	2,005,704	514,703	2,701,230	1,777,538	1,438,395	1,438,395
Labour underutilization	2,836,061	1,223,873	1,612,188	454,271	2,381,790	1,955,656	880,405	-
- Unemployed	591,628	303,419	288,209	167,207	424,421	341,302	250,326	-
- Time-related underemployed	921,602	459,540	462,062	101,966	819,636	615,142	306,460	-
- Potential labour force	1,322,831	460,914	861,917	185,098	1,137,733	999,212	323,619	-
Labour force participation rate	53.40%	62.60%	45.40%	64.60%	50.40%	49.40%	57.60%	79.20%
Employment-to-population ratio	44.80%	53.20%	37.50%	53.20%	42.60%	39.70%	50.20%	75.50%
Time related underemployment rate	29.80%	26.70%	33.60%	13.20%	35.30%	44.20%	18.00%	
LU1 - Unemployment rate	16.00%	15.00%	17.30%	17.80%	15.50%	19.70%	12.80%	4.60%
LU2 - Combined rate of unemployment and time-related underemployment	41.00%	37.70%	45.10%	28.60%	45.30%	55.10%	28.50%	
LU3 - Combined rate of unemployment and potential labour force	38.20%	30.80%	45.50%	31.30%	40.20%	49.00%	25.20%	-
LU4 - Composite measure of labour underutilization	56.60%	49.30%	63.80%	40.30%	61.30%	71.50%	38.70%	-
Youth unemployment rate (16-30 yrs)	19.70%	17.30%	22.40%	22.10%	19.70%	23.50%	17.00%	7.50%
Median monthly earnings at main job	20,800	26,000	18,200	47,000	20,000	18,200	30,000	

Table C. 2: Population by sex, age group and urban/rural area, February 2018

	Total	Male	Female	Urban	Rural
Population	**11,811,378**	**5,686,730**	**6,124,648**	**2,210,024**	**2,210,024**
0-4 yrs	1,595,032	800,028	795,004	277,522	1,317,511
5-9 yrs	1,473,916	748,271	725,644	210,980	1,262,936
10-14 yrs	1,543,872	773,329	770,543	219,394	1,324,478
15-19 yrs	1,318,914	636,850	682,064	253,367	1,065,547
20-24 yrs	1,058,539	496,977	561,562	286,553	771,986
25-29 yrs	896,703	426,323	470,380	247,615	649,087
30-34 yrs	831,630	406,414	425,215	182,717	648,913

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	Total	Male	Female	Urban	Rural
35- 39 yrs	717,552	342,964	374,588	150,284	567,268
40-44 yrs	524,547	239,001	285,546	108,637	415,910
45-49 yrs	406,202	181,273	224,929	74,597	331,605
50-54 yrs	343,250	157,452	185,798	59,571	283,679
55-59 yrs	360,443	153,735	206,709	53,610	306,833
60-64 yrs	262,654	124,585	138,069	33,764	228,890
65-69 yrs	182,631	77,074	105,557	17,225	165,406
70-74 yrs	107,082	50,150	56,932	10,738	96,344
75+	188,412	72,304	116,108	23,448	164,963

Table C. 3: Households by household size, sex of head of household and urban/rural area, February 2018.

Household size	Total number households	Head of household		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
	2,724,494	2,023,106	2,023,106	533,939	533,939	1,504,169	1,504,169
1	259,146	155,324	103,822	83,169	175,977	97,663	161,483
2	305,414	150,074	155,341	68,735	236,680	160,259	144,760
3	445,016	296,196	148,820	77,229	367,787	260,739	184,277
4	496,732	379,990	116,742	81,968	414,764	282,028	214,704
5	457,568	371,603	85,965	75,208	382,360	264,252	193,315
6	337,116	288,924	48,192	60,730	276,386	204,171	132,945
7	219,911	195,958	23,953	41,724	178,187	127,072	92,839
8	114,804	105,186	9,618	26,190	88,614	60,381	54,424
9	54,637	49,304	5,334	9,145	45,492	31,579	23,059
10+	34,150	30,548	3,601	9,840	24,310	16,025	18,125

Table C. 4: Population 16 years old and over by Labour force status, sex, age group, and urban/rural area, February 2018.

	Total	Labour force status				Labour force participation rate	Employment-population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Population 16 yrs and over	6,903,839	3,687,906	3,096,278	591,628	3,215,933	53.4%	44.8%	16.0%
16-24 yrs	2,082,734	869,380	674,024	195,356	1,213,354	41.7%	32.4%	22.5%
25-34 yrs	1,728,332	1,218,151	1,021,923	196,228	510,182	70.5%	59.1%	16.1%
35-54 yrs	1,991,551	1,279,821	1,115,323	164,498	711,729	64.3%	56.0%	12.9%
55-64 yrs	623,097	252,791	222,585	30,206	370,307	40.6%	35.7%	11.9%
65+ yrs	478,124	67,763	62,423	5,340	410,361	14.2%	13.1%	7.9%

	Total	Labour force status				Labour force participation rate	Employment-population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Population 16 yrs and over (Male)	**3,233,173**	**2,022,946**	**1,719,527**	**303,419**	**1,210,229**	**62.6%**	**53.2%**	**15.0%**
		-						
16-24 yrs	1,001,899	456,468	360,928	95,540	545,432	45.6%	36.0%	20.9%
25-34 yrs	832,737	685,746	594,293	91,453	146,991	82.3%	71.4%	13.3%
35-54 yrs	920,690	693,616	600,583	93,033	227,074	75.3%	65.2%	13.4%
55-64 yrs	278,319	138,676	119,942	18,734	139,644	49.8%	43.1%	13.5%
65+ yrs	199,528	48,440	43,781	4,659	151,088	24.3%	21.9%	9.6%
Population 16 yrs and over (Female)	**3,670,665**	**1,664,962**	**1,376,751**	**288,211**	**2,005,705**	**45.4%**	**37.5%**	**17.3%**
16-24 yrs	1,080,834	412,912	313,096	99,816	667,923	38.2%	29.0%	24.2%
25-34 yrs	895,595	532,405	427,630	104,775	363,191	59.4%	47.7%	19.7%
35-54 yrs	1,070,861	586,206	514,740	71,466	484,655	54.7%	48.1%	12.2%
55-64 yrs	344,778	114,115	102,643	11,472	230,663	33.1%	29.8%	10.1%
65+ yrs	278,597	19,324	18,642	682	259,273	6.9%	6.7%	3.5%
Population 16 yrs and over (Urban)	1,455,880	941,179	773,972	167,207	514,702	64.6%	53.2%	17.8%
16-24 yrs	493,673	224,493	167,898	56,595	269,180	45.5%	34.0%	25.2%
25-34 yrs	430,332	349,842	285,534	64,308	80,491	81.3%	66.4%	18.4%
35-54 yrs	393,089	311,112	270,728	40,384	81,977	79.1%	68.9%	13.0%
55-64 yrs	87,374	46,842	41,455	5,387	40,532	53.6%	47.4%	11.5%
65+ yrs	51,412	8,890	8,357	533	42,522	17.3%	16.3%	6.0%
		-						
Population 16 yrs and over (Rural)	5,447,958	2,746,727	2,322,307	424,420	2,701,231	50.4%	42.6%	15.5%
16-24 yrs	1,589,061	644,886	506,126	138,760	944,174	40.6%	31.9%	21.5%
25-34 yrs	1,298,000	868,309	736,389	131,920	429,691	66.9%	56.7%	15.2%
35-54 yrs	1,598,461	968,709	844,595	124,114	629,752	60.6%	52.8%	12.8%
55-64 yrs	535,723	205,949	181,130	24,819	329,775	38.4%	33.8%	12.1%
65+ yrs	426,713	58,874	54,067	4,807	367,839	13.8%	12.7%	8.2%

Table C. 5: Population 16 years old and over by labour force status, sex, educational attainment, and urban/rural area, february 2018

	Total	Labour force status				Labour force participation rate	Employment-to population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Population 16 yrs and over	**6,903,559**	**3,687,906**	**3,096,278**	**591,628**	**3,215,653**	**53.4**	**44.9**	**16**
None	3,433,907	1,783,300	1,552,533	230,767	1,650,607	51.9	45.2	12.9
Primary	2,045,289	1,106,012	923,521	182,491	939,276	54.1	45.2	16.5
Lower secondary	557,785	196,841	156,234	40,607	360,944	35.3	28	20.6
Upper secondary	589,827	351,208	256,928	94,280	238,619	59.5	43.6	26.8
University	276,752	250,544	207,062	43,482	26,208	90.5	74.8	17.4

Table C. 6: Population 16 years old and over by labour force status, sex, marital status, and urban/rural area, February 2018

	Total	Labour force status				Labour force participation rate	Employment-population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Population 16 yrs and over	**6,903,839**	**3,687,906**	**3,096,278**	**591,628**	**3,215,933**	**53.4**	**44.8**	**16.0**
Married	2,626,320	1,480,284	1,283,657	196,627	1,146,037	56.4	48.9	13.3
Living together	1,021,175	704,353	597,982	106,371	316,822	69.0	58.6	15.1
Divorced/separated	222,451	150,352	134,049	16,303	72,099	67.6	60.3	10.8
Single	2,539,166	1,202,038	945,293	256,745	1,337,128	47.3	37.2	21.4
Widow/ widower	494,726	150,879	135,297	15,582	343,847	30.5	27.3	10.3

Table C. 7: Employed population by sex, age group, and urban/rural area, February 2018

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population 16+	3,096,278	1,719,527	1,376,751	773,971	2,322,307	1,393,171	1,703,107
16-19 yrs	226,888	114,697	112,191	51,086	175,801	93,474	133,414
20-24 yrs	447,136	246,231	200,905	116,811	330,325	166,335	280,801
25-29 yrs	513,198	294,231	218,967	156,452	356,746	197,483	315,715
30-34 yrs	508,725	300,062	208,663	129,082	379,643	215,966	292,759
35- 39 yrs	434,112	240,750	193,362	108,426	325,686	212,897	221,215
40-44 yrs	295,649	163,241	132,407	75,815	219,834	148,356	147,292
45-49 yrs	223,091	110,718	112,373	53,298	169,793	113,351	109,740
50-54 yrs	162,472	85,874	76,598	33,190	129,282	88,746	73,726
55-59 yrs	140,462	73,278	67,184	28,420	112,042	78,448	62,014
60-64 yrs	82,122	46,664	35,459	13,035	69,088	45,579	36,544
65-69 yrs	40,854	25,992	14,862	4,280	36,574	24,126	16,728
70-74 yrs	11,884	10,333	1,551	1,729	10,155	5,766	6,118
75+	9,686	7,456	2,230	2,348	7,338	2,645	7,041

Table C. 8: Employed population by sex, occupation group, and urban/rural area, February 2018

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
ISCO High level	3,096,278	1719527	1,376,751	773,971	2,322,307	1,393,171	1,703,107
Managers	37,823	25,125	12,698	30,543	7,280	1,798	36,025
Professionals	195,820	117,711	78,109	96,941	98,879	30,676	165,144
Technicians and associate professionals	32,455	22,722	9,733	23,436	9,019	4,582	27,874
Clerical support workers	30,482	13,855	16,627	20,412	10,070	1,626	28,856
Service and sales workers	559,372	296,983	262,389	217,597	341,774	201,693	357,679
Skilled agricultural, forestry and fisheries	206,863	117,115	89,748	16,988	189,875	12,954	193,909
Craft and related trades workers	231,251	173,445	57,806	72,326	158,925	84,064	147,187
Plant and machine operators and assemble	86,154	80,738	5,416	40,693	45,461	18,287	67,867
Elementary occupations	1,716,058	871,833	844,226	255,036	1,461,023	1,037,493	678,565

Table C. 9: Employed population by sex, educational attainment, and urban/rural area, February 2018

	Total	Sex		Residence area		Participated in Subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	3,096,278	1,719,527	1,376,751	773,971	2,322,307	1,393,171	1,703,107
None	1,552,533	832,345	720,188	192,405	1,360,128	887,058	665,475
Primary	923,521	537,745	385,776	235,669	687,852	406,159	517,362
Lower secondary	156,234	87,586	68,649	67,410	88,824	39,073	117,161
Upper secondary	256,928	138,326	118,603	127,507	129,421	43,813	213,115
University	207,062	123,525	83,536	150,981	56,081	17,068	189,993

Table C. 10: Employed population by sex, branch of economic activity, and urban/rural area, February 2018

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	**3,096,278**	**1,719,527**	**1,376,751**	**773,971**	**2,322,307**	**1,393,171**	**1,703,107**
Agriculture, forestry and fishing	1,310,722	600,532	710,189	73,739	1,236,983	841,700	469,022
Mining and quarrying	55,768	53,387	2,381	647	55,121	21,262	34,506
Manufacturing	190,885	99,381	91,504	50,871	140,014	87,353	103,532
Electricity, gas, steam and air conditioning supply	8,019	7,046	973	5,136	2,883	1,315	6,704
Water supply, sewerage and waste management	8,279	4,824	3,455	4,347	3,932	1,969	6,310
Construction	281,910	229,804	52,106	59,486	222,425	134,125	147,785
Wholesale, retail trade, repair of motor vehicles..	445,814	230,166	215,648	167,471	278,343	165,632	280,182
Transportation and storage	118,199	114,531	3,668	49,421	68,777	26,692	91,506
Accommodation and food service activities	54,809	29,071	25,739	32,321	22,488	10,779	44,030
Information and communication	16,040	12,068	3,972	9,793	6,247	918	15,122

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Financial and insurance activities	23,818	10,632	13,186	17,386	6,432	1,938	21,880
Real estate activities	3,196	2,427	769	2,172	1,024	419	2,777
Professional, scientific and technical activities	19,871	13,857	6,014	13,499	6,372	1,717	18,154
Administrative and support service activities	49,161	30,417	18,744	26,703	22,458	12,032	37,129
Public administration and defense	55,884	42,283	13,601	31,278	24,606	3,117	52,767
Education	107,998	59,863	48,136	36,072	71,926	26,836	81,162
Human health and social work activities	48,193	22,598	25,595	25,945	22,248	4,258	43,935
Arts, entertainment and recreation	9,096	5,881	3,214	5,701	3,395	1,743	7,352
Other service activities	57,648	43,862	13,786	17,629	40,019	19,340	38,308
Activities of households as employers	211,274	94,861	116,413	132,181	79,093	25,025	186,249
Activities of extraterritorial organizations and bodies	19,695	12,035	7,659	12,175	7,520	4,999	14,696

Table C. 11: Employed population by sex, branch of economic activity and level of educational attainment, February 2018

	Total	None	Primary	Lower secondary	Upper secondary	University
Employed population	**3,096,278**	**1,552,533**	**923,521**	**156,234**	**256,928**	**207,062**
Agriculture, forestry and fishing	1,310,722	919,078	338,926	29,249	19,979	3,489
Mining and quarrying	55,768	39,407	15,146	758	141	317
Manufacturing	190,885	71,200	83,964	17,396	13,973	4,351
Electricity, gas, steam and air conditioning supply	8,019	2,715	1,067	814	1,927	1,496
Water supply, sewerage and waste management	8,279	2,138	1,214	1,195	1,917	1,815
Construction	281,910	125,873	108,416	21,938	20,340	5,342

	Total	None	Primary	Lower secondary	Upper secondary	University
Wholesale, retail trade, repair of motor vehicles, motorcycles	445,814	174,193	157,529	27,472	61,851	24,769
Transportation and storage	118,199	45,965	46,699	10,169	8,616	6,749
Accommodation and food service activities	54,809	17,553	12,673	5,618	14,109	4,856
Information and communication	16,040	1,086	2,114	1,564	4,150	7,126
Financial and insurance activities	23,818	475	2,266	1,337	4,399	15,340
Real estate activities	3,196	772	867	190	733	635
Professional, scientific and technical activities	19,871	853	2,559	819	5,491	10,148
Administrative and support service activities	49,161	14,132	12,498	6,487	10,761	5,283
Public administration and defense	55,884	2,968	10,970	5,933	11,691	24,323
Education	107,998	5,319	5,588	3,019	47,485	46,587
Human health and social work activities	48,193	2,979	3,719	4,194	11,945	25,356
Arts, entertainment and recreation	9,096	3,213	1,422	1,174	2,248	1,040
Other service activities	57,648	20,657	23,781	3,808	3,371	6,030
Activities of households as employers	211,274	98,926	90,028	13,099	8,466	755
Activities of extraterritorial organizations and bodies	19,695	3,031	2,075	0	3,334	11,255
Employed population (Male)	**1,719,527**	**832,345**	**537,745**	**87,586**	**138,326**	**123,525**
Agriculture forestry and fishing	600,532	416,398	159,176	10,236	12,430	2,292
Mining and quarrying	53,387	37,326	14,845	758	141	317
Manufacturing	99,381	37,546	41,502	7,895	9,178	3,260
Electricity gas stream and air conditioning supply	7,046	2,715	1,067	478	1,826	959
Water supply, gas and remediation services	4,824	1,026	723	1,065	1,161	848
Construction	229,804	99,809	89,011	18,589	17,603	4,792
Wholesale, retail trade, repair of motor vehicles, motorcycles	230,166	88,859	87,332	12,646	27,492	13,837
Transportation and storage	114,531	44,922	46,699	10,169	7,599	5,142
Accommodation and food services activities	29,071	10,819	6,794	1,473	5,956	4,028
Information and communication	12,068	1,086	1,950	1,439	2,269	5,324

	Total	None	Primary	Lower secondary	Upper secondary	University
Financial and insurance activities	10,632	475	1,409	529	1,327	6,893
Real estate activities	2,427	772	621	190	541	304
Professional, scientific and technical activities	13,857	853	1,826	713	3,559	6,907
Administrative and support activities	30,417	7,583	9,671	4,775	5,787	2,601
Public administration and defense; compulsory social security	42,283	2,827	10,361	5,823	8,380	14,892
Education	59,863	4,427	3,714	2,273	19,756	29,692
Human health and social work activities	22,598	1,300	2,985	2,910	5,700	9,703
Arts, entertainment and recreation	5,881	2,226	780	1,174	1,126	575
Other services	43,862	18,088	18,324	989	1,816	4,644
Activities of house13holds as employers	94,861	50,823	37,781	3,464	2,626	167
Activities of extraterritorial organizations and bodies	12,035	2,465	1,170	0	2,054	6,347
Employed population (Female)	**1,376,751**	**720,188**	**385,776**	**68,649**	**118,603**	**83,536**
Agriculture, forestry and fishing	710,189	502,680	179,750	19,013	7,549	1,197
Mining and quarrying	2,381	2,081	300	0	0	0
Manufacturing	91,504	33,654	42,462	9,502	4,795	1,091
Electricity, gas, steam and air conditioning supply	973	0	0	336	101	536
Water supply, sewerage and waste management	3,455	1,111	491	130	757	966
Construction	52,106	26,065	19,405	3,349	2,738	550
Wholesale, retail trade, repair of motor vehicles, motorcycles	215,648	85,334	70,197	14,826	34,359	10,932
Transportation and storage	3,668	1,043	0	0	1,017	1,608
Accommodation and food service activities	25,739	6,734	5,879	4,145	8,153	828
Information and communication	3,972	0	164	125	1,882	1,802
Financial and insurance activities	13,186	0	857	809	3,073	8,448
Real estate activities	769	0	246	0	192	331
Professional, scientific and technical activities	6,014	0	733	107	1,933	3,241

	Total	None	Primary	Lower secondary	Upper secondary	University
Administrative and support service activities	18,744	6,548	2,827	1,712	4,974	2,682
Public administration and defense	13,601	141	608	110	3,311	9,431
Education	48,136	892	1,873	746	27,728	16,896
Human health and social work activities	25,595	1,679	734	1,283	6,245	15,653
Arts, entertainment and recreation	3,214	987	642	0	1,122	464
Other service activities	13,786	2,570	5,457	2,819	1,555	1,386
Activities of households as employers	116,413	48,103	52,247	9,636	5,840	588
Activities of extraterritorial organizations and bodies	7,659	567	905	0	1,280	4,908

Table C. 12: Employed population by sex, status in employment, and urban/rural area, February 2018

		Sex		Area of Residence		Participated in Subsistence agriculture	Not participated in subsistence agriculture
	Total	Male	Female	Urban	Rural		
Employed population	3,096,278	1,719,527	1,376,751	773,971	2,322,307	1,393,171	1,703,107
Employee, Paid apprentice/intern	2,184,126	1,214,771	969,355	516,116	1,668,009	1,108,694	1,075,431
Employer	35,865	26,079	9,786	18,983	16,882	2,964	32,901
Own-account worker	748,541	454,467	294,074	206,082	542,458	255,721	492,820
Member of cooperative	3,317	1,172	2,146	425	2,892	501	2,816
Contributing family worker	124,259	23,038	101,220	32,194	92,065	25,291	98,967
Other	171	-	171	171	-	-	171

Table C. 13: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, February 2018

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employed population	3,096,278	1,719,527	1,376,751	773,971	436,829	337,142	2,322,307	1,282,697	1,039,610
Less than 24 hours	749,661	348,908	400,752	80,192	43,765	36,427	669,469	305,143	364,325
25-34 hours	461,352	215,473	245,879	53,659	25,992	27,667	407,693	189,481	218,212
35-40 hours	594,851	312,446	282,405	90,821	44,139	46,681	504,031	268,307	235,724
41-48 hours	505,656	316,378	189,278	181,796	106,013	75,783	323,861	210,366	113,495
49-61 hours	398,309	262,133	136,176	171,416	102,762	68,654	226,893	159,371	67,522
62-79 hours	279,696	185,169	94,527	135,689	77,009	58,680	144,007	108,159	35,847
80 hours+	106,753	79,020	27,733	60,399	37,149	23,250	46,354	41,871	4,483

Table C. 14: Youth and Young Population by sex, and residential area, February 2018

		Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
			Male	Female	Urban	Rural		
Young Population 16-30yrs		3,150,519	1,514,193	1,636,326	778,175	2,372,344	1,214,147	1,936,371
Employed	16-24yrs	674,024	360,928	313,096	167,898	506,126	259,809	414,215
	16-30yrs	1,294,118	719,922	574,196	352,764	941,354	503,873	790,245
Unemployed	16-24yrs	195,356	95,540	99,816	56,595	138,760	97,275	98,080
	16-30yrs	316,799	150,796	166,003	100,044	216,755	155,028	161,771
Outside Labour Force	16-24yrs	1,213,354	545,432	667,923	545,432	269,180	356,683	856,672
	16-30yrs	1,539,602	643,475	896,128	325,367	2,372,344	555,246	1,936,371

Table C. 15: Youth Unemployed by sex, duration of seeking employment, and urban/rural area, February 2018

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Youth Unemployed (16-24 yrs)	187,914	91,579	96,334	25,838	28,688	65,741	67,647
0 – less than 3 months	73,853	35,231	38,622	7,435	9,142	27,796	29,480
3 – less than 6 months	43,811	24,005	19,806	8,313	7,559	15,692	12,248
6 – less than 12 months	21,606	8,975	12,631	2,841	3,644	6,134	8,988
1 – less than 2 years	28,529	13,822	14,707	5,442	4,704	8,380	10,003
2 years or more	20,114	9,546	10,568	1,807	3,639	7,739	6,928

Table C. 16:   Youth not in employment and not currently in education or training by sex, age group, and urban/rural area, February 2018.

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Young not in employment nor in education (16-30 yrs)	1,067,850	381,372	686,478	77,950	119,303	303,423	567,175
16-19 yrs	264,973	115,864	149,109	20,604	16,606	95,259	132,504
20-24 yrs	404,811	140,764	264,048	30,691	50,627	110,072	213,421
25-30 yrs	398,066	124,745	273,321	26,654	52,071	98,091	221,250
None	441,975	168,152	273,823	14,725	24,216	153,427	249,606
Primary	340,028	112,080	227,948	19,502	31,475	92,578	196,474
Lower secondary	93,326	26,549	66,776	11,608	16,467	14,941	50,309
Upper secondary	163,453	62,404	101,049	24,353	34,825	38,051	66,224
University	29,068	12,187	16,881	7,762	12,320	4,426	4,561

Table C. 17: Unemployed population by sex, broad age group and urban/rural area, February 2018

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Unemployed population 16+	591,628	303,419	288,209	167,207	424,421	341,302	250,326
16-24 yrs	195,356	95,540	99,816	56,595	138,760	97,275	98,080
25-34 yrs	196,228	91,453	104,775	64,308	131,920	104,805	91,423
35-54 yrs	164,498	93,033	71,466	40,384	124,114	113,105	51,393
55-64 yrs	30,206	18,734	11,472	5,387	24,819	22,384	7,822
65+ yrs	5,340	4,659	682	533	4,807	3,733	1,608

Table C. 18: Unemployed population by sex, level of educational and urban/rural area, February 2018

		Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
	Total	Male	Female	Urban	Rural		
Unemployed population 16+	595,750	306,178	289,572	167,601	428,148	341,302	250,326
None	233,697	122,067	111,630	27,697	206,001	172,155	58,612
Primary	183,683	92,778	90,905	39,607	144,076	121,488	61,003
Lower secondary	40,607	19,709	20,898	19,258	21,350	13,987	26,620
Upper secondary	94,280	47,462	46,818	47,321	46,958	30,011	64,269
University	43,482	24,162	19,321	33,719	9,763	3,660	39,822

Table C. 19: Unemployed population (who looked for a job) by sex, method of seeking employment, and urban/rural area, February 2018.

	Total	Sex		Residence area		Participated in Subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Unemployed population who looked for a job	540,292	280,119	260,172	160,387	379,905	300,733	239,559
Arranging for financial resources, applying for permits, licenses	73,715	24,917	48,798	24,918	48,797	36,018	37,697
Looking for land, premises, machinery, supplies, farming inputs	8,089	4,266	3,823	935	7,154	5,475	2,614
Seeking the assistance of friends, relatives or other types of intermediaries	145,351	79,719	65,632	52,100	93,251	71,412	73,939
Registering with or contacting public or private employment services	14,578	8,146	6,432	8,341	6,237	4,201	10,376
Applying to employers directly, checking at worksites, farms, factory gates, markets	261,299	142,954	118,345	52,777	208,522	175,018	86,280
Placing or answering newspaper or online job advertisements	28,578	16,094	12,484	15,034	13,543	7,020	21,557
Placing and updating resumes on professional or social networking sites online	8,089	3,728	4,361	6,282	1,807	1,292	6,797
Other method	593	296	296	-	593	296	296

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

Table C. 20: Unemployed population (who looked for a job) by sex, duration of seeking employment, and urban/rural area, February 2018

	Total	Sex		Residence area		Participated in Subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Unemployed population 16+	540,154	279,982	260,172	160,249	379,905	300,733	239,421
Less than 3 months	239,699	127,608	112,091	51,441	188,257	154,364	85,335
Less than 6 months	109,132	61,901	47,231	34,220	74,913	59,916	49,216
Less than 12 months	59,125	26,508	32,617	17,826	41,299	32,682	26,443
1 year to less than 2 years	71,630	35,339	36,291	30,649	40,981	30,344	41,287
2 years and above	60,568	28,626	31,942	26,113	34,454	23,427	37,141

Table C. 21: Time related under employment by age group sex and area of residence, February 2018

Age group	Total	Male	Female	Urban	Rural
Total	**921,602**	**459,540**	**462,062**	**101,966**	**819,636**
16-24 yrs	219,267	106,685	112,582	19,588	199,679
25-34 yrs	299,912	156,070	143,842	37,444	262,468
35-54 yrs	331,997	155,944	176,053	38,970	293,027
55-64 yrs	59,441	33,138	26,303	5,431	54,010
65+ yrs	10,986	7,704	3,282	535	10,451

Annex D: SDG indicators tables

Table D. 1: Average time spent in own-use production work by type of own-use production, age, urban/rural area and sex, February 2018

	Total	Male	Female	Urban	Rural
Total own-use production	5,417,164	2,199,626	3,217,538	896,480	4,520,684
Collecting firewood for the household including travel time	2.1	1.6	2.4	0.7	2.3
Fetching water for the household, including travel time	2.2	2.1	2.3	1.2	2.4
Searching for fodder for the household's animals	3.6	4.8	2.7	0.9	4.1
Manufacturing household goods for own or family use	0.2	0.1	0.2	0	0.2
Constructing your dwelling, making major repairs on it, farm buildings, private roads, or wells	0.5	0.8	0.3	0.3	0.6
Doing household chores including shopping, preparing meals	8.1	2.9	11.7	8.9	8
Looking after children and elderly	3.1	0.9	4.7	4.3	2.9
Total (16+ yrs)	19.8	13.1	24.4	16.3	20.5
16-24 yrs	17.5	12.3	21.8	14.9	18
25-34 yrs	23	13.5	29.8	18.4	24.2
35-54 yrs	20.8	13.5	25.3	16.4	21.6
55-64 yrs	18.2	14	20.5	13.8	18.7
65+ yrs	15	12.3	16.5	12.5	15.3

Table D. 2: Proportion of informal employment in non-agriculture employment, by sex and broad industry

Economic sector	Total	Male	Female
Industry	95.9	95.1	98
Services	78	76.3	80.4
Total	83.4	82.9	84.3

Table D. 3: Average hourly earnings (in frw) of female and male employees, by occupation, age and persons with disabilities, February 2018

	Total	Male	Female	Urban	Rural
Total (16+ yrs)	401	466	321	805	278
16-24 yrs	223	241	223	232	219
25-34 yrs	431	496	431	801	292
35-54 yrs	485	564	485	1,200	298
55-64 yrs	451	578	451	1,594	269
65+ yrs	471	524	471	1,518	401
Managers	3271	3732	2375	3566	914
Professionals	1388	1523	1210	1855	549
Technicians and associate professions	1584	1506	1787	1747	736
Clerical support workers	965	952	976	1013	724
Service and sales workers	433	409	489	534	228
Skilled agricultural, forestry and fishery workers	164	164		170	162
Craft and related trades workers	869	896	362	1068	702
Plant and machine operators, and assemblers	914	912	974	1015	564
Elementary occupations	244	270	219	231	248
person with disability	344	483	228	739	257

Table D. 4: Unemployment rate, by sex, age and persons with disabilities, February 2018

	Total	Male	Female	Urban	Rural
Unemployed population 16+	16.0	15.0	17.3	17.8	15.5
16-24 yrs	22.5	20.9	24.2	25.2	21.5
25-34 yrs	16.1	13.3	19.7	18.4	15.2
35-54 yrs	12.9	13.4	12.2	13.0	12.8
55-64 yrs	11.9	13.5	10.1	11.5	12.1
65+ yrs	7.9	9.6	3.5	6.0	8.2
person with disability	14.0	15.5	12.5	13.8	14.1

Table D. 5: Proportion of youth (aged 16-24 years) not in education, employment or training by sex and area of residence

Area of residence	Male	Female	Total
Urban	20.8	27.2	24
Rural	27.2	41.5	34.7
Total	**25.6**	**38.2**	**32.2**

Table D. 6: Number of jobs in tourism industries as a proportion of total jobs by sex

	Total	Male	Female	Urban	Rural
Total Jobs	**3,096,278**	**1719,527**	**1,376,751**	**773,971**	**2,322,307**
Total tourism industry jobs	**95,969**	**65,320**	**30,649**	**47,652**	**48,317**
Accommodation for visitors	17,992	11,580	6,412	15,608	2,384
Food and beverage serving activities	39,816	19,858	19,958	18,747	21,069
Road passenger transport	25,640	25,022	618	5,280	20,360
Water passenger transport	708	708	0	140	568
Air passenger transport	212	212	0	212	0
Transport equipment rental	92	13	78	92	0
Travel agencies and other reservation service activities	2,552	2,184	368	2,012	540
Cultural activities	7,066	5,050	2,016	3,739	3,327
Sports and recreational activities	1,891	693	1198	1,823	68
Proportion	**3.1**	**3.8**	**2.2**	**6.2**	**2.1**

Annex E. List of officials involved in the survey

Yusuf MURANGWA
Director General

TECHNICAL DIRECTOR
Michel NDAKIZE RUGAMBWA
SURVEY DESIGN
Farhad MEHRAN
DATA COLLECTION
Survey Coordinators
Michel NDAKIZE RUGAMBWA
James BYIRINGIRO
Survey Supervisors
Jean Marc MUKUNDABANTU
Evelyne KANYONGA INGABIRE
Nicolas MWIZERWA
Gilbert MUGENZI
Jonathan DUSABE
Madeleine MUKAZITONI
IMANISHIMWE VALENTINE
UWAMAHORO Pacifique
NDIZEYE Job
NKURUNZIZA Venuste
Data analysis & Report writing
Farhad MEHRAN
James BYIRINGIRO
Jean Marc MUKUNDABANTU
Evelyne KANYONGA INGABIRE
Nicolas MWIZERWA
UWAMAHORO Pacifique

Data Processing
Peruth MUKANSHIMIYE
Massoud HARELIMANA

Report Editing & Design
Jean Claude NYIRIMANZI
Jean Marc MUKUNDABANTU