



The Republic of Rwanda



nisr

NATIONAL INSTITUTE OF
STATISTICS OF RWANDA

Labour Force Survey 2017

-August 2017-



The Republic of Rwanda



Labour Force Survey

August 2017

April 2018

Labour Force Survey August 2017 report is produced by the National Institute of Statistics of Rwanda (NISR).

Additional information about Labour Force Survey August 2017 report may be obtained from NISR:

P.O. Box 6139, Kigali, Rwanda; Telephone: (250) 252 571 035

E-mail: info@statistics.gov.rw; Website: <http://www.statistics.gov.rw>

ISBN: 97899977-43-26-8

Recommended citation:

National Institute of Statistics of Rwanda (NISR), Labour Force Survey August 2017 report, April 2018

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.

In the context of Rwanda's commitment to achieve its overarching objective set in vision 2020 of transforming Rwanda into a middle income country, the Government of Rwanda, through different programs sets out target of creating 200,000 off-farm jobs annually to speed up employment growth. At the same time, labour market indicators of the sustainable development goals are also to be monitored. 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. The survey programme begun with a pilot survey conducted in February 2016. After the pilot survey, the first round of the Rwanda labour force survey was conducted in August 2016 to derive estimates of the main labour force aggregates. The present report is for the third round whose data collection was conducted in August and September 2017.

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 invites policy makers, program managers, researchers and all users to play an important role in using the valuable data showcased in the LFS rounds to contribute to Rwandans' Economic development.


Yusuf MURANGWA
Director General of NISR



Executive summary

Rwanda started conducting LFS twice a year since August 2016 to capture the seasonal variations of economic activities, i.e in February and in August. The current report presents the results of the August 2017 LFS. The main objective of the survey is to collect data on the size and characteristics of the labour force, employment, unemployment and other labour market characteristics of the population. The survey was also designed to measure different forms of work, in particular, own-use production work and other components of labour underutilization including time-related underemployment and potential labour force in line with the new international standards, adopted by the 19th International Conference of Labour Statisticians (ICLS) in 2013.

According to the new international standards, employment includes only persons working for pay or profit, excluding persons engaged wholly or mostly in subsistence foodstuff production. The effect of this is to lower the count of employment (according to the old definition) and to higher the count of unemployment because some of the subsistence foodstuff producers would be looking and available for work for pay or profit and thus be classified as unemployed. The comparison of some key indicators using old and new definition is presented in this section as well as in the tables at the end of the section.

The survey also collected data on certain particular labour-market related issues such as working children 5 to 17 years old, income from employment, migrant workers and workers with disabilities.

The scope of the survey covered all persons living in private households, excluding the institutional population permanently residing in places such as hostels, health resorts, correctional establishments etc., as well as persons living at their work-sites and in seasonal dwellings. The survey was designed as part of a regular survey programme to be conducted twice a year, in February and August of each year, using 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 Population and Housing Census 2012 updated at the second stage of sampling with fresh listing of the selected enumeration areas. The resulting estimates of the main labour force indicators at the national level have standard errors of about 0.6 percent.

The survey results are analyzed in this report under fourteen headings and sub-headings. The main highlights are described below. Key summary indicators are presented at the end of this section.

Labour force, employment and unemployment

According to the survey results, among the 6,812,978 persons 16 years old and above living in private households, about 3,600,916 persons representing 52.9 percent were in the labour force, either employed (2,959,965) or unemployed (640,951). The remaining 3,212,062 persons were outside the labour force including some 1,691,727 persons

engaged wholly or mostly in subsistence foodstuff production, not classified as employment according to the new international standards on statistics of work, employment and labour underutilization.

The unemployment rate stood at 17.8 percent, indicating that roughly for six persons in the labour force there was one person unemployed. The unemployment rate obtained in August 2017 was 1 percentage point lower than the one obtained in August 2016. The unemployment rate was higher among women (21.0 percent) than among men (15.2 percent) and higher among young people (21.7) than among adults (14.6percent). It was also higher in the urban areas (18.5 percent) than in the rural areas (17.5 percent). This situation is the same as the one in February 2017, where the unemployment rate was higher in the urban areas (18.1 percent) than in rural areas (16.2 percent). The median duration of seeking for employment was only 3.0 months but about 20.1 percent of the unemployed were seeking employment for 12 months or more (long-term unemployment).

Other components of labour underutilization

The unemployment rate is not the only indicator of the unmet needs for employment. Other indicators combine unemployment, time-related underemployment and potential labour force. In total there were 838,906 persons classified as time-related underemployed and 1,453,928 persons as potential labour force. The composite measure of labour underutilization including unemployment was 58.0 percent, more than a half of the extended labour force was either unemployed, time-related underemployed or in the potential labour force (persons outside the labour force who were available for employment but were not seeking employment during the reference period as well as others outside the labour force who were seeking employment during the reference period but were not currently available for work). The underutilization rate stays the same as compared to the situation of August 2016.

Subsistence foodstuff producers

The unemployment rate obtained in the August 2017 labour force survey under the new international standards (17.8 percent) differed considerably from the rate (5.1 percent) that would have been obtained under the old definitions used in past household surveys and population censuses of Rwanda. The main reason explaining the difference is the statistical treatment of subsistence foodstuff producers in the definition of employment. The effect of this is to lower the count of employment according to the old definition (by 2,058,515 persons) and to higher the count of unemployment (by 367,784 persons).

Branches of economic activity

Under the new international standards, agriculture employment includes only those who produce agriculture good intended mainly for sale or barter. Agriculture employment was still predominant even under the new international standard with a proportion of 37.5%.

The branch of economic activity with the next highest number of employed persons was trade (16.6 percent) followed by construction (10.3 percent) and activities of households as employers of domestic personnel (6.8 percent). Using the broad branch of economic activity, the share of industry was 18.9 percent and 43.6 percent in services.

Occupations

The occupation category with the highest proportion (53.9 percent) was elementary occupations involving the performance of simple and routine tasks. This is followed by services and sales workers (19.2 percent), followed by craft and related trades workers (7.6 percent) and skilled agricultural (6.8 percent).

Status in employment

The employed population consisted of employees, paid apprentices and interns (68.1 percent), employers (1.4 percent), own-account workers (25.6 percent), contributing family workers (4.4 percent) and members of producers' cooperatives (0.4 percent).

Informal sector and informal employment

The results of the survey show that there were about 2,254,401 employed persons in the informal sector, corresponding to about 76.2 percent of total employment. There were in total 2,681,435 person with informal employment at main job, constituting almost 90.5 percent of total employment. A significant result was the presence of some 257,756 person with informal jobs in formal sector.

Working time

The average and median number of hours usually worked at all jobs were 39.6 and 36 hours per week respectively, and the corresponding hours actually worked during the reference week were 33.1 hours for the average and 30 hours for the median. For most people (48.2 percent), the weekly usual and actual hours of work at all jobs were the same. For others, the usual hours of work was higher than the actual hours of work due to various reasons, including vacation or holidays or sickness during part or the whole of the reference week (45.3 percent). For the remaining, the hours usually worked was lower than the hours actually worked. The total volume of employment in terms of actual hours worked at all jobs in the reference week was 96 million hours; which means that the volume of labour in term of actual hours increased by around 3 million as compared to the situation of august 2016.

The combination of usually working hours in employment and in foodstuff production give the number of usually working hours according to the old definition of employment. The corresponding mean and median usually working hours were 37.9 and 36.0 hours per week.

Income from employment

The average income from paid employment of employees at main job was about 58,677 RWF per month while the median was 20,800 RWF. The national average hourly cash income from employment of employees at main job was 439 RWF per hour. The corresponding values were 228 RWF per hour in agriculture, 484 RWF per hour in industry and 681 RWF per hour in services.

Population outside the labour force

The number of persons of working age who were outside the labour force was about 3,212,062 the majority of them being subsistence foodstuff producers (52.7 percent). A large part of the population outside the labour force considered themselves to be currently studying (31.6) unemployed (29.2 percent), or fulfilling domestic tasks in their household (21.8 percent). The remainder (17.4 percent) considered themselves as in retirement, or permanently unable to work due to disabilities or other health problem.

Women and equal opportunities

Women accounted for close to 44.6 percent of the labour force, mostly engaged as crop farm labourers, domestic cleaners and helpers, stall and market salespersons, and shopkeepers. Among employed persons with managerial positions, 29.5 percent were women. The analysis of the survey data also showed that, after controlling for differences in characteristics of males and females as well the differences in their jobs, the results show that there is no gender pay gap in hourly earnings.

Youth and education

The unemployment rate among young persons 16 to 30 years old was 21.7 percent. The survey showed an increasing pattern of youth unemployment rate from about 18.2 percent for young people with no educational attainment to 31.9 percent for youth with secondary education with a slight decline to 29.4 percent among youth who completed university education.

Participation in training programmes

In total an estimated 607,552 persons completed a trade or technical vocational course in the past. The most popular training course was tailoring with participation rate of 31 percent, followed by masonry with participation rates of 22 percent and carpentry with 8 percent.

Among the training courses with more than 1 percent of the graduates, Motor vehicle engine mechanics was the most successful training course with current employment rate of 85.7 percent, followed by automotive technology (76.1 percent), automotive body repair 75.7 percent), welding (74.8 percent), engine mechanics (74.1 percent), and masonry (67.8 percent). Graduates in Technical and Vocational Education Training were

more successful than graduates in general education at the labour market. The proportion of employed population among those who completed TVET was 58.7 percent while the corresponding proportion among those who followed general education was 42.2 percent. The unemployment rate among both TVET and general education graduates was relatively the same (19 percent).

Working children

In many countries, children below the legal working age are engaged in economic activity, earning money in a variety of casual or informal jobs or helping without pay in family enterprises. Not all work performed by children is however *child labour*. According to the international standards concerning statistics of child labour adopted by the 18th ICLS in 2008, the term *child labour* refers to the engagement of children in prohibited work and, more generally, in types of work to be eliminated as socially and morally undesirable as guided by national legislation and relevant ILO conventions and recommendations.

The RLFS was not designed to measure child labour, however, the survey collected some data on children aged 5 to 17 that allows estimating some aspects of work activities of children. The survey results show that there were 364,915 children 5 to 17 years old engaged in employment work during the reference period, representing 9.4 percent of the total number of children in that age category. Only 0.6 percent of children 5 to 12 years old worked 20 hours or less per week and the majority of them was enrolled in schools. The corresponding rates for those aged 13 to 15 years old and 16 to 17 years old were 14.6 percent and 39.3 percent respectively. The major part of the working children age 5 to 17 were engaged in agriculture activities (70.8 percent), and working 20 hours or less per week (58 percent).

Own-use producers

About 78.2 percent of the working age population engaged in one or more types of own-use production work, spending on average 21.4 hours of work in such activities, for example household chores including shopping, preparing meals (10.6 hours per week), searching for fodder or grazing for domestic animals (9.4 hours per week), looking after children and elderly (8.1 hours per week), constructing own dwelling or making major repairs (6.9 hours per week), manufacturing household goods for own or family use (6.6 hours per week), collecting firewood (4.8 hours per week), and fetching water for the household including travel time (4.6 hours per week).

Migrant workers

The stock of the migrant population at the time of the survey was 1,372,914 persons, representing 11.7 percent of the total population. Among them, an estimated 550,910 were internal migrant workers, the bulk were internal migrant workers employed by the household mainly as domestic workers (24.6 percent), or in agriculture (16.8 percent), in wholesale and retail trade (17.5 percent) and in construction (8.6 percent).

Workers with disabilities

In total there were 333,452 persons five years old and over with disabilities, representing a prevalence rate of slightly less than 3.3 percent. Almost one-fifth (19.6 percent) of the working age persons with disabilities were labour force participants, but the unemployment rate of persons with disabilities (15.7 percent) was lower than the unemployment rate of the working age population at large (17.8 percent).

Rwanda Labour force survey August 2017: Summary labour force indicators

Children 5 to 17 years old = 3,869,754 Working children = 364,915(9.4%) 5-12 yrs: 0.6% ; 13-15yrs: 14.6% ; 16-17yrs: 39.3%	Working age population 16 years old and over 6,812,978 persons								
	Outside the labour force 3,212,062 person Primary or below:81.7% Secondary:17.2% Tertiary: 1.2%			Labour force 3,600,916 persons Labour force participation rate 52.9%					
				Employed (All who worked for pay or profit) 2,959,965 persons			Unemployed (All not employed but seeking and available to work for pay or profit) 640,951 persons (17.8%)		
	Others outside the labour force	Subsistence foodstuff producers	Agriculture excluding subsistence foodstuff production	Industry	Services	Primary education or below	Secondary education	Tertiary education	
	47.1%	47.3%	37.5%	18.9%	43.6%	16.5%	24.8%	17.5%	
Supplied weekly labour: 96 million hours									
Labour underutilization (2,933,785 persons): Unemployed (640,951) + Time-related underemployed (838,906) + Potential labour force (1,453,928) Composite measure of labour underutilization (58.0%)									

Comparison of General and Technical and Vocational education

Level of attained	Employment to population ratio			Unemployment rate		
	General education	TVET	Total	General education	TVET	Total
None		56.6	42.3		14.8	16.5
Primary	41.8	59.9	44.4	17.2	13.3	16.4
Lower secondary	21.7	55.6	27.1	23.4	20.1	22.3
Upper secondary	44.9	59.6	47.1	26.1	26.3	26.1
University	72.1	64.9	71.7	17.3	21.6	17.5
Young/Adult						
Young (16-30)	33.7	57.4	40.3	24.4	22.1	21.7
Adults (31+)	54.6	59.6	46.2	14.3	13.0	14.6
Total	42.2	58.7	43.4	19.4	16.8	17.8

Comparison of old and new definitions

Indicators	Old definition			New definition		
	Total	Urban	Rural	Total	Urban	Rural
Labour force participation rate	77.7	70.3	79.8	52.9	65.8	49.1
Employment to population ratio	73.7	59.8	77.7	43.4	53.6	40.5
Unemployment rate	5.2	14.9	2.7	17.8	18.5	17.5
Youth Unemployment rate	8	19.5	4.4	21.7	21.7	21.6
Average usually working hours	32.6	47.4	29.4	39.6	50.5	35.5
Median usually working hours	30	45	30	38	48	36
Occupation						
Managers	0.9	4.3	0.2	1.5	4.8	0.3
Professionals	3.7	10.4	2.3	6.3	11.6	4.3
Technician and Associate Professional	0.8	2.7	0.4	1.4	3.1	0.7
Clerical and support workers	0.5	2.2	0.1	0.8	2.5	0.2
Service and sales workers	11.3	25.5	8.2	19.2	28.5	15.7
Skilled agricultural	45	11.6	52.4	6.8	1.4	8.8
Craft and related trade workers	4.5	7.6	3.8	7.6	8.4	7.3
Plant and machines operators	1.4	4.8	0.7	2.4	5.4	1.3
Elementary occupations	31.8	30.9	32	53.9	34.4	61.3
Economic activity						
Agriculture, forestry and fishing	63.1	15.9	73.6	37.5	6.1	49.4
Mining and quarrying	1.1	0.3	1.3	1.8	0.3	2.4
Manufacturing	3.6	5.5	3.2	6.1	6.1	6.1
Electricity, gas, steam and air conditioning supply	0.2	0.6	0.1	0.3	0.6	0.2
Water supply, sewerage and waste management	0.2	0.6	0.1	0.4	0.7	0.3
Construction	6.1	7.6	5.7	10.3	8.4	11
Wholesale, retail trade, repair of motor vehicles and motor vehicles	9.8	21.3	7.3	16.6	23.7	13.9
Transportation and storage	2.4	6.1	1.5	4	6.8	3
Accommodation and food service activities	1	3.3	0.4	1.6	3.7	0.8
Information and communication	0.3	1.2	0.1	0.5	1.4	0.1
Financial and insurance activities	0.4	1.8	0.1	0.7	2	0.2
Real estate activities	0.1	0.2	0	0.1	0.3	0
Professional, scientific and technical activities	0.5	1.9	0.2	0.9	2.1	0.4
Administrative and support service activities	0.6	2	0.3	1	2.2	0.6
Public administration and defense	1.4	4.3	0.8	2.4	4.7	1.5
Education	2.3	4.1	1.9	3.9	4.6	3.7
Human health and social work activities	1.1	2.8	0.7	1.8	3.2	1.3
Arts, entertainment and recreation	0.3	0.9	0.1	0.5	1	0.3
Other service activities	1.2	2.8	0.9	2.1	3.1	1.7
Activities of households as employers	4	15.8	1.4	6.8	17.7	2.7
Activities of extraterritorial organizations and bodies	0.3	1	0.2	0.6	1.1	0.3
Total	100	100	100	100	100	100

Trend of Labour force survey Main indicators

Indicators	16-Aug	17-Feb	17-Aug	Annual average -2017
Labour force participation rate	50.6%	54.0%	52.9%	53.4%
Foodstuff production participation rate(outside LF)	25.3%	26.3%	24.8%	25.6%
Proportion of labour force who completed at least secondary school education	14.0%	16.0%	17.1%	16.6%
Employment to population ratio	41.1%	45.0%	43.5%	44.2%
Percentage of employed population in market oriented agriculture	37.3	45.9	37.7%	41.8%
Percentage of employed population in industry	19.00%	14.3	18.9%	16.6%
Percentage of employed population in services	43.80%	39.7	43.6%	41.6%
Number of off-farm jobs(main and secondary job)	1,753,523	1,691,408	1,907,769	1,799,080
Informal employment rate	91%	91%	90.6%	90.8%
Proportion of informal employment in non-agriculture employment	86.20%	84.10%	83.4%	84.6%
Median weekly hours actually worked	35.5	33	30	30
Median weekly hours usually worked	40	39.1	38.0	36
Supplied labour in hours during the reference week (in millions of hours)	93	97	96	96
Unemployment rate	18.80%	16.70%	17.8%	17.3%
Unemployment rate among university graduates	17.2%	15.9%	17.5%	16.7%
Unemployment rate among secondary school graduates	25%	26.8%	22.0%	24.4%
Unemployment rate among females	22.7%	17.5%	21.0%	19.3%
Unemployment rate among males	15.7%	16.1%	15.2%	15.7%
Unemployment rate among TVET graduates	18%	19.5%	16.8%	18.2%
Unemployment rate among general education graduates	20%	18.6%	19.4%	19.0%
Unemployment rate among persons with disability	20.8%	18.5%	15.7%	17.1%
Youth unemployment rate	20.90%	21%	21.7%	21.4%
Time related underemployment rate	31.4%	29.9%	28.3%	29.1%
Combined rate of labour underutilization	62.3%	58.0%	58.0%	58.0%
Average monthly salary from paid employment (In Frw)	55,737	55,934	58,702	57,263
Average monthly salary in agriculture (In Frw)	20,478	22,244	19,211	20,929
Average monthly salary in industry (In Frw)	64,306	75,668	60,209	67,001
Average monthly salary in services (In Frw)	91,505	103,821	107,976	105,923
Proportion of TVET graduates who are employed	59%	58.3%	58.7%	58.5%
Proportion of General education graduates who are employed	40%	42.1%	42.2%	42.2%
Share of women in non -agricultural paid employment	29.3%	33.0%	30.0%	31.5%
Share of youth in non-agricultural paid employment	53.6%	52.3%	51.2%	51.8%
Manufacturing employment as a proportion of total employment	5.8%	4.5%	6.0%	5.3%
Economic dependency ratio (based on old definition of employment)	143	124	128	126

Contents

Contents

Foreword.....	i
Executive summary.....	iii
Contents.....	xi
List of figures and tables	xiii
Appendix C: Statistical tables	xvii
Introduction	1
Chapter 1. Main labour force indicators	3
Chapter 2. Population, labour force and subsistence foodstuff producers	9
Chapter 3. Labour force participation.....	13
Chapter 4. Employment.....	15
4.1 Branches of economic activity and occupations.....	16
4.2. Informal sector and informal employment	21
4.3 Working time and income from employment	24
Chapter 5. Unemployment and labour underutilization	31
Chapter 6. Persons outside the labour force	37
Chapter 7. Women and equal opportunities	41
Chapter 8. Youth.....	45
8.1: Youth and education	45
Chapter 9. Participation in training programmes	49
Chapter 10. Working children.....	53
10.2 Economic activity of working children 14-17 years.....	55
10.3 Type of work among working children 5-17 years	56
Chapter 11. Own-use producers and subsistence foodstuff producers.....	59
11.1 Foodstuff producers.....	59
11.2 Subsistence foodstuff producers.....	62
Chapter 12. Migrant workers	65
Chapter 13. Workers with disabilities	71
Chapter 14. Main indicators at district level	75
14.1. Labour force participation.....	75
14.1.2 Degree of concentration of market-oriented agriculture.....	78
14.2 Unemployment.....	79
14.2.1 Comparison of unemployment under new and old definitions.....	80
14.2.2 Level of job opportunities in districts.....	81
Annex A. Main concepts and definitions	83
Annex B. Survey methodology and data quality	89
Annex C: Statistical tables.....	109
Annex D: Questionnaire.....	178

List of figures and tables

Table 1. 1: Main labour force indicators, August 2017.....	3
Table 4. 1: Employed persons by branch of economic activity in main job	17
Table 4. 2: Employed persons by occupation in main job.....	20
Table 4. 3: Four digits occupation with high segregation	21
Table 4. 4: Cross-classification of employment by informal or formal job and informal or formal production unit.....	23
Table 4.5: Usual and actual hours of work at main and secondary jobs	25
Table 4. 6: Period of coverage of last income payment of paid employees at main job	27
Table 4. 7: Size distribution of harmonized monthly income from employment at main job.....	28
Table 5.2: Duration of unemployment: Elapsed duration of job search.....	32
Table 6. 1: Main source of livelihood of persons outside the labour force by sex and age group.....	38
Table 7. 1: Gender wage gap using extended Mincer earning equation	42
Table 7.2: Women and men in managerial positions.....	43
Table 8. 1: Accounting for the youth population (16-30 yrs) with respect to employment and education or training, August 2017.....	47
Table 9. 1: Participation in trade or technical vocational course and current employment status.....	49
Table 10. 1: Distribution of working children by age group, working hours and type of work	54
Table 10. 2: Distribution of working children aged 14-17 years old by economic activity according to age group	55
Table 10. 3: Distribution of working children age 14 to 17 by economic activity, according to weekly working hours	56
Table 11. 1: Average time spend per week on own-use production.....	60
Table 11.2: Average time spend per week on subsistence foodstuff production	63

Table 12. 1: Province of current residence and province of last move of internal migrants.....	66
Table 12.2: Province of current residence and country of last move of international migrants.....	67
Table 13. 1: Prevalence of disabilities by type of disability.....	71
Table 14. 1 Labour force participation rate and unemployment rate by district.....	76
Table 14. 2: District opportunity.....	82

List of figures

Figure 1. 1: Labour force participation rate, Employment-to-population ratio and Unemployment rate. New definition versus Old definition.....	5
Figure 1. 2: Regional variations of Labour force participation rate, Employment-to-population ratio and Unemployment rate	6
Figure 1. 3: Seasonal variations of employment, unemployment and labour force participation ('000).....	7
Figure 2. 1: Labour force and subsistence foodstuff producers.	9
Figure 2. 2: Demographic and educational characteristics of labour force versus subsistence foodstuff producers.....	10
Figure 2. 3: Employment and own-use production of good.....	11
Figure 3. 1: Labour force participation rate by sex and age group.....	13
Figure 3. 2: Educational attainment of the labour force	14
Figure 3. 3: Distribution of labour force by education attainment among young and adult population	14
Figure 4. 1: Status in employment at main job.....	16
Figure 4. 2: Share of work force by broad branch of economic activity	18
Figure 4. 3: Top twelve branches of economic activity of employed persons at main job.....	19
Figure 4. 4: Top twelve occupations of employed persons at main job.....	20
Figure 4. 5: Composition of non-agriculture informal sector employment by sex and urban/rural area	24
Figure 4. 6: Usual and actual hours of work of employed persons at all jobs	26
Figure 4.7: Average hourly cash income from employment of employees at main job by broad branch of economic activity (RWF per hour)	28
Figure 5. 1: Unemployment rate by level of educational attainment	31
Figure 5.2: Composition of labour underutilization.....	33
Figure 5.3: Composite measure of labour underutilization by sex, urban/rural area , age group and educational attainment.....	35
Figure 6. 1: Persons outside the labour force by self-reported main status.....	37
Figure 6.2: Past work experience and reason for stopping last employment of persons outside the labour force	39
Figure 7. 1: Labour force participation by marital status and sex.....	41

Figure 8. 1: Youth (16-30 years old) labour force participation rate and unemployment rate by educational attainment	45
Figure 8. 2: Youth not in education and not in technical training.....	47
Figure 9. 1: Reported benefits after completing vocational training.....	51
Figure 10. 1: Child work rate by age group.....	54
Figure 10.2: Working children by type of work.....	57
Figure 10.3: Working children by sex.....	57
Figure 10.4: Percentage distribution of working children by sex and type of work	58
Figure 10.5: School and work among children (5-17 years old).....	58
Figure 11. 1: Proportion of working age population who are own use producers by sex.....	61
Figure 11.2: Average number of hours spent in own use production activities by type and sex.....	61
Figure 11.3: Proportion of working age population engaged in Own use production of services by residential area and activity.....	62
Figure 11.4: Percentage distribution of the use of household production.....	63
Figure 11.5: Participation of paid workers in subsistence agriculture.....	64
Figure 12. 1: Size of the migrant and migrant workers populations	65
Figure 12.2: Labour force status of internal and international migrants.	68
Figure 12.3: Employed migrant workers by branch of economic activity.....	69
Figure 13. 1:Demographic characteristics and work status of persons with disabilities relative to the general population.	73
Figure 13.2:Main labour force indicators: Working age persons with disabilities versus working age population at large.....	74

Appendix C: Statistical tables

Table 1. Summary labour force indicators, August 2017	109
Table 2: Comparison of old and new definition	110
Table 3 : Population by sex, age group and urban/rural area, August 2017	112
Table 4: Households by household size, sex of head of household and urban/rural area, August 2017	113
Table 5: Disabled persons by sex, age group, urban/rural area and type of disability, RLFS August 2017	114
Table 6: Disabled working age persons by labour force status and type of disability, RLFS August 2017	114
Table 7: Population 16 years old and over by education status and urban/rural area, August 2017	115
Table 8: Population 16 years old and over by sex, level of educational attainment and urban/rural area, August 2017	115
Table 9: Population 16 years old and over with respective field of education by sex, urban/rural area, August 2017	116
Table 10: Population 16 years old and over in trade/attended or training courses by sex, duration of training, and urban/rural area, August 2017	117
Table 11: Population 16 years old in/attended trade and technical training by sex, technical skills, and urban/rural area, August 2017	118
Table 12: Population 16 years old and over who received trade and technical training by sex, place of the training, main sponsor, Outcome of the Training and urban/rural area, August 2017	120
Table 13: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, August 2017	121
Table 14: Population 16 years old and over by labour force status, sex, educational attainment, and urban/rural area, August 2017	123
Table 15: Population 16 years old and over by labour force status, sex, marital status, and urban/rural area, August 2017	123
Table 16: Employed population by sex, age group, and urban/rural area, August 2017	124
Table 17: Employed population by sex, occupation group, and urban/rural area, August 2017	125
Table 18: Employed population by sex, current education attendance, and urban/rural area, August 2017	125
Table 19: Employed population by sex, educational attainment, and urban/rural area, August 2017	126
Table 20: Employed population by sex, occupation group and level of educational attainment, August 2017	126
Table 21 : Employed population by sex, branch of economic activity, and urban/rural area, August 2017	128
Table 22: Employed population by sex, branch of economic activity and level of educational attainment, August 2017	129
Table 23: Employed population by sex, status in employment, and urban/rural area, August 2017	132

Table 24: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, August 2017	132
Table 25: Employees by sex, duration of employment contract at main job and urban/rural area, August 2017	133
Table 26: Employed population by sex, formal/informal sector employment, status in employment at main job and urban/rural area, August 2017	134
Table 27: Formal and informal employment by sex, branch of economic activity, August 2017	136
Table 28: Formal and informal Sector by sex, branch of economic activity, August 2017	137
Table 29: Average number of hours usually worked per week at main job by sex, branch of economic activity, urban/rural area August 2017	138
Table 30: Average monthly cash income from employment of employees at main job by sex, age group, level of educational attainment, occupation group and urban/rural area, August 2017	139
Table 31: Median monthly cash income from employment of employees at main job by sex, age group, level of educational attainment, occupation group and urban/rural area, August 2017	140
Table 32: Size distribution of monthly cash income from employment of employees at main job by sex and urban/rural area, August 2017	141
Table 33: Median/Mean cash income from employment of employees at main job by Quintiles sex and urban/rural area, August 2017	141
Table 34: Youth and Young Population by sex, and residential area, August 2017	142
Table 35: Young population 16–30 years old by sex, level of educational attainment, labour force status and urban/rural area, August 2017	142
Table 36: Youth Unemployed by sex, duration of seeking employment, and urban/rural area, August 2017	144
Table 37: Young Unemployed by sex, duration of seeking employment, and urban/rural area, August 2017	144
Table 38: Youth not in employment and not currently in education or training by sex, age group, and urban/rural area, August 2017	145
Table 39: Unemployed population by sex, broad age group and urban/rural area, August 2017	146
Table 40: Unemployed population by sex, level of educational, and urban/rural area, August 2017	146
Table 41: Unemployed population(who looked for a job) by sex,method of seeking employment, and urban/rural area, August 2017	147
Table 42: Unemployed population(who looked for a job) by sex, duration of seeking employment, and urban/rural area, August 2017	148
Table 43: Time related under employment by age group sex and area of residence	148
Table 44: Time-related underemployed persons by sex, main branch of economic activity and urban-rural areas.	149
Table 45: Population outside the labour force by sex, degree of labour market attachment, and urban/rural area, August 2017	150
Table 46: Population outside the labour force by sex, main source of livelihood, and urban/rural area, August 2017	151
Table 47: Working age population, by reported status of non-employment	152

Table 48: Average time spent in own-use production work by sex, type of own-use production and urban/rural area, August 2017	153
Table 49: Average time spent per week on own-use production of goods of working age population by sex, age group, employment status, and urban/rural area, August 2017	154
Table 50: Average time spent per week on own-use provision of services of working age population by sex, age group and urban/rural area, August 2017	154
Table 51: Children 5-17 years old by sex, school attendance, current work status and urban/rural area, August 2017	155
Table 52: Migrants by sex, age group, urban/rural area and place of residence prior to migration, RLFS August 2017	156
Table 53: Internal and international migrants by labour force status, sex, urban/rural area, RLFS August 2017	157
Table 54: Internal and international migrants by labour force status and main reason for migration, RLFS August 2017	158
Table 55: Migrant workers by sex, urban/rural area, prior place of residence and branch of economic activity, RLFS August 2017	160
Table 56: Summary labour force indicators, RLFS August 2017(City of Kigali)	162
Table 57: Summary labour force indicators, RLFS August 2017(South province)	164
Table 58: Summary labour force indicators, RLFS August 2017(West province)	165
Table 59: Summary labour force indicators, RLFS August 2017(North province)	166
Table 60: Summary labour force indicators, RLFS August 2017(East province)	167
Table 61: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(City of Kigali)	168
Table 62: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(South province)	169
Table 63: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(West province)	170
Table 64: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(North province)	171
Table 65: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(East province)	172
Table 66: Labour market indicators and educational type (general and Technical)	173
Table 67: Labour market indicators by attained level of education by those who completed TVET	174
Table 68: Main Labour market indicators by District	176

Introduction

The National Institute of Statistics of Rwanda (NISR), as the coordinator of the National Statistics System (NSS), launched a regular labour force survey programme (LFS) in 2016¹. The survey programme is part of the second National Strategy for the Development of Statistics (NSDS2) covering the period 2014/15 to 2018/19.² It is conducted in partnership with the Ministry of Public Service and Labour (MIFOTRA), and with technical support from the Rwanda-German Development Cooperation as part of its Technical Cooperation program GIZ Eco-Emploi.

The main objective of the survey programme is to monitor the trend of employment and labour underutilization including unemployment at the national and province levels, and to the extent possible also at district level. The survey programme is also meant to provide relevant data for the design, implementation and evaluation of economic and social policies related to employment creation, income generation, skills development including vocational education and training, and related decent work policies. It is further designed to provide data on particular categories of persons such as women and youth and on required data for other bodies of statistics such as volume of work and labour input for national production accounts and calculation of labour productivity.

The survey programme began with a pilot survey conducted in February 2016. The principal objective of the pilot LFS was a full rehearsal of the operations of a national labour force survey including sample selection, listing of sample enumeration areas, household interviewing, data processing and report writing. The first round of the full-fledge Rwanda labour force survey was conducted in August 2016 and it is conducted twice a year in February and August.

The analysis of the August LFS 2017 results is presented in the main body of the report organized in 14 Chapters. Chapter 1 presents the main results at the national level and comparisons with the past surveys. Chapter 2 examines the age structure of the population, the labour force and its relation to the subsistence foodstuff producers. Chapter 3 examines the labour force participation of the working age population. Chapter 4 presents the data on employment and its composition in terms of status in employment, branch of economic activity, occupation, informal sector and informal employment, working time and income from employment.

Chapter 5 deals with unemployment and other components of labour underutilization (time-related underemployment and potential labour force) and compares the unemployment rate with broader indicators of labour underutilization. Chapter 6 presents the data on the characteristics of the population outside the labour force, including main source of livelihood and past work experience. The other seven chapters examine the labour market situation of particular categories of workers, namely,

¹ NISR, *Labour Statistics Framework of Rwanda*, National Institute of Statistics of Rwanda Kigali, 2014.

² NISR, *National Strategy for the Development of Statistics, 2014/15-2018/19*, National Institute of Statistics of Rwanda, Kigali, September 2014.

women (Chapter 7), young persons (Chapter 8), participants in training programmes (Chapter 9), own-use producers (Chapter 10), working children (Chapter 11), migrant workers (Chapter 12) , workers with disabilities (Chapter 13) and District level main labour market indicators (chapter 14).

The survey methodology and data quality is documented in Annexes A and B. The main concepts and definitions used in the survey are described in Annex A, including the working age population, employment, unemployment and other components of labour underutilization, and own-use producers. The definitions of other concepts are presented in the body of the report including hours actually or usually worked, status in employment, informal sector and informal employment. Annex B describes the survey design and quality of the data, in particular, sampling errors, coverage errors, non-response and response errors. The annex also describes the questionnaire design and issues experienced during the field operations. The statistical tables are presented in Annex C.

A specimen of the survey questionnaire is reproduced in Annex D and the list of officials involved in the survey design and operations is given in Annex E.

Chapter 1. Main labour force indicators

The main results of the LFS August 2017 are shown in Table 1.1 below. According to these results, among the 6,813,000 persons 16 years old and over living in regular households, about 3,601,000 persons were in the labour force, either employed (2,960,000) or unemployed (641,000). The remainder 3,212,000 persons were outside the labour force including about 1,692,000 persons engaged wholly or mostly in subsistence foodstuff production, not classified as employment according to the 2013 new international standards on statistics of work, employment and labour underutilization.

The national labour force participation rate, that is the percentage of the working age population engaged in the labour force, was 52.9 percent, indicating that slightly more than half of the working age population was either working for pay or profit or seeking employment. The male labour force participation rate was 62.5 percent, higher than the female rate of 44.4 percent. At the same time, the labour force participation rate in urban areas (65.8 percent) was higher than the rate in rural areas (49.1 percent).

Table 1. 1: Main labour force indicators, August 2017

Indicators ('000)	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Population 16 years old and over	6,813	3,189	3,624	1,520	5,293	3,223	3,590
Labour force	3,601	1,993	1,608	1,000	2,601	1,531	2,070
- Employed	2,960	1,690	1,270	814	2,146	1,164	1,796
- Unemployed	641	303	338	185	456	367	274
Outside labour force	3,212	1,196	2,017	520	2,692	1,692	1,520
Labour underutilization	2,934	1,249	1,685	501	2,433	1,889	1,045
- Unemployed	641	303	338	185	456	367	274
- Time-related underemployed	839	436	403	105	734	504	335
- Potential labour force	1,454	510	944	211	1,243	1,019	435
Labour force participation rate	52.9	62.5	44.4	65.8	49.1	47.5	57.7
Employment-to-population ratio	43.4	53	35	53.6	40.5	36.1	50
Time-related underemployment rate	28.3	25.8	31.7	12.9	34.2	43.3	18.7
LU1 - Unemployment rate	17.8	15.2	21	18.5	17.5	24	13.2
LU2 - Combined rate of unemployment and time-related underemployment	41.1	37.1	46.1	29	45.7	56.9	29.4
LU3 - Combined rate of unemployment and potential labour force	41.4	32.5	50.2	32.7	44.2	54.3	28.3
LU4 - Composite measure of labour-underutilization	58	49.9	66	41.4	63.3	74.1	41.7

Source: RLFS August 2017

The employment-to-population ratio, i.e., the percentage of the working age population who is employed, is an indicator of the performance of the national economy in providing employment

to its growing population. The ratio was 43.4 percent according to the survey results. Similar to the labour force participation rate, the employment-to-population ratio was higher among men than women, and higher in urban areas than in rural areas.

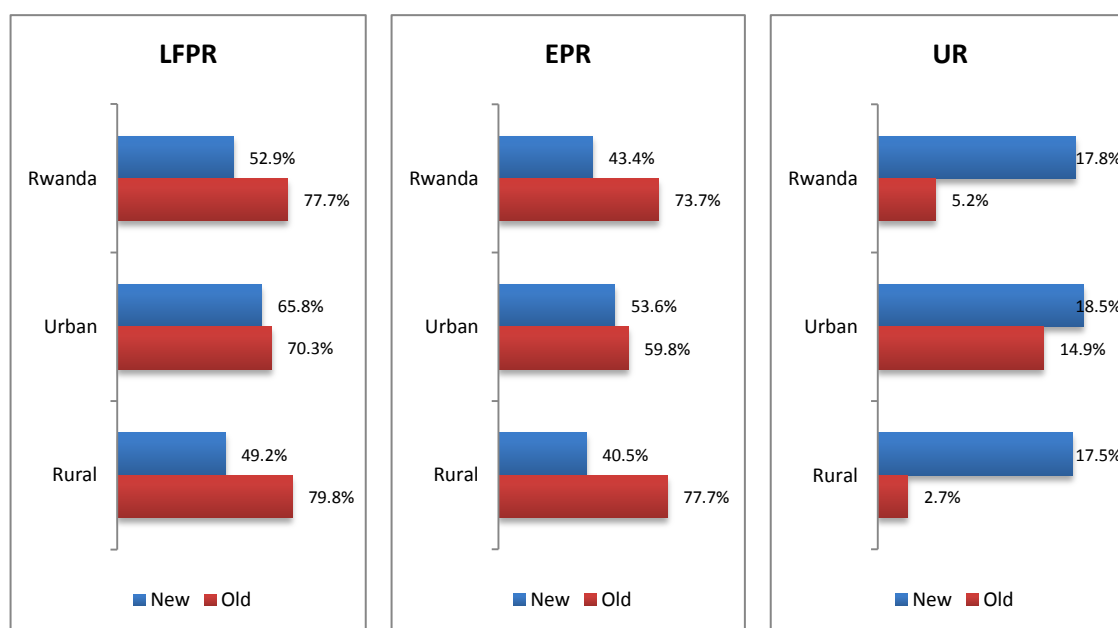
The unemployment rate represents the percentage of the labour force that is unemployed. The rate shown in Table 1.1 as LU1 stood at 17.8 percent, indicating that roughly for six persons in labour force there was one person unemployed. The female unemployment rate (21.0 percent) was higher than the male rate (15.2 percent) and that the unemployment rate in urban areas (18.5 percent) was slightly higher than the one in rural areas (17.5 percent).

The unemployment rate is not the only indicator of the unmet needs for employment. Other indicators combine unemployment, time-related underemployment and potential labour force. The potential labour force includes persons who were available for employment but were not seeking employment during the reference period as well as persons who were indeed seeking employment during the reference period but were not currently available for work.

According to the LFS results, the combined rate of unemployment and time-related underemployment (LU2) was 41.1 percent more than the unemployment rate. The combined rate of unemployment and potential labour force (LU3) was 41.4 percent. The composite measure of labour underutilization (LU4) that combines unemployment, time-related underemployment and potential labour force was 58.0 percent indicating that more than half of the labour force was affected by some form of labour underutilization. In general, labour underutilization affected female workers more than male workers, and rural areas more than urban areas.

The results presented here under the new definitions in line with the 2013 international standards differ considerably from those that would have been obtained under the old definitions used in household surveys and population censuses of Rwanda, in line with the 1982 international standards. Figure 1.1 compares the main labour market indicators under the new and old definitions. The labour force participation rate under the new definition, 52.9 percent, is significantly lower than the rate under the old definition, 77.7 percent. Even more pronounced is the difference between the employment-to-population ratio, 43.4 percent under the new definition, and 73.7 percent under the old definition. By contrast, the unemployment rate is considerably higher under the new definition, 17.8 percent, than the rate under the old definition, 5.2 percent.

Figure 1. 1: Labour force participation rate, Employment-to-population ratio and Unemployment rate. New definition versus Old definition



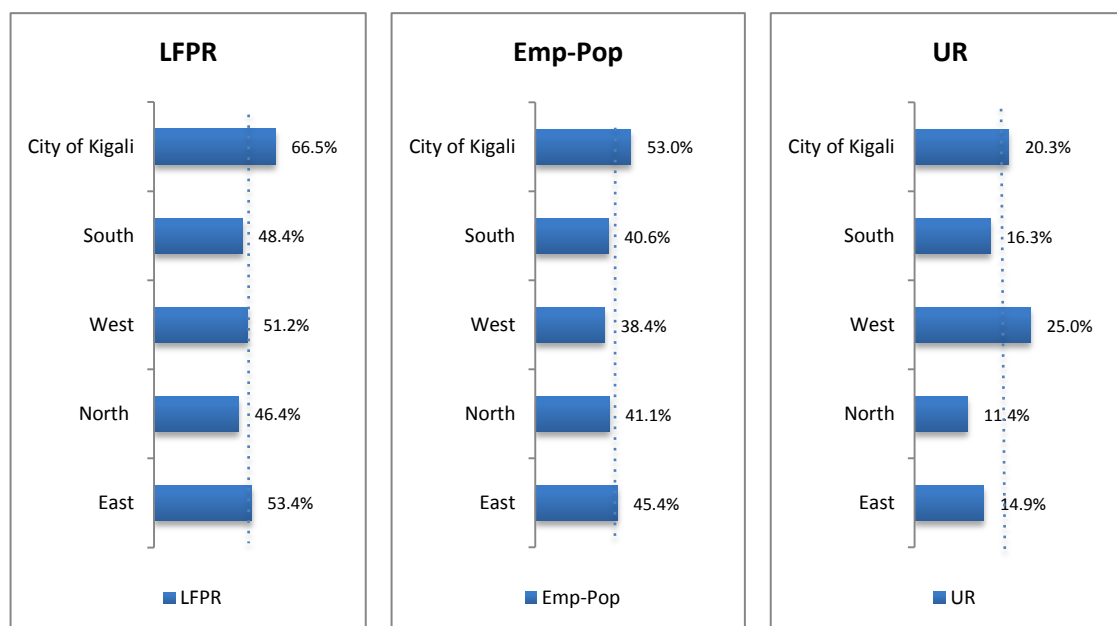
Source: RLFS August 2017

The main reason explaining the difference is the statistical treatment of subsistence foodstuff producers in the definition of employment. According to the new international standards, employment includes only persons working for pay or profit, excluding persons engaged wholly or mostly in subsistence foodstuff production. The effect of this is a lower count of the number of employed and a higher count of the number of unemployed because some of the subsistence foodstuff producers would be looking and available for work for pay or profit and thus be classified as unemployed.

It can be observed on Figure 1.1 that the differences between the labour market indicators under the new and old definitions are much less pronounced in urban areas than in rural areas where subsistence foodstuff production is vastly more widespread. The difference between the labour force participation rate under the old and new definitions in urban areas is 4.5 percentage points while it is 30.6 percentage points in rural areas. The difference between the employment-to-population ratio under the old and new definitions in urban areas is 6.2 percentage points while it is 37.2 percentage points in rural areas. The difference between the unemployment rate under the old and new definitions in urban areas is only 3.6 percentage points while the gap is much wider at 14.8 percentage points in rural areas.

Labour market situation varies from one part of the country to another. Figure 1.2 shows the main labour force indicators for the five regions of Rwanda. More detailed regional data are presented in the Statistical Annex C, and District level results are discussed in chapter 14. It can be observed that the labour force participation rate in August 2017 was considerably higher than the national average in the City of Kigali (66.5 percent) and East (53.4 percent). The rate was about average in the West (51.2 percent), and much lower in South (48.4 percent), and in the North (46.4 percent).

Figure 1. 2: Regional variations of Labour force participation rate, Employment-to-population ratio and Unemployment rate



Source: LFS August 2017.

Note: Dotted line represents the national average of corresponding indicator.

A similar pattern may be observed with respect to the employment-to-population ratio. It shows that the rate was higher than the national average in the City of Kigali (53.0 per cent) and in the East (45.4 per cent), and about average in the North (41.1 per cent) and in the South 40.6 per cent, but significantly lower in the North (38.4 per cent).

The unemployment rate shows a different pattern, lowest in the North (11.4 per cent), and East (14.9 per cent) about average in the South (16.3 per cent) and above average in the City of Kigali (20.3 per cent), and highest in the West (25.0 per cent).

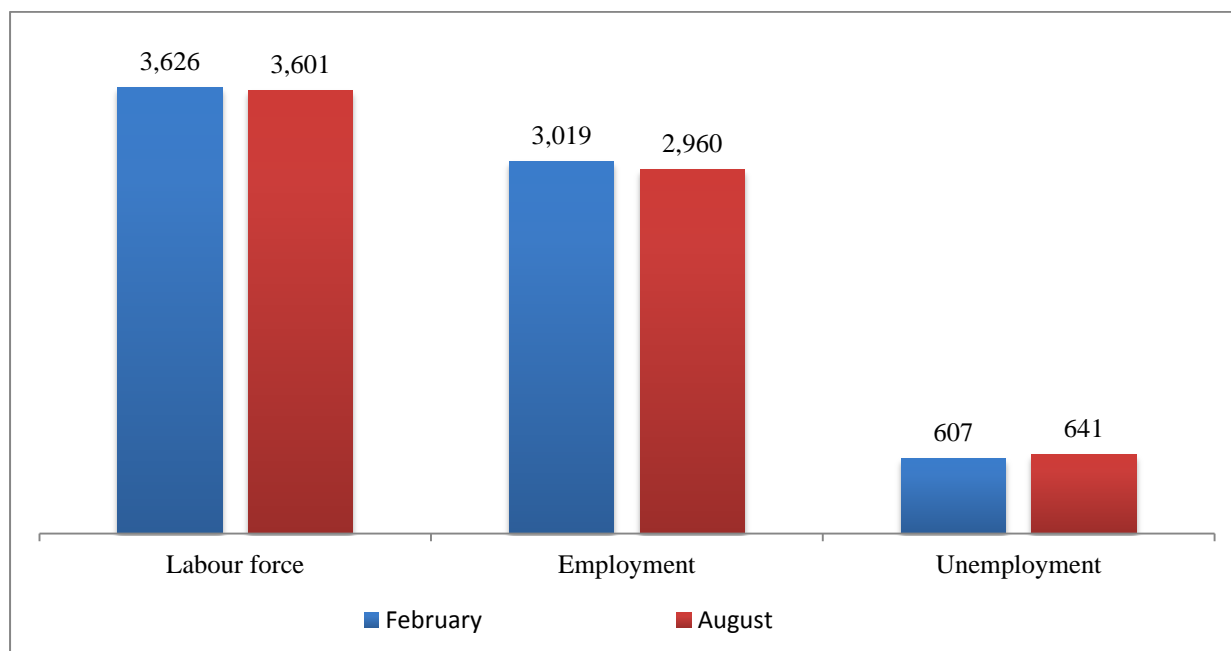
Overall, the regional pattern that emerges indicates significantly higher labour market activity in the City of Kigali in the form of employment work and in the West in the form of unemployment. The West Province shows the lowest employment activity while the unemployment is the lowest in the Northern Province. These results are essentially in line with the regional pattern of subsistence foodstuff production. Where there are relatively more subsistence foodstuff producers, employment is comparatively lower and vice versa where there are relatively less subsistence foodstuff producers, employment tends to be higher. The relationship with unemployment is however more complex.

The labour market of Rwanda is not only subject to regional variations in different parts of the country but also subject to seasonal variations over different periods of the year, particularly, the high and low season of agricultural activities. An idea of the effect of seasonality of the labour market may be obtained by comparing the results of the LFS August 2017 with those of LFS conducted in February 2017.

Figure 1.3 presents the main labour force aggregates obtained from the two surveys. According to these results, total employment shows a decrease from February to August 2017 of about

59,000 persons. Unemployment is significantly higher in August (641,000) compared to February 2017 (607,000), resulting to a slightly lower labour force participation in August (3,601,000) as opposed to February (3,626,000).

Figure 1. 3: Seasonal variations of employment, unemployment and labour force participation ('000)



Source: RLFS August 2017 and RLFS February 2017

The main factor explaining the seasonal variations in the main labour force aggregates is the change in the number of subsistence foodstuff producers during the high and low season. In February, corresponding to the High season of agriculture activity, the total number of subsistence foodstuff producers was about 3,578,000, while the number in August 2017, corresponding to the low season of agriculture activity, was 3,223,000, i.e., a decrease of almost 355,000. Some of the subsistence foodstuff producers who stopped their agriculture activities during the off-season became jobseekers looking for employment work, and as results raising the level of unemployment. This process may have involved 34,000 workers, explaining the increase of the total number of unemployed persons from 607,000 in February 2017 to 641,000 in August 2017.

Chapter 2. Population, labour force and subsistence foodstuff producers

The population constitutes the human capital of a nation and defines its potential labour supply. From an economic point of view, the working population is a factor of production and its aptitude and skills level contribute to the productivity of the national economy. From a social point of view, different categories of the population form social groups of particular concern and meeting their needs are major challenges faced by public institutions and society at large.

The results of the LFS August 2017 show that the working age population 16 years old and over includes 6,813,000 persons of whom about 3,601,000 are in the labour force. This means that slightly more than a half of the working age population (53 percent) are participating in the labour force; many others are engaged in subsistence foodstuff production not counted as employment according to the new international standards on statistics of work, employment, and labour underutilization.

Figure 2.1 shows the size of the labour force relative to the size of the subsistence foodstuff producers and the overlap between them. It can be observed that there are more persons in labour force (3,601,000) than in subsistence foodstuff producers (3,223,000). The overlap (1,531,000) represents the subsistence foodstuff producers who were engaged in an employment activity for pay or profit (1,164,000) or were seeking and available for employment during the reference period of the survey (367,000).

Figure 2. 1: Labour force and subsistence foodstuff producers.

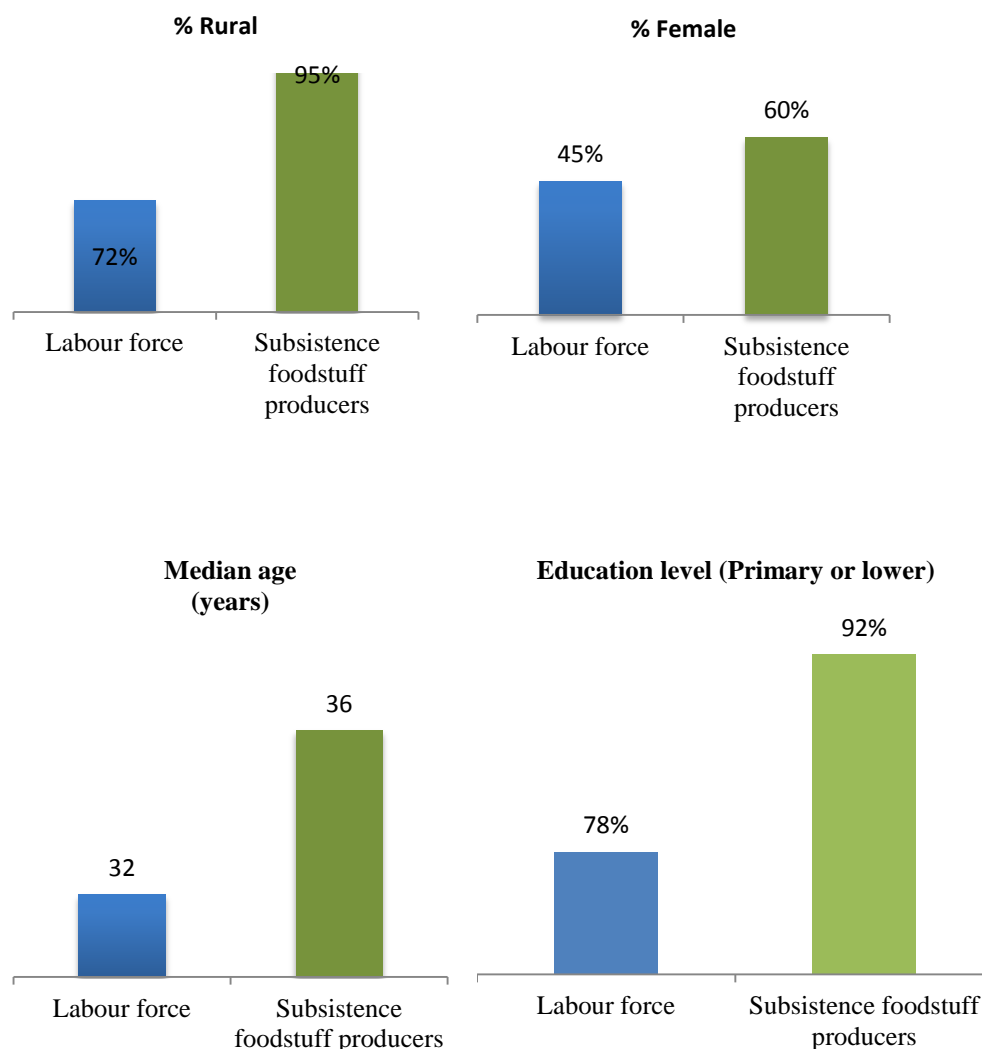


Source: RLFS August 2017

Figure 2.2 compares some of the demographic and educational characteristics of the subsistence foodstuff producers outside labour force with those of the labour force. In general, subsistence foodstuff producers were virtually all living in rural areas (95 percent) while the labour force was 72 percent rural and 28 percent urban. The majority of subsistence foodstuff producers were women (60 percent) while the share of women in the labour force was 45 percent. Subsistence foodstuff producers were generally older (median age 36 years old) and

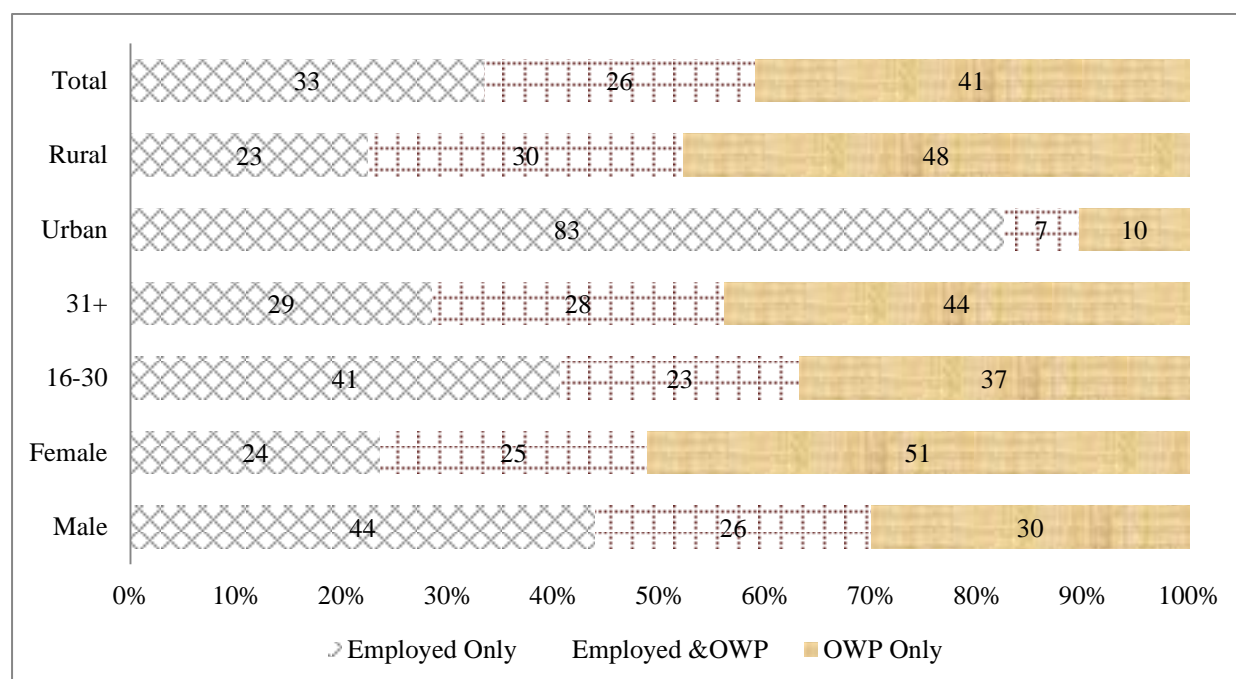
almost the same as educated (55 percent with primary education or below) than persons in the labour force (median age 32 years old and 52 percent with primary education or below).

Figure 2. 2: Demographic and educational characteristics of labour force versus subsistence foodstuff producers.



Source: LFS August 2017

The following figure shows the combination of employment work and subsistence foodstuff producers among different categories of persons who were engaged in one or both of these forms of work. Overall, 33 percent were engaged only in employment work and 41 percent only in own-use production of goods. The remainder 26 percent was combining employment work and own-use production of goods during the specified reference period. It should be mentioned that employment work were measured with reference to the last seven days while the reference period for the measurement of own-use production of goods was four weeks prior to the survey date.

Figure 2. 3: Employment and own-use production of good

Source: LFS August 2017

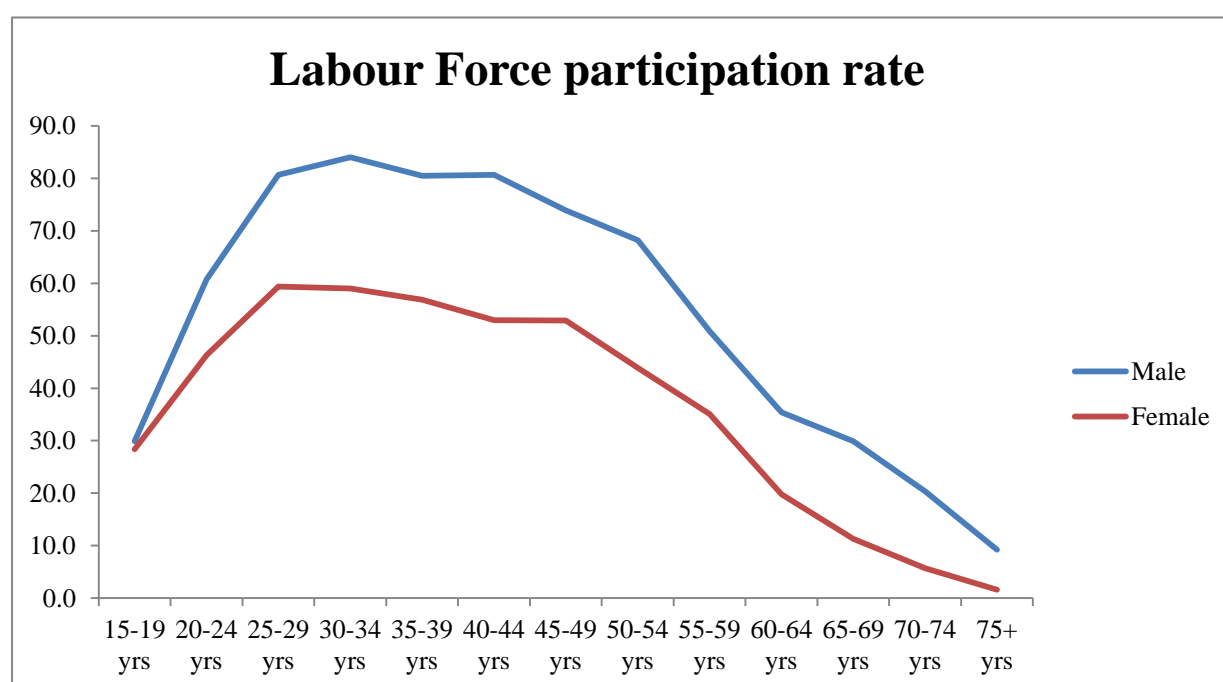
In terms of categories of persons, the data show that sole engagement in own-use production of goods was mostly among women, older persons 31 years old and over, and in rural areas. In contrast, engagement in employment work only was mostly in urban areas, among men, and young person's 16 to 30 years old. The relative size of persons engaged in both employment work and own-use production of goods was the same for almost all categories of persons and varies between 23 to 30 percent in different categories, except for persons living in urban areas where the percentage of persons combining the two forms of work was very low at about 7 percent.

Chapter 3. Labour force participation

The labour force participation rate, i.e., the ratio of the labour force to the working age population expressed in percentage terms, is an indicator of the level of labour market activity. It measures the extent of the working age population who is in the labour force. The breakdown of the labour force participation rate by sex and age group gives a profile of the labour force participation as shown in Figure 3.1.

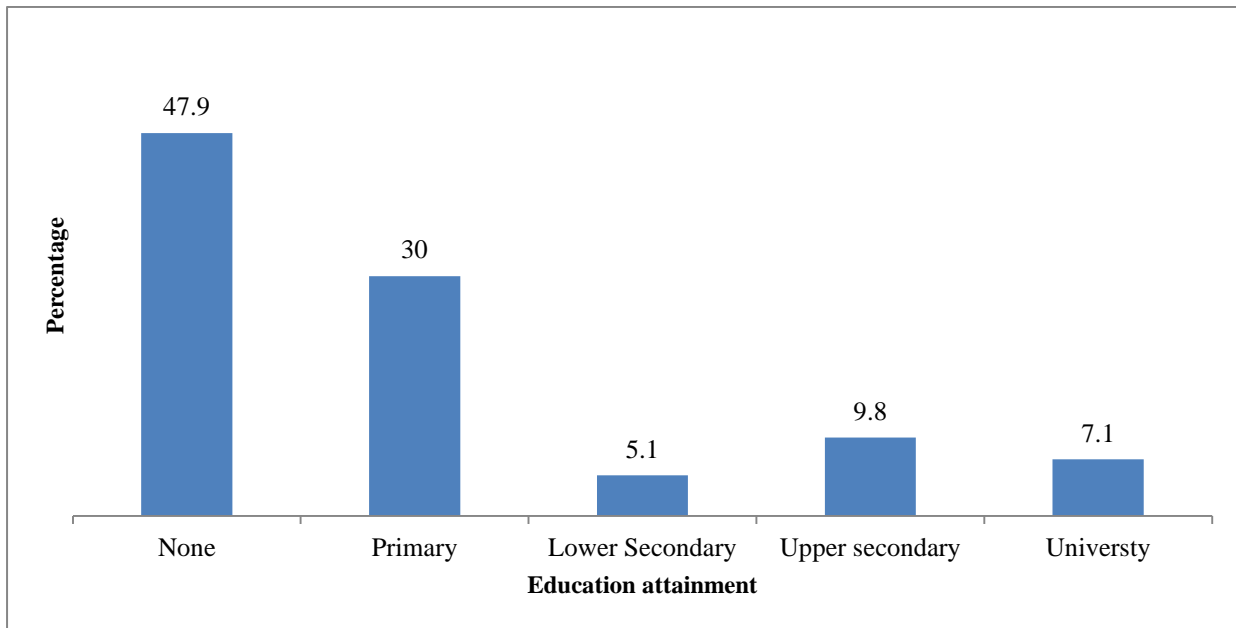
Like most national rates, the Rwanda labour force participation rate has an inverted-U shape. The male curve is above the female curve, reflecting a higher labour force participation of male at virtually all age groups. For each sex, the curve increases for young people when they leave school and enter the labour market. It reaches a peak in the age group 30-34 years for men and in the age group 25-29 for women. The labour force participation rate decreases sharply for both men and women from 50 year old, as people leave and retire from the labour market at older ages. The age from which more than a half of working age population is out of labour force is 60 years old for males and 50 years old for females.

Figure 3. 1: Labour force participation rate by sex and age group



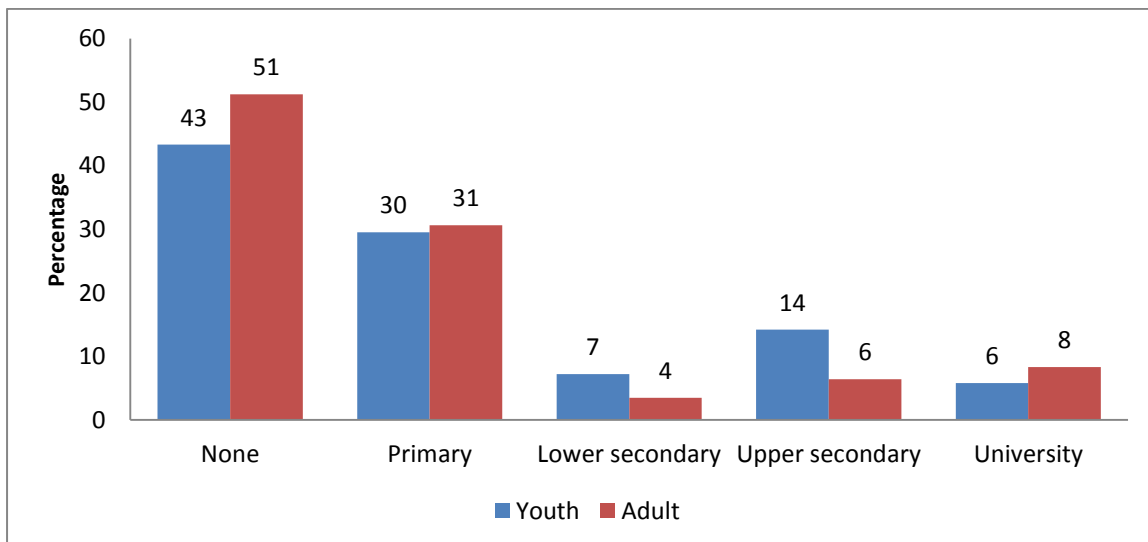
Source: LFS August 2017

The skill level of the labour force may be assessed by the educational attainment of the labour force participants. Figure 3.2 presents the distribution of the labour force by educational attainment. The level of educational attainment of the majority of the labour force (78 percent) was primary education or below. The share of the labour force with secondary education (lower and upper) was about 15 percent and the share with tertiary education was about 7 percent.

Figure 3. 2: Educational attainment of the labour force

Source: LFS August 2017

The educational attainment of the youth population 16 to 30 years old in the labour force was higher than the overall labour force. About 27 percent of youth in labour force has lower secondary or higher education against 22 percent for the labour force as a whole and 18 percent for adults. The percentage of youth with no level of education attained is lower than their adult counterpart

Figure 3. 3: Distribution of labour force by education attainment among young and adult population

Source: LFS August 2017

Chapter 4. Employment

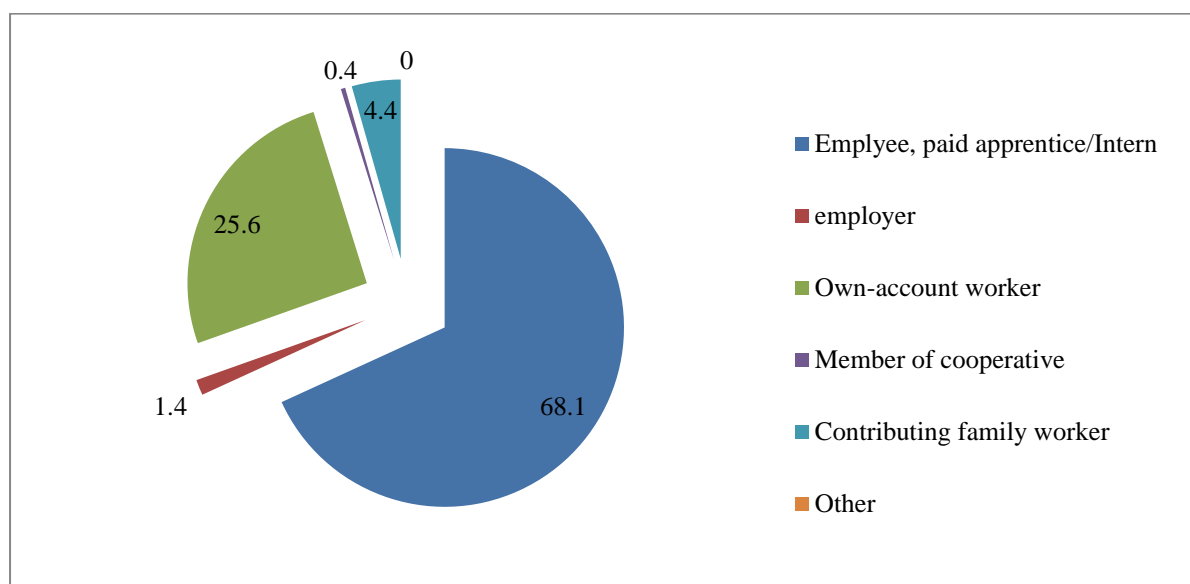
Aggregate employment generally increases with growing population. Therefore, the ratio of employment to the working age population is an important indicator of the capacity of the economy to provide employment to a growing population. A decline in the employment-to-population ratio is often regarded as an indicator of economic slowdown and a decline in total employment as an indicator of a more severe economic downturn. In August 2017, the employment-to-population ratio was 43.4 percent; 2 percent points higher than the one of August 2016

Status in employment classifies jobs held by persons at a given point of time with respect to the type of explicit or implicit contract of employment of the person with other persons or organizations. It may refer to the current job or jobs of an employed person or the last job of an unemployed person who had past work experience. The International Standard Classification of Status in Employment (ICSE-1993) identifies five main categories of persons with respect to their status in employment:³

- **Employees:** Persons working in “paid employment jobs”, i.e., holding explicit (written or oral) or implicit employment contract with remuneration not directly dependent upon the revenue of the unit for which they work. Remuneration could be in the form of wages or salaries, commission from sales, piece-rates, bonuses, or in-kind payments such as food, housing or training.
- **Employers:** Persons working on own-account or with one or a few partners in “self-employment jobs”, i.e., (a) remuneration is directly dependent on the profits (or potential for profits) derived from the goods and services produced or for own consumption, and (b) engaging one or more “employees,” on a continuous basis.
- **Own-account workers:** Persons working on own-account or with one or a few partners in a “self employment job”, not engaging any “employees,” on a continuous basis.
- **Contributing family workers:** Persons working in a market-oriented establishment operated by a household member, who cannot be regarded as partner, in a “self employment job”, not engaging any “employee” on a continuous basis.
- **Members of producers’ cooperatives:** Persons working in a cooperative producing goods and services, in a “self employment job”, not engaging any “employee” on a continuous basis

Figure 4.1 shows the composition of the employed population by status in employment in main job according to the August, 2017 LFS. Almost two-third of the employed population (68.1 percent) were employees or paid apprentices or trainees. The share of own-account workers was (25.6 percent), followed by contributing family workers (4.4 percent), employers (1.4 percent) and members of producers’ cooperatives (0.4%).

³ILO, *International Classification of Status in Employment, ICSE-93*, Fifteenth International Conference of Labour Statisticians, Geneva, <http://laborsta.ilo.org>.

Figure 4. 1: Status in employment at main job

Source: LFS August 2017

The data disaggregated by gender show that there is a significant difference between males and females who were employed in dependent jobs as employees. The percentage of female employed as employees is 65.7 percent against 70.0 percent among males. But, the percentage of females employed in dependent jobs as contributing family workers was higher 8.2 percent against 1.5 percent among males.

The distribution of the employed population by sector of employment reveals that the majority of employed persons were in private sector (84.5 percent) followed by Public sector (6.5 percent). The household as employer was the next to employ 6.0 percent of employed population. The remaining part of the employed population was engaged in the cooperative sector (less than 1 percent) or in international or local non-governmental organizations (less than 1 percent) or other institutions (less than 1 percent).

4.1 Branches of economic activity and occupations

Branch of economic activity refers to the activity of the establishment in which an employed person worked during the reference period. An establishment may be a farm, a mine, a factory, a workshop, a store, an office or a similar type of economic unit. It is important to distinguish enterprises from establishments. “Enterprise” is a broader concept than “establishment”. An enterprise is a legal entity (or group of legal entities) and may have a number of establishments with different economic activities and different locations.

Table 4.1 presents the distribution of the employed population by branch of economic activity in main job. The data show that agriculture employment was by far the most frequent branch of economic activity, comprising 37.5 percent of employment. The branch of economic activity with the next highest number of employed persons was trade (16.6 percent) followed by construction (10.3 percent), activities of households as employers of domestic personnel (6.8 percent) and Manufacturing was 6.1 percent. The other branches of economic activity comprised each less than five percent of total employment.

Table 4. 1: Employed persons by branch of economic activity in main job

Branch of economic activity	Number	%
Total	2,959,965	100.0
Agriculture, forestry and fishing	1,110,612	37.5
Mining and quarrying	54,618	1.8
Manufacturing	179,926	6.1
Electricity, gas, steam and air conditioning supply	9,227	0.3
Water supply, sewerage and waste management	11,030	0.4
Construction	304,473	10.3
Wholesale, retail trade, repair of motor vehicles, motorcycles	492,486	16.6
Transportation and storage	119,181	4.0
Accommodation and food service activities	47,902	1.6
Information and communication	14,031	0.5
Financial and insurance activities	21,545	0.7
Real estate activities	2,595	0.1
Professional, scientific and technical activities	25,407	0.9
Administrative and support service activities	30,247	1.0
Public administration and defense	71,556	2.4
Education	116,713	3.9
Human health and social work activities	52,794	1.8
Arts, entertainment and recreation	14,344	0.5
Other service activities	62,292	2.1
Activities of households as employers	202,632	6.8
Activities of extraterritorial organizations and bodies	16,354	0.6

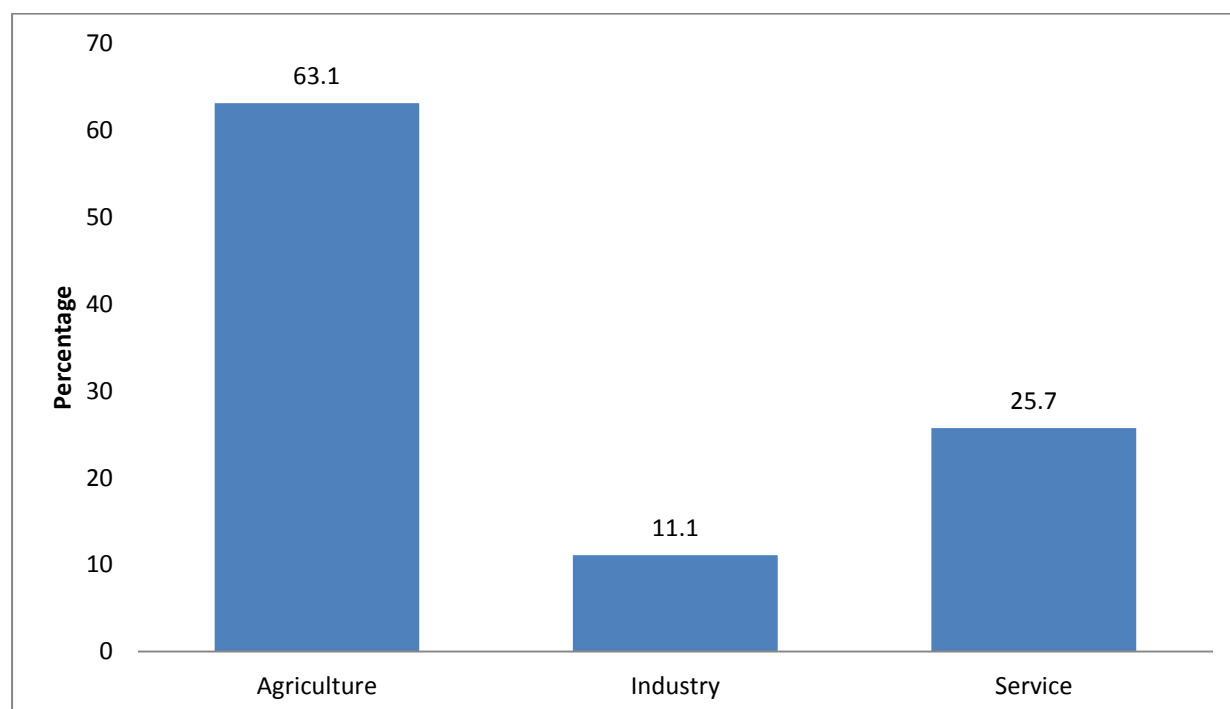
Source: LFS August 2017

Figure 4.2 presents the composition of the employed population by broad branch of economic activity. The results show that the share of agriculture workers account to 37.5 percent in August, the share of industry was 18.9 percent and that of services was 43.6 percent, service sector became high in employing many person.

A full account of agriculture activity requires the inclusion of subsistence foodstuff producers in the calculation.⁴ This means adding to agriculture employment (1,110,600), the number of workers engaged wholly in subsistence foodstuff production not already included in agriculture employment (estimated at 2,058,000 persons).

The result gives a total of 3,169,100 persons engaged in agriculture, representing 63.1 percent of total employment adjusted for subsistence foodstuff production and made comparable with past data as presented in figure 4.2

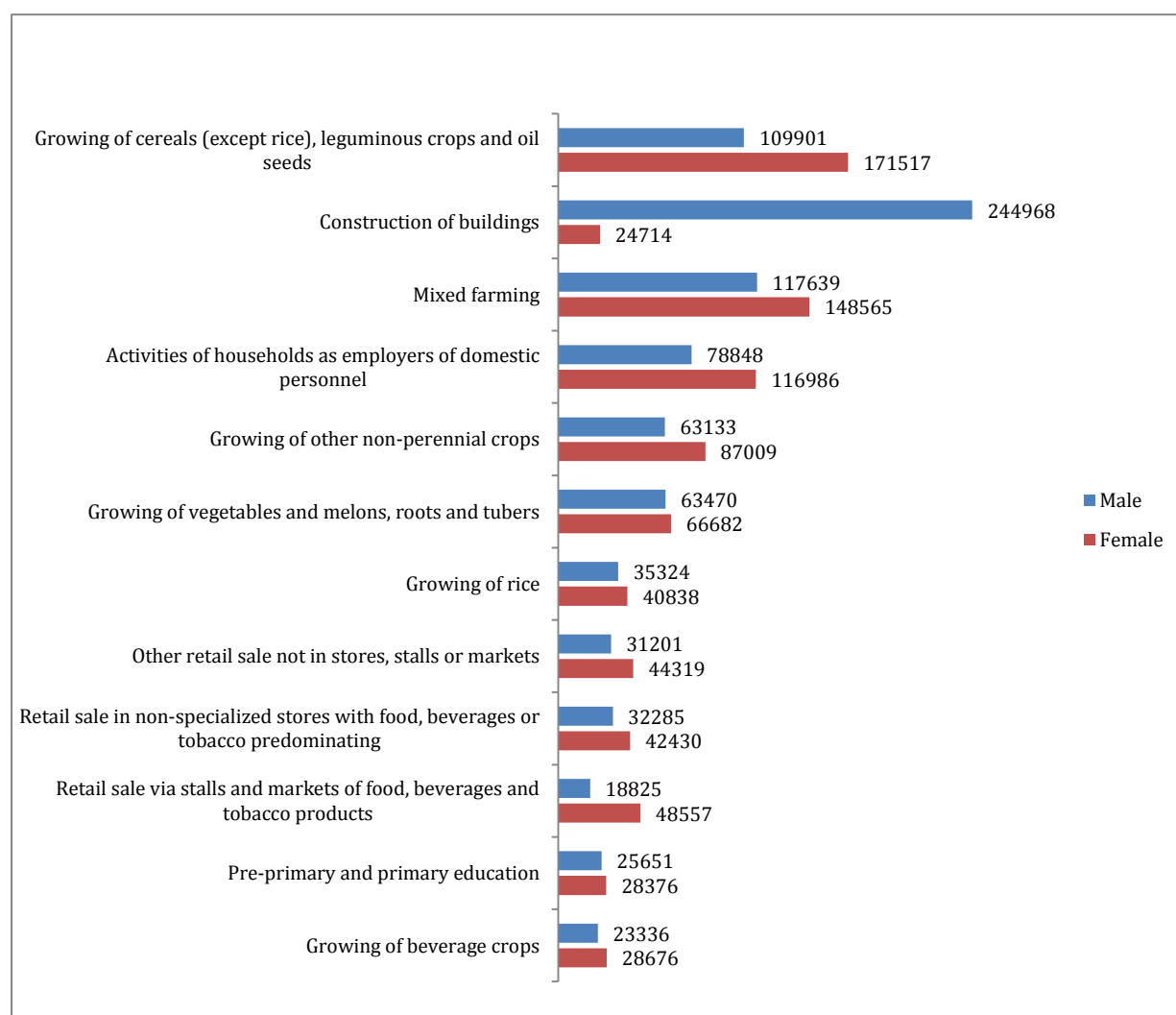
⁴ In principle, a full account of the role of agriculture activities should also include agricultural employment in secondary jobs.

Figure 4. 2: Share of work force by broad branch of economic activity

Source: LFS August 2017

Note: Agriculture includes forestry, fishing and animal husbandry. Industry includes Mining and quarrying, Manufacturing, Electricity, gas, steam and air conditioning supply, Water supply, sewerage and waste management, and Construction. Services cover the remaining branches of economic activity.

Figure 4.3 shows the top twelve 4-digit branches of economic activity according to the August LFS 2017. It is instructive to note that out of the top twelve economic activities, eleven were dominated by female workers, while only construction of buildings was the branches of economic activity dominated by male workers. However most of activities dominated by females are related do the agriculture and most of those females are agriculture laborers.

Figure 4. 3: Top twelve branches of economic activity of employed persons at main job

Source: LFS August 2017

The August 2017 LFS also collected information on occupation. Occupation refers to the kind of work done by a person employed (or the kind of work done previously or wanted if the person is unemployed), irrespective of the branch of economic activity or the status in employment of the person.

Table 4.2 presents the distribution of the employed population by occupation category in the main job. The occupation category with the highest frequency (53.9 percent) was elementary occupations involving the performance of simple and routine tasks. It includes cleaners and helpers, agricultural, forestry and fishery labourers, labourers in mining, construction, manufacturing and transport, food preparation assistants, street and related sales and service workers and other elementary workers.

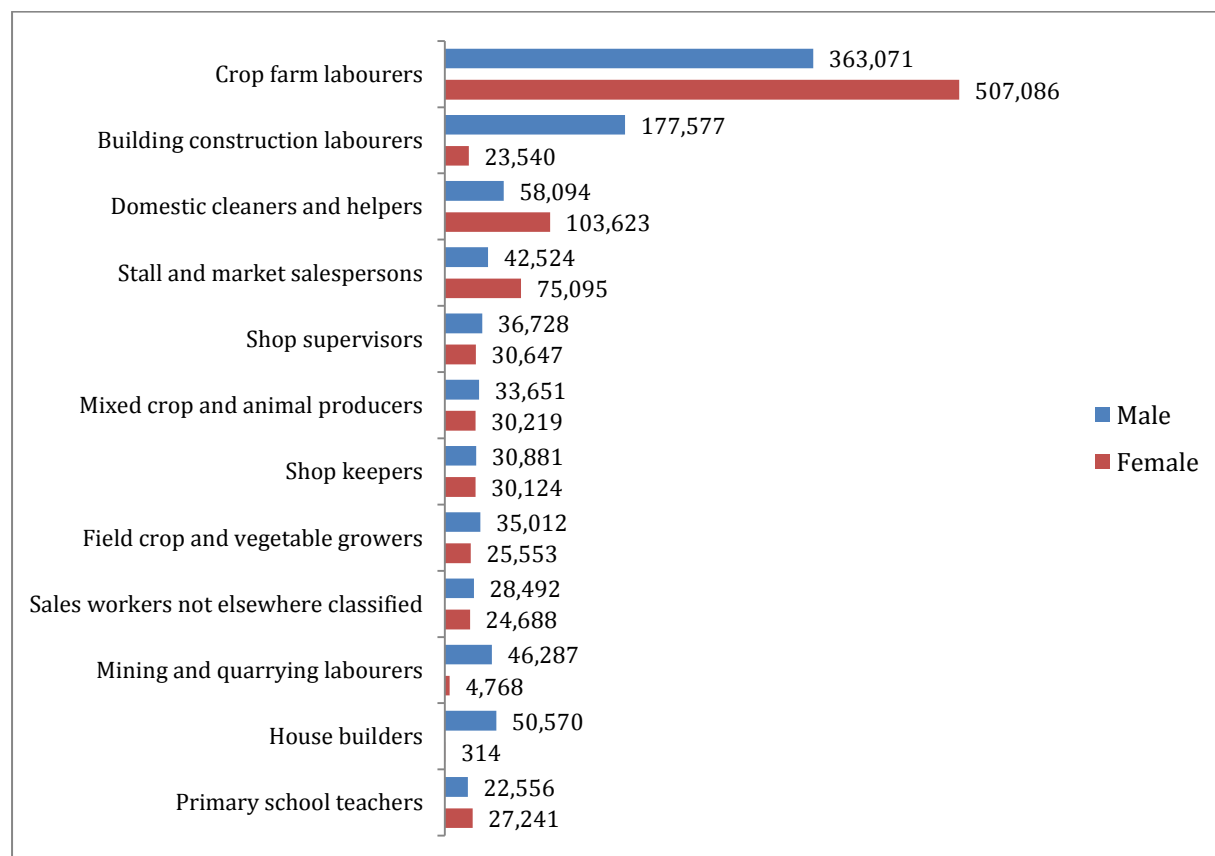
Table 4. 2: Employed persons by occupation in main job

Major occupation group	Number	%
Total	2,959,965	100.0
Legislators, Managers and Senior Officials	45,706	1.5
Professionals	187,371	6.3
Technicians and Associate Professionals	40,894	1.4
Clerical Support Workers	24,746	0.8
Service and Sales Workers	568,415	19.2
Skilled Agricultural, Forestry and Fishery Workers	201,172	6.8
Craft and Related Trades Workers	224,244	7.6
Plant and Machine Operators and Assemblers	72,313	2.4
Elementary Occupations	1,595,105	53.9

Source: LFS August 2017

The occupation category with the second highest frequency was services and sales workers (19.2 percent), followed by craft and related trades workers (7.6 percent), skilled Agricultural (6.8 percent) and professionals (6.3 percent). The other occupation categories each covered less than 5 percent of the employed population.

Figure 4.4 lists the top twelve 4-digit occupations and compares their frequency among male and female employed persons. It can be observed that there were more women than men employed as crop farm labourers, domestic cleaners and helpers, stall and market sales person and primary school teachers.

Figure 4. 4: Top twelve occupations of employed persons at main job

Source: LFS August 2017

There were more men than women employed as Building construction labourers, Shop supervisors, mixed crop and animal producers, shop keepers, field crop and vegetable growers, sales workers not elsewhere classified. House builders, and mining and quarrying labourers were virtually all men.

The degree of segregation of occupations by sex may be measured with the occupational segregation index. It measures extent to which labour markets are separated into “male” and “female” occupations. The occupational segregation index (D) is commonly used as a proxy indicator for equality of opportunity in employment and occupation.⁵It is defined by

$$D = \frac{1}{2} \sum_i \left| \frac{n_{Ai}}{n_A} - \frac{n_{Bi}}{n_B} \right|$$

where n_{Ai} and n_{Bi} are, respectively, the number of men and women in a given occupational i and n_A and n_B are, respectively, the total number of men and women in all occupations. The value of the index ranges from zero to one, zero indicating no segregation and one indicating complete segregation. The index may be interpreted as the fraction of persons that need to change occupations to achieve zero segregation. According to the results of the August 2017 LFS, the segregation index calculated at four-digits level of occupation was 0.41 indicating that 41 percent of the male and female employed population need to exchange occupations to eliminate occupational segregation in Rwanda. While using one-digit level of occupation, the segregation index rate to 12.5 percent compared to 16.0 percent in February 2017.

Among the 330 distinct 4-digit occupations coded in the survey, five contributed more than half of total index of occupational segregation in the country. There were:

Table 4. 3: Four digits occupation with high segregation

Occupation	Number of employed persons	
	Male	Female
Crop farm labourers	363,071	507,086
Building construction labourers	177,577	23,540
Domestic cleaners and helpers	58,094	103,623
Stall and market salespersons	42,524	75,095
House builders	50,570	314

Source: LFS August 2017

It can be observed from these data that building construction labourers and house builders were male-dominated occupations while crop farm labourers, stall and market salespersons and domestic cleaners and helpers were female dominated occupations.

4.2. Informal sector and informal employment

The concept of informal sector is broadly characterized as unincorporated enterprises owned by households.⁶ In such economic units the fixed capital and other assets of the

⁵ILO, *Decent Work Indicators Concepts and definitions, ILO Manual (First version)*, May 2012, pp. 127-130.

⁶ILO, *Resolution on the measurement of employment in the informal sector*, Fifteenth International Conference of Labour Statisticians (ICLS), Geneva, 1993.

enterprise do not belong to the production units as such but to their owners, and may be used both for production and personal purposes. Production expenditure can hardly be separated from household expenditure. In practice, in the LFS, employment in the informal sector was defined as all persons 16 years of age and over who were engaged in unregistered private business enterprises that did not keep written records of accounts. Unregistration meant not registered with the Rwanda Revenue Authority or not paying PAYE/TPR. Domestic workers engaged by households were excluded from the classification of employment in the informal sector.

The results of the survey show that there were about 2,233,674 employed persons in the informal sector, corresponding to about 75.5.0 percent of total employment. The employed persons in the informal sector were mostly male (56.6 percent), employees (60.8 percent) or own-account workers (32.2 percent). Employment in the informal sector was mostly in agriculture (48.2 percent), followed by whole sale and retail trade; repair of motor vehicles and motorcycles (19.0 percent) and Construction (12.6 percent)

Parallel to the concept of employment in the informal sector, there is a separate concept of informal employment. While the concept of informal sector refers to production units as observation units, the concept of informal employment refers to jobs as observation units.⁷In the case of employees, informal employment is defined in terms of the employment relationship. A job held by an employee is considered informal, if the job does not entail social security contribution by the employer, and is not entitled to paid sick leave and paid annual leave.

In the case of own-account workers and employers, the informal employment status of the job is determined by the informal sector nature of the enterprise. Thus, own-account workers (without hired workers) operating an informal enterprise are classified as in informal employment. Similarly, employers (with hired workers) operating an informal enterprise are classified as in informal employment. All contributing family workers are classified as having informal employment, irrespective of whether they work in formal or informal sector enterprises.

According to the August, 2017 LFS, there were in total 2,681,000 persons with informal employment at main job, constituting almost 90.5 percent of total employment. Informal employment jobs were held mostly by male workers (56.4 percent).

The joint analysis of the informal or formal sector status of production units and the informal or formal status of jobs reveals the existence of a significant number of persons with informal employment engaged in the formal sector. Table 4.4 gives the cross-

⁷ILO, *Guidelines concerning a statistical definition of informal employment*, Seventeenth International Conference of Labour Statisticians, Geneva, 2003.

classification of the employed population according to informal or formal sector status of the production unit and informal or formal status of the job.

Table 4. 4: Cross-classification of employment by informal or formal job and informal or formal production unit

Classification of production units	Classification of jobs		Total
	Formal employment	Informal employment	
Informal sector	25,131	2,208,543	2,233,674
Formal sector	251,853	265,023	516,876
Household	1,545	207,869	209,414
Total	278,530	2,681,435	2,959,965

Source: LFS August 2017

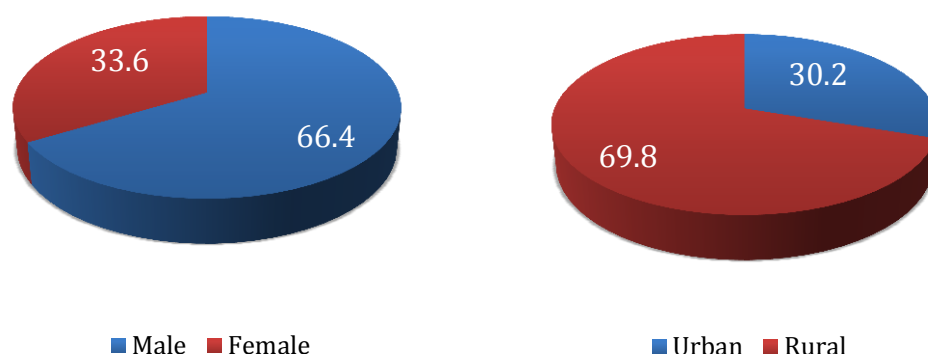
The results show that there were few people with formal employment working in the informal sector (25,131 persons). But, there were a significant number of persons with informal employment in the formal sector (265,023 persons). An example of this category of persons is an employee with short-term contract without social security contribution by the employer working in, a large private corporation or a small enterprise.

- **Informal sector outside agriculture**

The share of the informal sector in non-agriculture employment (70.4 percent) is substantially lower than the corresponding share in total employment (81.2 percent). This implies a relatively few agriculture holdings that are formal, most being informal this raising the share of the informal sector in total employment. Informal sector employment outside agriculture is almost equally composed of own-account workers (50.0 percent) and employees (43.1 percent), the remainder being contributing family workers (4.9 percent), employers (1.7 percent) and members of producers' cooperative or others (0.3 percent). The bulk is engaged in services, particularly in retail trade including shopkeepers, street vendors, and market and stall sales persons.

The following diagram shows the Composition of non-agriculture informal sector employment by sex, and by urban and rural areas. The left panel indicates that men make-up almost two-third of employment in the informal sector outside agriculture (66.4 percent). This is in contrast with the share of men in total informal sector employment (56.6 percent), suggesting that there are relatively fewer men than women engaged in informal agriculture holdings.

Figure 4. 5: Composition of non-agriculture informal sector employment by sex and urban/rural area



Source: LFS August 2017

The right panel of the diagram gives the urban-rural breakdown. It shows that about one-third of informal sector employment outside agriculture is urban (30.2percent), a value almost twice the percentage of urban employment in total informal sector, agriculture and non-agriculture combined (17.7 percent). This result is in line with the expectation that employment in informal agricultural holdings is relatively lower in urban areas than in rural areas.

4.3 Working time and income from employment

The international definition of employment is expansive covering even one hour of work during the reference week. It is thus important that employment is analyzed in conjunction with data on hours of work in order to distinguish the various intensities of employment. Data on hours of work are also necessary to calculate time-related underemployment and hourly income from employment so that the resulting income data are comparable across different categories of workers. The August, 2017 LFS measured two concepts of hours of work:

- **Hours actually worked:** The time spent in a job for the performance of activities that contribute to the production of goods and services during the specified reference period. It includes the direct hours that the person is engaged in the activities, as well as the related hours such as waiting time, on-call, resting time, coffee break, prayer, etc. It excludes annual leave, public holidays, sick leave and other leave, as well as commuting time between work and home, longer breaks such as meal breaks and educational activities, even if authorized by the employer.
- **Hours usually worked:** The hours actually worked in a job during a typical week (or in general any specific reference period). In principle, it is calculated as the most frequent number of hours that a person actually worked per week during the past month.

According to the results shown in Table 4.5, the average number of hours usually worked per week by employed persons in their main job was 39.4 hours. The

corresponding average number of hours actually worked during the reference week was 32.1 hours. Around 82,199 persons representing 2.8 percent of the employed population reported to have been engaged in secondary jobs during the reference week. The average number of hours usually worked on secondary jobs was 13.6 hours per week while the average number of hours actually worked on secondary jobs was 12.2 hours during the reference week.

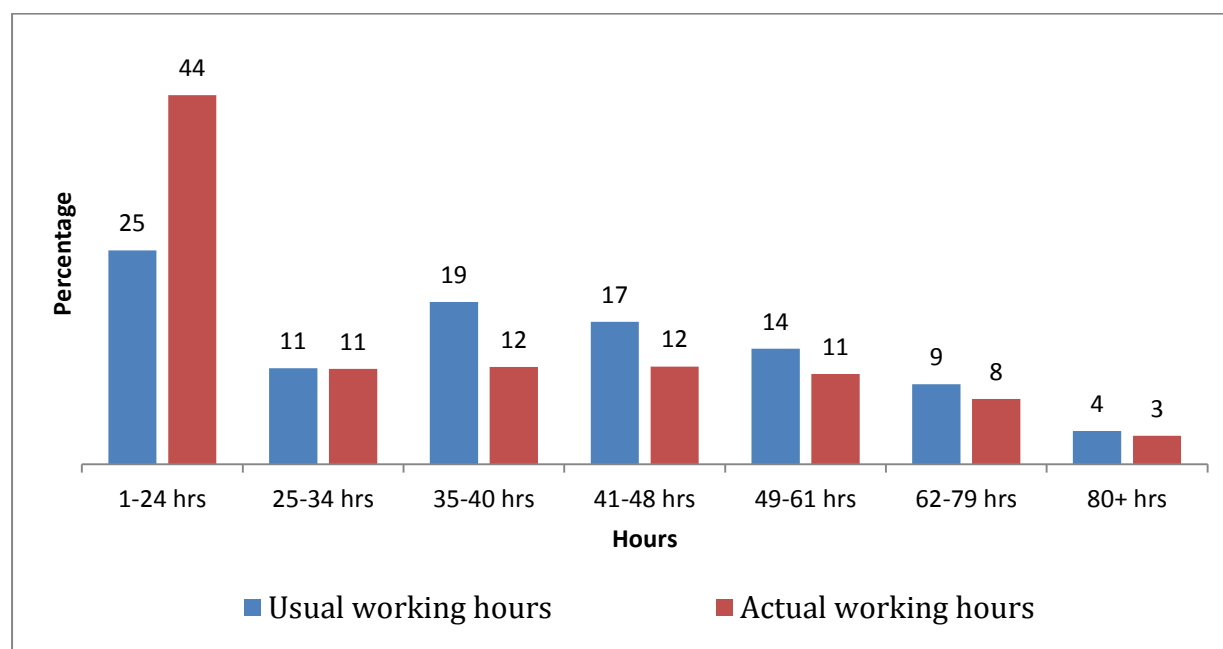
Table 4.5: Usual and actual hours of work at main and secondary jobs

Job category	Number of employed persons	Average hours usually worked per week	Average hours actually worked in reference week
Main job	2,959,965	39.4	32.1
Secondary job	82,199	13.6	12.2
All jobs	2,959,965	39.6	33.2

Source: LFS August 2017

The average number of hours usually worked at all jobs was 39.6 hours per week and the corresponding number of hours actually worked during the reference week was 33.2 hours. For most people (49.2 percent), the weekly usual and actual hours of work at all jobs were the same. While others (44.1 percent), the usual number of hours worked was higher than the actual number of hours due to various reasons, including vacation or holidays or sickness during part or the whole of the reference week. Some 2.6 percent of the employed persons had a job but were temporarily absent from work during the reference week and therefore had zero hours actually worked during the reference week. Finally, for 6.5 percent of the employed persons, the usual number of hours worked was lower than the actual number of hours of work. In total, the volume of employment in terms of actual hours worked at all jobs in the reference week was 96 million hours.

Figure 4.6 shows the size distribution of total weekly usual and actual hours of work of the employed population. The percentage of persons working part-time or short hours (lower than 35 hours per week) was 36 percent measured in terms of usual hours worked and 55 percent measured in terms of actual hours of work.

Figure 4. 6: Usual and actual hours of work of employed persons at all jobs

Source: LFS August 2017

The percentage of persons working long hours was about 22 percent, when measured in terms of actual hours of work and 27 percent when measured in terms of usual hours of work. Excessive hours of work are defined as usual hours of work more than 48 hours per week at all jobs. Very long or excessive hours of work is a threat to physical and mental health, interfering with the balance between work and family life, reducing productivity and often signaling an inadequate hourly pay.⁸ The data show that male workers are affected relatively more by excessive hours of work than female workers (31 percent for male against 22 percent for female).

An attempt has been made in the LFS to measure income from employment in cash and in-kind at the main job for both paid employees and self-employed workers. Because of the differences in the nature of income generation in self-employment and paid employment jobs, the international definition of *employment-related income* distinguishes between paid employment and self-employment.⁹ In the case of paid employment, the concept is defined in terms of its components, namely, remuneration in cash and in kind, profit-related pay and current receipts of employment-related social benefits. In the case of self-employment, the concept is defined as the difference between gross value of output and operating expenses.

Given that respondents are generally reluctant about providing information on their income in surveys, the LFS questionnaire was designed in a way so as to make response

⁸[ILO, *Decent Work Indicators Concepts and definitions, ILO Manual (First version)*, May 2012, pp. 86-87.

⁹ILO, *Resolution concerning the measurement of employment-related income*, Sixteenth ICLS, October 1998. For the sake of simplicity, the term “income from employment” is used in this chapter in preference to the more exact term “employment-related income”.

as easy as possible. The series of questions (D12 to D19) thus begun by asking paid employees the amount earned at their main job in cash the last time they were paid and then by asking the period it covered. If the respondent refused to provide the information or did not know the amount, another question was asked phrased in terms of income ranges rather than exact figures. Similar questions were designed for in-kind income and income from self-employment.

The results showed that despite the special questionnaire design, responses to the questions on income from self-employment and on in-kind income from employment were erratic, exhibiting wide variations and large outliers. It was therefore decided to limit the analysis of the data on cash income from employment of employees at main job for which more reliable data could be obtained. The data were processed on this basis as presented in Annex B.5 of this report

Table 4.6 shows the period of coverage of last payment of paid employees at main job. About 40.5 percent of employees reported that their last cash payment covered one month. For another 1.5 percent paid employees, the last payment covered two weeks, 5.7 percent covered one week, and 52.3 percent covered one day. The corresponding median monthly cash payment was 30,000 RWF, the median two-week cash payment was 13,000 RWF, the median one-week cash payment was 4,200 RWF and the median daily cash payment was 800 RWF.

Table 4. 6: Period of coverage of last income payment of paid employees at main job

Period of payment	Cash income from employment		In-kind income from employment	
	Number of responses	Median response	Number of responses	Median response
Total	6,354	-	186	-
Month	2,570	30,000	97	30,000
Two weeks	97	13,000	2	14,075
One week	365	4,200	14	2,500
One day	3,321	800	73	700

Source: LFS August 2017

Note: Un-weighted numbers and medians

Based on these results, it was decided to use the conversion factor 1 for monthly payments, 2 for two-weekly payments, 52/12 for weekly payments, and 26 for daily payments to calculate the monthly income.

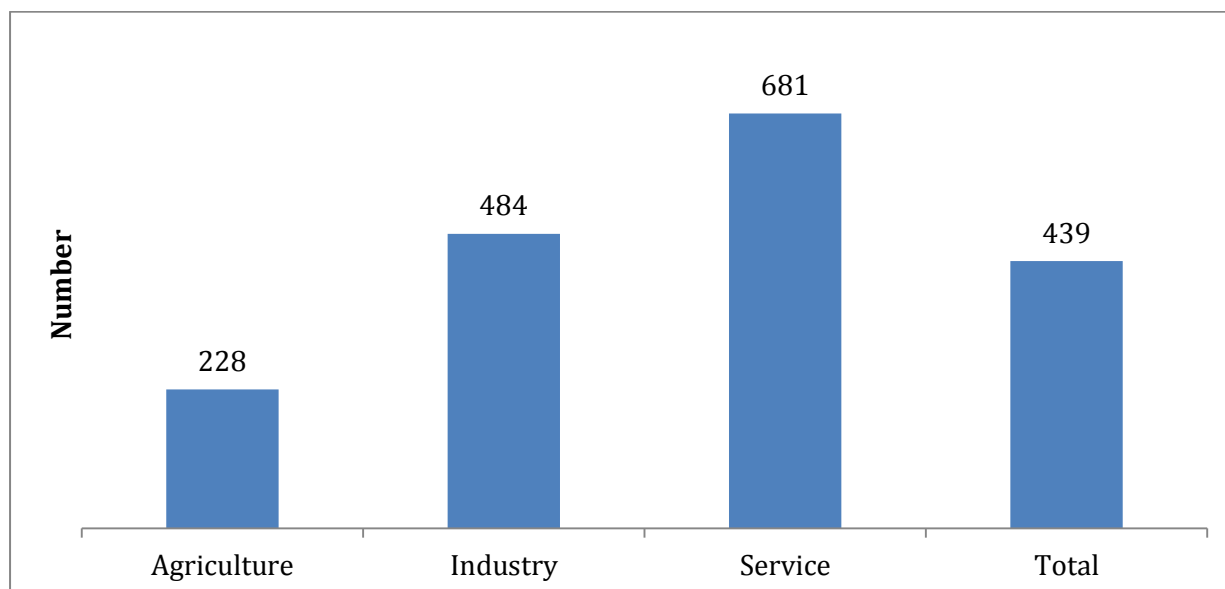
Table 4.7 presents the resulting size distribution of cash monthly income from employment of employees at main job. According to these results, the median income from paid employment of employees at main job was about 20,800 RWF per month while the mean monthly income was 58,677 RWF.

Table 4. 7: Size distribution of harmonized monthly income from employment at main job

Monthly income from employment (RWF)	Number of paid employees
Total	2,017,013
Less than 20,000 RWF	875,963
20,000 – 29,999 RWF	386,183
30,000 – 49,999 RWF	232,985
50,000 – 99,999 RWF	228,103
100,000 RWF and above	261,374
Not stated	32,404
Median	20,800 RWF
Average	58,677 RWF

Source: LFS August 2017

Finally, the average hourly cash income from employment of employees at main job was calculated by broad branch of economic activity. The results are shown in Figure 4.7. The overall average hourly cash income from employment of employees at main job was 439 RWF per hour, and the corresponding values were 228 RWF per hour in agriculture, 484 RWF per hour in industry and 681 RWF per hour in services.

Figure 4.7: Average hourly cash income from employment of employees at main job by broad branch of economic activity (RWF per hour)

Source: LFS August 2017

4.4: Job creation

According to the different government programs around 200 thousand jobs should be created annually. There is no international guidance on the measurement of the total number of created jobs so far. The methodology used by EICV survey was the calculation of the difference of employment stock in two consecutive points of data collection, which gives the net change in employment between two data collection periods.

Using the same methodology in labour force survey, the number of net jobs created between 2016 and 2017 was calculated based on the stock of main and secondary jobs in August 2016 and August 2017. The results present in the table below show that about 155,994 off farm jobs were created. In addition to this 95,502 farm jobs were also created and made a total of 251,496 net job created. The increase rate in the number of job between August, 2016 and August, 2017 is evaluated to 9.0% for all jobs and off-farm jobs

The sector which most contributed more in term of absolute number is whole sale and retail trade; repair of motor vehicles and motor cycles with about 104,478 corresponding to 25% annual increase. Agriculture sector is the second contributor in the number of created jobs with about 95,502 jobs equivalent to 9 percent of annual increase. Other sectors with relatively high contribution are: manufacturing with 20,943 net jobs, Activities of households as employers with 20,376 and mining and quarrying with 17,472 net jobs. On the other hands, some sectors of economic activities presented a negative increase in the number of employment between August 2016 and August 2017. These are; Accommodation and food service activities (-73,209), other services (-8,713), administrative and support activities (-5,041) construction (-4,448) and water supply, gas and remediation services (-1,892).

It is important to note that some sector grown at the high pace even though their contribution in term of absolute number in created jobs was not very significant. Those sectors are: Real estate activities, Electricity gas stream and air condition and Arts, entertainment and recreation.

Table 4. 8: Net change in Jobs, LFS August 2016 and LFR August 2017

ISIC High level	17-Aug	17-Feb	16-Aug	Net Changes	
				February 2017 to August 2017	August 2016 to August 2017
Agriculture forestry and fishing	1,134,394	1,431,959	1,038,892	-297,565	95,502
Mining and quarrying	55,079	43,000	37,608	12,079	17,472
Manufacturing	184,975	140,971	164,032	44,004	20,943
Electricity gas steam and air condition	10,432	9,437	2,697	995	7,735
Water supply, gas and remediation service	11,546	7,930	13,438	3,616	-1,892
Construction	311,709	249,705	316,157	62,004	-4,448
Whole sale and retail trade; repair of m	515,384	472,522	410,906	42,862	104,478
Transportation and storage	122,130	132,858	112,274	-10,728	9,856
Accommodation and food services activity	49,128	42,003	122,337	7,125	-73,209
Information and communication	14,127	8,319	14,114	5,808	13
Financial and insurance activities	22,107	24,327	18,861	-2,220	3,246
Real estate activities	3,008	4,733	69	-1,725	2,939
Professional, scientific and technical a	28,657	21,886	14,962	6,771	13,695
Administrative and support activities	31,026	45,722	36,067	-14,696	-5,041
Public administration and defense; compulsory social security	71,556	53,091	67,311	18,465	4,245
Education	119,959	106,830	104,055	13,129	15,904
Human health and social work activities	53,350	48,889	38,614	4,461	14,736
Arts, entertainment and recreation	15,483	6,711	6,389	8,772	9,094
Other services	66,708	48,854	75,421	17,854	-8,713
Activities of households as employers	204,723	216,322	184,347	-11,599	20,376
Activities of extraterritorial organizat	16,684	6,282	12,117	10,402	4,567
Total	3,042,164	3,122,350	2,790,668	-80,186	251,496
Off-farm jobs	1,907,770	1,690,391	1,751,776	217,379	155,994

The calculations based on February and August rounds of the same year 2017 revealed that more than 217,370 off-farm jobs were created between February and August 2017. However, the overall number of jobs reduced by around 80,186 jobs between February 2017 and August 2017 mainly due to substantial loss of jobs in agriculture sector (-297,565) in August round corresponding to the low season of agriculture. Other sectors which registered a significant job loss between February and August 2017 are: Administrative and support activities (-14,696) activity of household as employer (-11,599) and Transportation and storage (10,728).

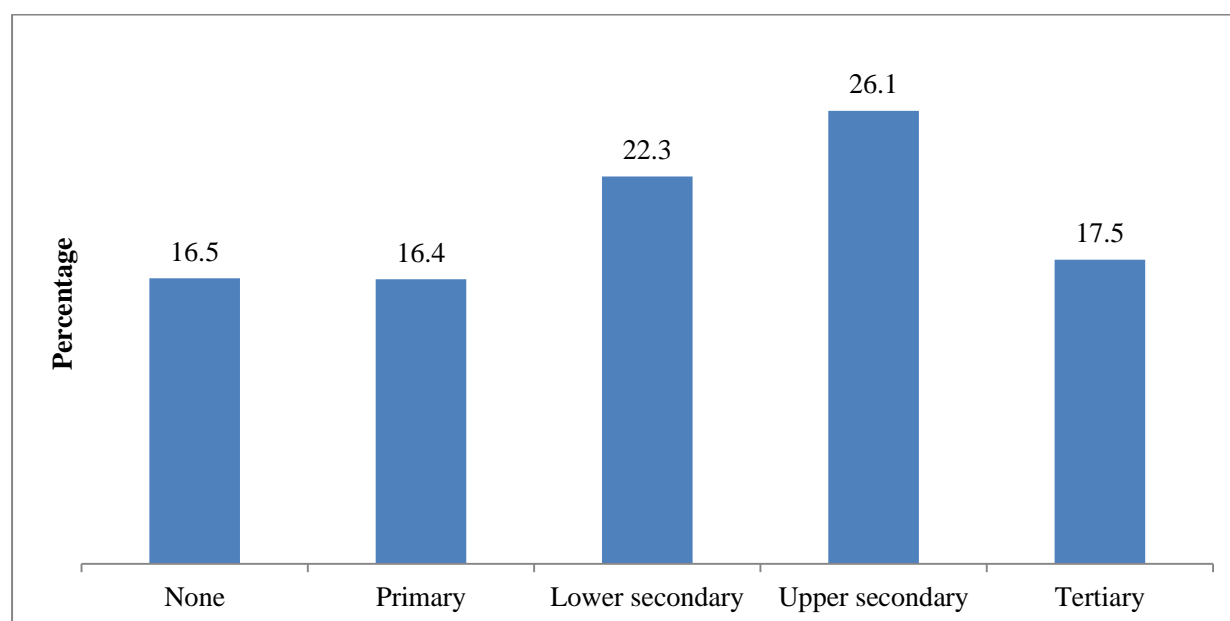
Chapter 5. Unemployment and labour underutilization

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 limited their active job search and/or their availability.

The unemployment rate, defined as the ratio of the number of unemployed persons to the total labour force, 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 results of the August 2017 LFS, the unemployment rate in Rwanda stood at 17.8 percent compared to 16.7 percent in February 2017 LFS and to 18.8 percent in August 2016. It was higher in the urban areas (18.5 percent) than in the rural areas (17.5 percent). Similarly, the unemployment rate was higher among the female labour force (21.0 percent) than the male labour force (15.2 percent), and among the youth 16 to 30 years old (21.7 percent) than in adults (14.6 percent).

In terms of educational attainment, the results shown in Figure 5.1 indicate that the unemployment rate was highest among persons with upper secondary education (26.1 percent) followed by lower secondary education (22.3 percent). It was lowest among persons with primary education (16.4 percent) and with no education (16.5 percent) followed by persons with Tertiary or higher education (17.5 percent),

Figure 5. 1: Unemployment rate by level of educational attainment



Source: LFS August 2017

On average each unemployed person used 1.5 methods for seeking employment during the specified reference period. The most frequent method of job search was applying to employers directly, checking at worksites, farms, factory gates, placement (46.1 percent), followed by seeking the assistance from friends, relatives or other types of intermediaries (25.8 percent) and arranging for financial resources, applying for permits, licenses (14 percent). Other methods of job search were placing or answering newspaper or online job advertisements or response to job advertisements (6 percent), looking for land, premises, machinery, supplies, farming inputs (2.5 percent) and registering with or contacting public or private employment services (4 percent).

The survey provides also data on duration of job search that can be used to estimate long-term unemployment. Long-term unemployment refers to unemployed persons with duration of search for employment lasting 12 months or more, including the reference period. Duration of search for employment is measured from when the unemployed person began carrying out activities to seek employment, or from the end of the last job, whichever is shorter. Duration of unemployment is the length of time that an unemployed person has been without employment, available for employment, and actively seeking employment.

Table 5.1 shows that about 21.1 percent of the unemployed who reported duration of job search were long-term unemployed, i.e., seeking employment for 12 months or more. Most unemployed persons were however seeking employment for the period between less than three months (41.1% percent). The general shape of the curve of unemployment by duration of job search is L-shaped with concentration at the left hand side of the distribution.

Table 5.1: Duration of unemployment: Elapsed duration of job search

Elapsed duration of job search	Number of unemployed reporting duration of job search	%
Total	585,726	100.0%
Less than 3 months	240,652	41.1%
3 - less 6 months	150,887	25.8%
6 - less 12 months	76,623	13.1%
1 - less 2 years	63,138	10.8%
2 years or more	54,426	9.3%

Source: LFS August 2017

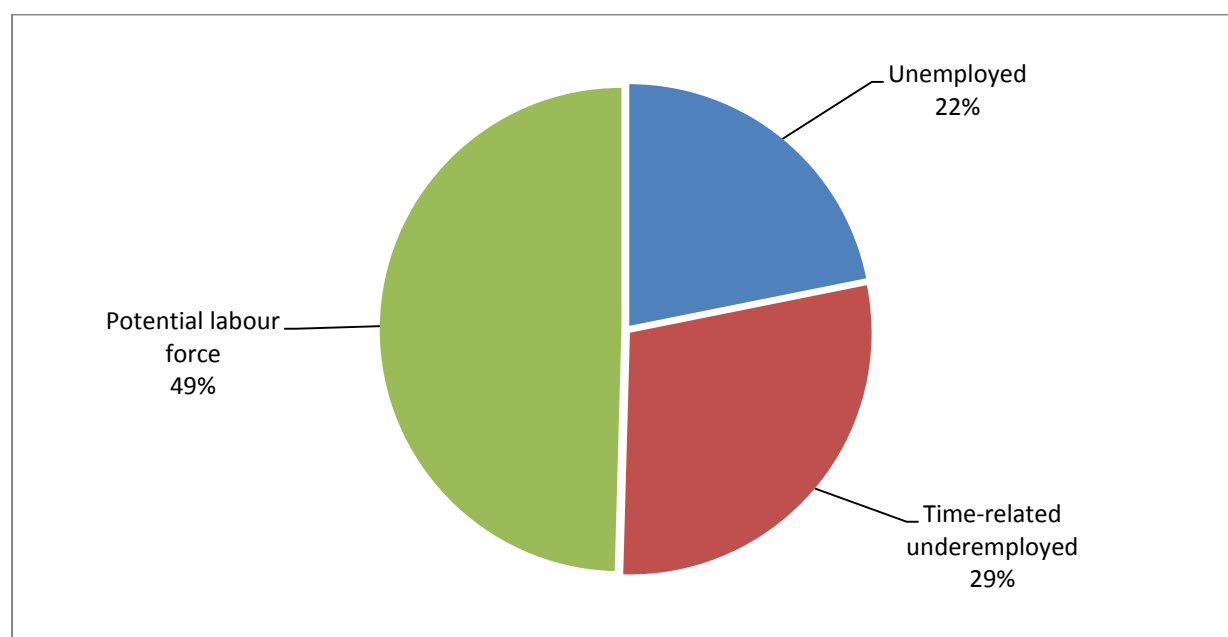
The median reported duration of search for employment by the unemployed was about 3.0 months. It is the median duration of job search until the date of the survey.¹⁰ The duration of unemployment however continues after the survey. The median duration of completed spells of unemployment may be estimated as twice the duration of the interrupted spells of unemployment (2x3=6 months).

¹⁰Kiefer, Nicholas, M & Lundberg, Shelly J & Neumann, George R, "How Long Is a Spell of Unemployment? Illusions and Biases in the Use of CPS Data," *Journal of Business & Economic Statistics*, American Statistical Association, vol. 3(2), April 1985, pp. 118-128.

Unemployment is a particular form of labour underutilization. As mentioned earlier, other forms of labour underutilization include 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. Time-related underemployment is measured here as all persons in employment who, during the specified reference period of the survey (a) wanted to work additional hours, (b) were working in all jobs less than 35 hours during the reference week, and (c) were available to work additional hours given an opportunity for more work. 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).

Potential labour force together with time-related underemployment and unemployment are different dimensions of labour underutilization. Figure 5.2 shows the composition of labour underutilization. It is instructive to note that unemployment was only a small part of labour underutilization in Rwanda comprising 640,951 persons and representing only 22 percent of labour underutilization. By far, the largest part of labour underutilization was the potential labour force close to 1.5 million persons, representing 49 percent of labour underutilization. The potential labour force consists of persons outside the labour force who were currently available for employment but did not carry out activities to seek employment during the specified reference period as well as those seeking employment but not currently available for work.

Figure 5.2: Composition of labour underutilization



Source: LFS August 2017

The other part of labour underutilization includes the time-related underemployed, consisting of 838,906 persons or about 28.6 percent of labour underutilization.

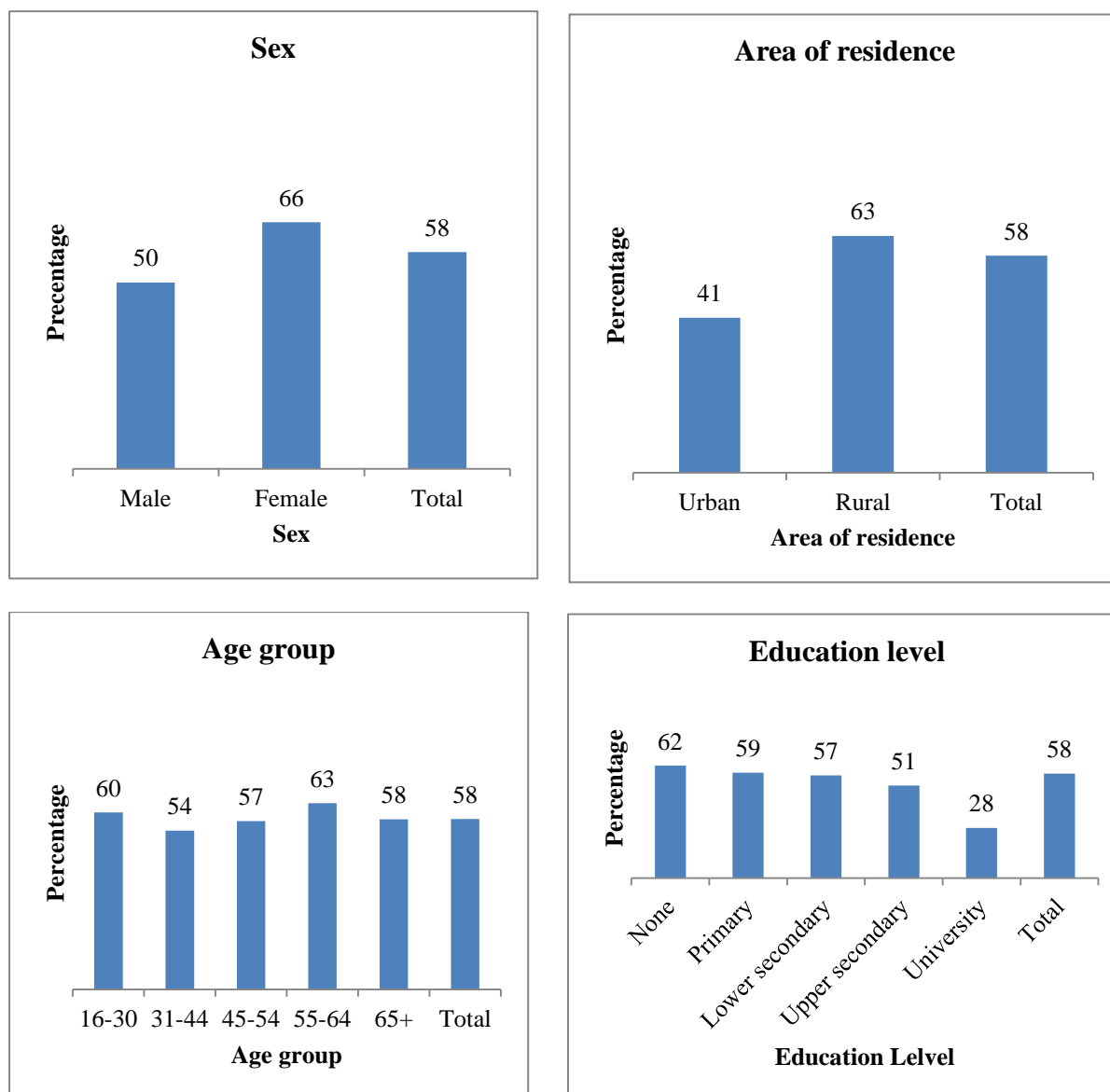
An important sub-category of the potential labour force is the discouraged jobseekers, i.e., those outside the labour force who did not “seek employment” for labour market-related reasons, such as past failure to find a suitable job, lack of experience, qualifications or jobs matching the person’s skills, lack of jobs in the area, considered too young or too old by prospective employers). According to the current LFS there were about 1,098,431 discouraged jobseekers in Rwanda in August 2017 representing around 34.2 percent of those out of the labour force. The bulk of discourage jobseekers is those with primary or lower education(87.5 percent), females(64.1 percent), adult aged 31 years old or above(55.1 percent), living in rural areas(87.1 percent) and participating in subsistence agriculture(73.8 percent).

The international standards further suggest the identification of a separate group of persons outside the labour force who expressed interest in employment. They are called *willing non-jobseekers* and defined as persons neither employed nor unemployed who wanted employment but did not seek employment and were not currently available for work. The estimate of the number of willing non-jobseekers obtained from the August 2017 LFS was 139,421 representing 4.3 percent of the population outside the labour force.

The proportion of willing non-jobseekers decreases as the level of education increase. It is 77.7 percent for those with primary or lower and 0.7 percent for university graduates. Moreover, it higher for females(65.5 percent) and in rural areas(85.6 percent).

Figure 5.3 shows the composite measure of labour underutilization for different socio-demographic characteristics of the population. While the unemployment rate (LU1) is the narrowest measure of labour underutilization, the composite measure (LU4) is the broadest measure of labour underutilization. It is the ratio of total labour underutilization to the extended labour force, calculated as the sum of the labour force and the potential labour force.

Figure 5.3: Composite measure of labour underutilization by sex, urban/rural area , age group and educational attainment



Source: LFS August 2017

In terms of gender and age group, the composite measure of labour underutilization closely follows the pattern of the unemployment rate though at a much higher level. The female rate of labour underutilization (66 percent) is relatively higher than the male rate (49.9 percent). Similarly, the population in age group 55-64 years old and youth 16 to 30 years old are mostly affected by labour underutilization at a relatively higher rate (63.4 and 60.3 percent, respectively) than most of other age population groups (54 percent for persons 31 to 44 years old, 57 percent for persons 45 to 54 years old and 58 percent for persons 65+ years old).

According to area of residence, the rate of labour of underutilization is higher in rural areas (63.3 percent) than in urban areas 41.4 percent). This is because there is a large of

pool of subsistence foodstuff producers in the rural areas outside the labour force, who is available for employment but not seeking work.

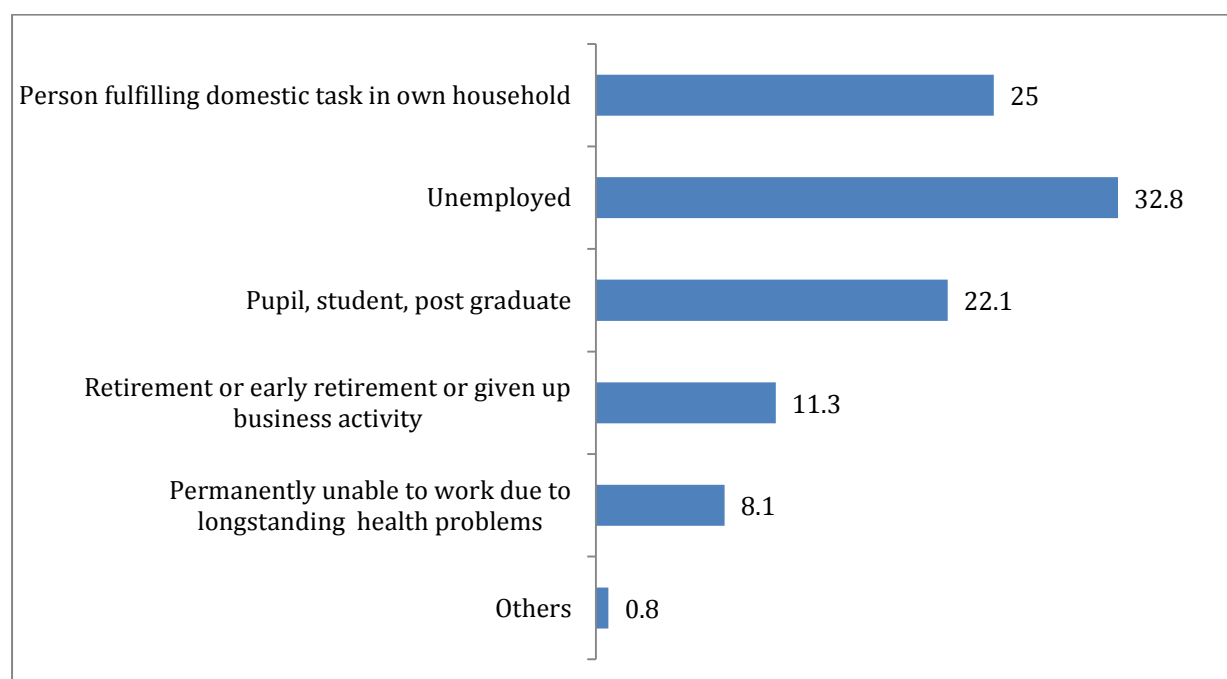
In terms of level of educational attainment, the composite measure of labour underutilization differs from the pattern of the unemployment rate. While the unemployment rate is highest among persons with upper and lower secondary, the rate of labour underutilization is highest among persons with no educational attainment or primary education.

Chapter 6. Persons outside the labour force

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 as big or larger than the size of the labour force itself. In Rwanda, the August, 2017 LFS shows that the number of persons 16 years old and over who are outside the labour force is about 3,212,062 against 3,600,916 in the labour force. More than the majority of the persons outside the labour force are subsistence foodstuff producers (52.7 percent).

The survey identifies the main status of people outside labour force as self-reported. The largest group consisted of persons who considered themselves unemployed (32.8) followed by fulfilling domestic tasks in their household (25 percent).

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



Source: LFS August 2017

The survey also included a question on main source of livelihood of persons outside the labour force. Table 6.1 shows the results by sex and broad age group. For most people outside the labour force, the main source of livelihood was own-production irrespective of sex and age group, except for the young population between 16 and 24 years old outside the labour force, for whom the main source of livelihood was from their parents. Table 6.1 also shows that for elderly persons 65 years old and above who were outside the labour force, the main source of livelihood after own production was from their children or other family members. The percentage of those who were supported by FARG, church or other non-government organizations was around one percent of the persons outside labour force.

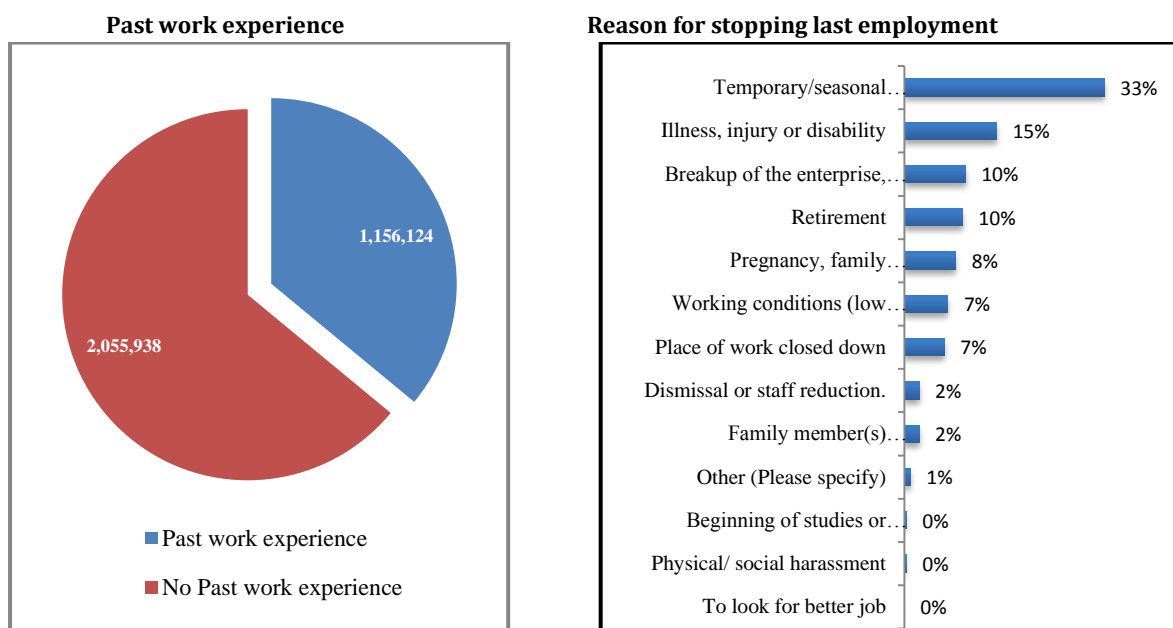
Table 6. 1: Main source of livelihood of persons outside the labour force by sex and age group

	Sex			Age group				
	Total	Male	Female	16-24 yrs	25-34 yrs	35-54 yrs	55-64 yrs	65+ yrs
Total	3,212,062	1,195,515	2,016,547	1,210,088	529,395	697,882	375,789	398,909
	100	100	100	100	100	100	100	100
Parents	31.3	41.6	25.2	73.8	18	2.4	0	0
Husband/Wife	10.9	3.9	15	4.1	26.1	16.3	7.4	5
Child	2.6	1.3	3.3	0.1	0	1	5.4	13.7
Other family members	6.9	7.1	6.8	11.6	4.1	2.6	2.9	7.5
Pension	0.2	0.4	0.2	0	0.1	0.1	0.9	0.9
Own production	41.6	39.2	43	8.2	44.3	70	76.3	56.7
Assistance received [VUP]	1.3	0.8	1.7	0	0.3	0.4	1	8.7
Assistance received [FARG]	0.2	0.1	0.3	0.1	0.2	0.1	0.4	0.5
Assistance received [Church, Other NGO]	0.1	0.1	0.1	0.1	0.2	0.2	0	0.1
Assistance from friends	1.1	0.7	1.4	0.6	0.6	1.3	1.2	3
Revenue from own property/Savings	1.5	1.6	1.4	0.1	1	2.5	2.5	3.2
Past work	2	2.7	1.5	0.8	4.5	3.1	1.7	0.5
Scholarship	0.2	0.4	0.1	0.4	0.4	0	0	0
Others (Please specify)	0.1	0.1	0.1	0.1	0	0	0.2	0.2

Source: LFS August 2017

Persons outside the labour force have different degrees of attachment to the labour force. Some are in the potential labour force as discussed in the preceding section. Others may not be in the potential labour force but have had past work experience or were willing to work although they were not currently seeking or available for work.

Among the population outside the labour force, about 1,156,124 persons representing 36 percent reported to have had past work experience. Thirty three percent of the population who had past work experience reported that the reason for stopping employment was the nature of their jobs which was temporally or seasonal. For others, the main reason was illness/injury or disability (15 percent), or pregnancy, breakup of the enterprise, bankruptcy and retirement (10 percent) family responsibilities (8 percent), , and other reasons such as low pay, late payment of wages, difficult work, or faraway place of work.

Figure 6.2: Past work experience and reason for stopping last employment of persons outside the labour force

Source: LFS August 2017

Person outside the labour force were also analyzed according to different characteristics of the population such as education, age and sex. Table 6.1 below describes the relationship between population outside the labour force and some demographic characteristics. It can be observed that more than a half (62.8 percent) were females, 70.7 percent had primary education or lower and almost a half (48.0 percent) were young people.

Table 6. 2: Demographic characteristics of population outside labour force

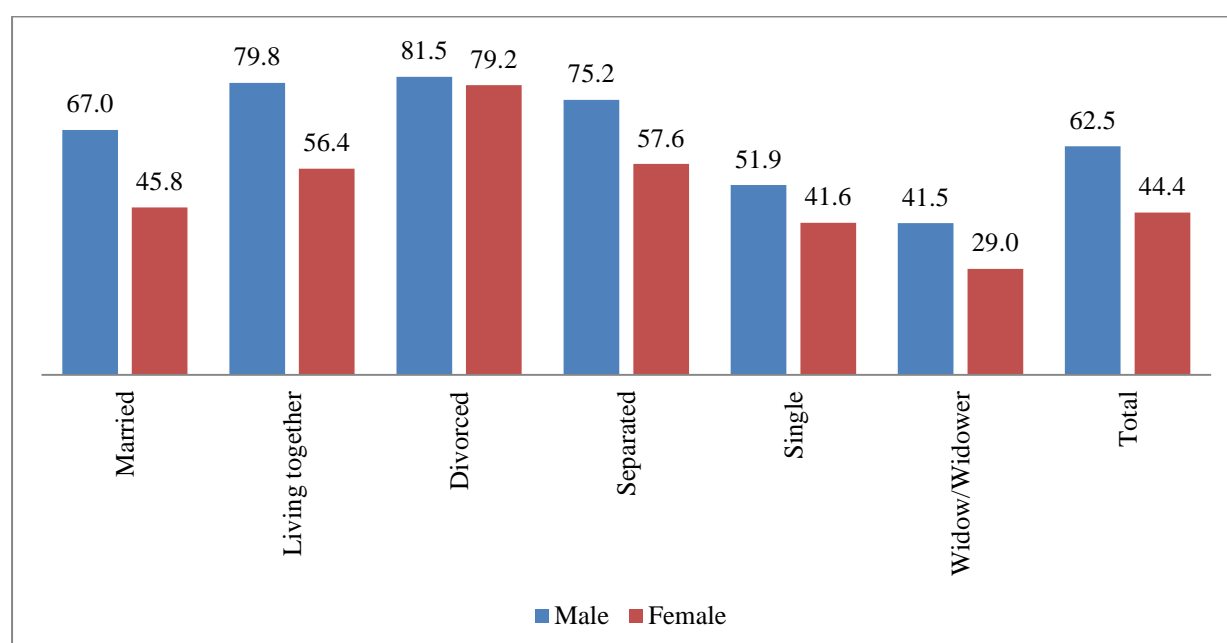
Characteristics	Total	%
Sex		
Male	1,195,515	37.2
Female	2,016,547	62.8
Education level		
Primary or lower	2,272,120	70.7
Secondary	820,311	25.5
University	119,631	3.7
Age group		
16-30	1,541,481	48
31-44	583,907	18.2
45-54	311,977	9.7
55-64	375,789	11.7
65+	398,909	12.4
Total	3,212,062	100

Chapter 7. Women and equal opportunities

Women account for close to 44.6 percent of the labour force in Rwanda. The August, 2017 LFS provides a rich set of current information on their labour force participation. Here a few aspects are examined: female labour force participation rate by marital status, pay gap between women and men, and the proportion of women in managerial positions.

The overall female labour force participation rate was 44.4 percent. As shown in Figure 7.1 below, the labour force participation rate was lower for female widower (29.0 percent) and much higher for female separated (79.2 percent).

Figure 7. 1: Labour force participation by marital status and sex



Source: LFS August 2017

Gender pay gap measures the relative difference between the male average hourly pay and the female average hourly pay for doing the same type of work. In line with the ILO decent work indicator, gender pay gap may be measured as the difference between the gross average hourly earnings of male and female employees expressed as percentage of gross average hourly earnings of male employees.¹¹ The limitation in this methodology is that it overlooks different factors that may be the source of wage gap such as the level of education, length of work experience, occupation etc. Not taking into account these factors may result to the over estimation of gender wage gap. In this report the extended Mincer equation¹² have been used to control those differences in individuals characteristics as well as differences in their jobs such as occupation, industry, formality status and the type of contract in order to compare, to the extent

¹¹ILO, *Decent Work Indicators Concepts and definitions, ILO Manual (First version)*, May 2012, pp. 130-131.

¹²Heckman, James J., Lochner, Lance J., and Todd, Petra E., "Fifty Years of Mincer Earnings Regressions," First draft June 1998, Revised March 19, 2003.

possible, the means wages of males and females working in similar jobs. The results for hourly earnings are shown in table 7.1 below. After controlling for the above mentioned variables, the results shows that there is no gender pay gap in hourly earnings. However, if the monthly earnings is used, we observe women are paid around 13% lower than the monthly salary of men. The different results in using hourly or monthly earning may indicates that the monthly working time of men is higher than the one of females.

Table 7. 1: Gender wage gap using extended Mincer earning equation

VARIABLES	(1) Employee hourly	(2) Employee hourly Public	(3) Employee hourly private	(4) Employee monthly
Female	-0.0324	-0.0672	-0.0258	-0.1300***
	(-1.42)	(-1.11)	(-1.04)	(-7.58)
Age	0.0321***	0.0240	0.0336***	0.0501***
	(5.48)	(1.12)	(5.49)	(11.38)
exp2	-0.0003***	-0.0001	-0.0003***	-0.0005***
	(-3.79)	(-0.40)	(-3.98)	(-9.43)
Primary	0.1361***	0.1052	0.1359***	0.1464***
	(4.79)	(0.64)	(4.70)	(7.37)
Lower_sec	0.3862***	0.6860***	0.3444***	0.4437***
	(6.57)	(3.37)	(5.59)	(9.66)
Upper_sec	0.6428***	0.7080***	0.6354***	0.6538***
	(12.09)	(4.16)	(10.80)	(15.28)
University	1.5639***	1.7608***	1.3916***	1.5161***
	(24.85)	(10.38)	(17.20)	(28.68)
Managers	0.8321***	0.8444***	0.8830***	0.9603***
	(9.14)	(4.10)	(7.92)	(11.69)
Professional	0.2523***	0.0826	0.5380***	0.3106***
	(3.68)	(0.47)	(5.86)	(5.45)
Technician	0.7103***	0.6992***	0.7575***	0.7216***
	(7.40)	(3.52)	(6.19)	(9.05)
Clerical	0.4014***	0.3591*	0.4794***	0.5275***
	(4.33)	(1.68)	(4.39)	(6.49)
Service	-0.0820	0.1386	-0.1310**	0.2147***
	(-1.44)	(0.76)	(-2.16)	(4.93)
Agriculture	0.5450***	0.6047**	0.5297***	0.2354***
	(3.64)	(2.24)	(3.40)	(2.59)
Craft_work	0.4867***	0.9274***	0.4791***	0.5398***
	(8.31)	(4.82)	(8.02)	(11.97)
Plant and machine op.	0.8012***	0.8127***	0.8030***	0.9161***
	(9.15)	(3.30)	(8.67)	(12.86)
Industry	0.4061***	0.1575	0.4102***	0.5878***
	(12.54)	(0.81)	(12.37)	(24.59)
Services	0.1564***	-0.1475	0.1803***	0.3407***
	(3.40)	(-0.96)	(3.67)	(10.28)
Formal	0.0346	0.0569	0.0408	0.2043***
	(0.96)	(0.58)	(1.02)	(6.83)
Permenant	-0.2554***	-0.1267	-0.2585***	-0.0411
	(-7.62)	(-1.33)	(-7.09)	(-1.56)
Constant	4.3808***	4.5036***	4.3643***	8.7646***
	(39.54)	(10.92)	(37.70)	(106.78)
Observations	6,172	753	5,414	6,172
R-squared	0.4147	0.5334	0.3532	0.6692

Robust t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Women are gradually increasing their numbers as managers. A recent global report prepared by the ILO states that women own and manage over 30 percent of all businesses, ranging from self-employed (or own-account workers), micro and small enterprises to medium and large companies.¹³ Occupations in senior and middle management correspond to the ISCO sub-major occupation groups occupational categories 11 (Chief executives, senior officials and legislators) and 12 (Administrative and commercial managers).

The data in Table 7.2 show that there were 4,371 women working as chief executives, senior officials and legislators, about 3,794 women as administrative and commercial managers, giving a total of 8,164 women in specialized managerial positions. The corresponding total for men was 19,484 persons. Thus, the overall share of women in managerial positions was 29.5 percent.

Table 7.2: Women and men in managerial positions

Sub-major occupation groups	Persons			%		
	Total	Male	Female	Total	Male	Female
Total Persons in managerial positions	27,649	19,484	8,165	100.0	70.5	29.5
Chief executives, senior officials and legislators	12,735	8,366	4,371	100.0	65.7	34.3
Administrative and commercial managers	14,913	11,118	3,795	100.0	74.6	25.4

LFS August 2017

¹³ILO, *Women in Business and Management Gaining Momentum*, Abridged version of the Global Report, Geneva, 2015.

Chapter 8. Youth

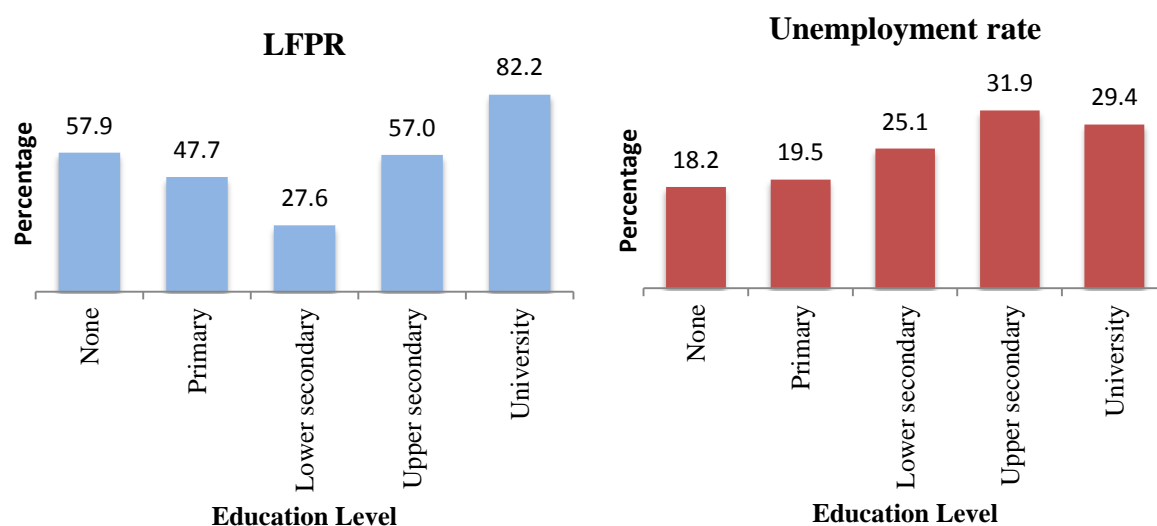
8.1: Youth and education

In general, there is a two-way relationship between the education system and the labour market. The education system supplies the labour market with educated labour force, while the labour market – through the wage structure of occupations and other labour market variables – transmits signals on the types of qualifications expected from the education system. The data collected by the August 2017 LFS contain the elements for carrying such types of analysis.

In Rwanda, youth is defined as young person's 16 to 30 years of age. The international definition of the youth population is “persons aged 15-24 years old.”¹⁴ To cover countries where entry into the labour market occurs at a later stage, the ILO extends the definition to include young adults aged 25-29 years old for certain purpose.

Figure 8.1 presents in the left panel the youth labour force participation rate by educational attainment and in the right, the youth unemployment rate by educational attainment. The data show that the labour force participation rate was higher among the university graduates (82.2 percent), and it is between (47 and 57 percent) on other levels of education except for young people with lower secondary education for whom the labour force participation rate was still lower at 27.6 percent.

Figure 8. 1: Youth (16-30 years old) labour force participation rate and unemployment rate by educational attainment



Source: LFS August 2017

The relationship between educational attainment and the unemployment rate is also significantly different, showing a relatively positive slope. Unemployment shows an

¹⁴ILO, *Global Employment Trends for Youth 2015*, Employment Policy Department, International Labour Office, Geneva, 2015.

increasing rate from 18.2 percent for young people with no educational attainment to 31.9 percent for youth with upper secondary education and then a slight declining rate to 29.4 percent among youth who completed university education. This pattern suggests that the higher the educational attainment of a young person, the higher his or her risk of unemployment. One could think of a number of reasons for this phenomenon. First, persons with higher educational attainment have a higher reservation wage, preferring to wait for a suitable employment rather than accepting a job considered as inadequate or low paying. Another possible reason may be the existence of mismatch between the qualification of the young and the skill requirements of jobs in the labour market.

8.2: Youth neither in employment, nor in education or training (NEET)

A full accounting of the labour market situation of young people is important for the formulation of employment policies regarding the youth. Of the total youth population of 3,170,650 persons, the LFS August 2017 shows that 882,593 were in education or training, and 1,276,339 were in employment during the reference week, including about 84,989 persons in both employment and in education or training. The number of young persons who were neither in employment, nor in education or training was 1,096,707 corresponding to about 34.6 percent of the youth population. This figure provides a measure of the youth who are outside the educational system and not in employment (NEET). The NEET rate is an ILO decent work indicator and serves as a broader measure of potential youth labour market entrants than youth unemployment.¹⁵

Among the NEET population are the youth unemployed or in the potential labour force who are not in the educational system, 321,148 and 592,068, respectively. The remaining 183,492 are not accounted for. Some may want employment but not seeking, nor currently available for work. An accounting of the youth population is given in the following table for young men and young women, separately:

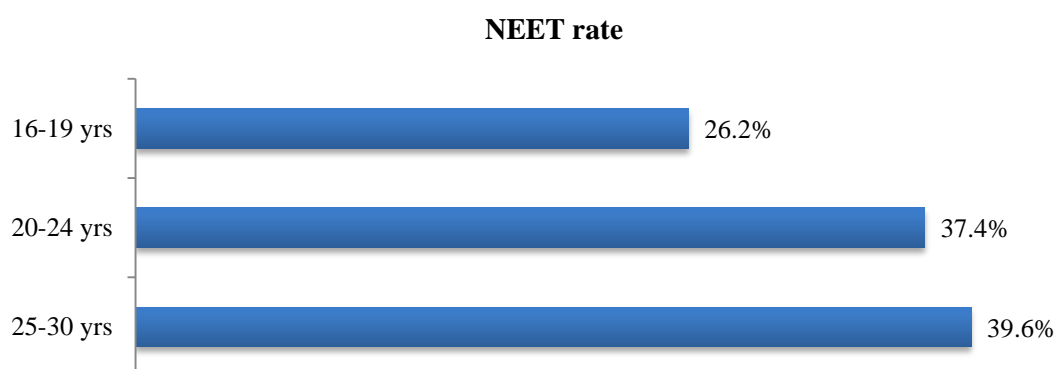
¹⁵ ILO, *Decent Work Indicators Concepts and definitions, ILO Manual (First version)*, International Labour Office, Geneva, May 2012, pp. 51-53.

Table 8. 1: Accounting for the youth population (16-30 yrs) with respect to employment and education or training, August 2017

	Number			Percentage		
	Total	Young men	Young women	Total	Young men	Young women
Total youth population (16-30 yrs)	3,170,650	1,527,709	1,642,941	100	100	100
In education or training	797,604	411,168	386,436	25.2	26.9	23.5
In employment	1,191,350	667,253	524,097	37.6	43.7	31.9
In both employment and education or training	84,989	57,505	27,484	2.7	3.8	1.7
Not in employment nor in education/training (NEET)	1,096,707	391,784	704,923	34.6	25.6	42.9
- Unemployed	321,148	141,038	180,109	29.3	36	25.6
- Potential labour force	592,068	193,487	398,581	54	49.4	56.5
- Other	183,492	57,259	126,233	16.7	14.6	17.9

Source: LFS August 2017

As expected, the NEET rate is higher among young women (42.9 percent) than among young men (25.6 percent), as relatively more women than men remain outside the labour force after completing their education or training. Many of them are however in the potential labour force, available to take up employment under suitable conditions. The following diagram shows the variation of the NEET rate as a function of age:

Figure 8. 2: Youth not in employment and not education or training

It indicates that the percentage of young people not in employment and not in education or training increases with age, starting at 26.2 percent in the age group 16 to 19 years and reaching 37.4 percent in the age group 25-30 yrs. As mentioned earlier, the overall average is 39.6 percent.

Chapter 9. Participation in training programmes

The role of training for insertion or reinsertion into the labour market is widely recognized. In order to assess the outreach of training among the youth and adults as well as to understand the nature of the demand for training in terms of subject of courses and type of training providers, the LFS questionnaire included four questions (B07-B10) on current participation or past acquisition of any trade or technical vocational course among all eligible respondents.

In total an estimated 607,552 persons completed a trade or technical vocational course in the past. Table 9.1 gives the distribution of training courses completed and the current status of employment of the participants. There is in total 12 training course subject that covered more than 1 percent each of the total number of graduates. Among them, the most popular training course was tailoring with participation rate of 31 percent, followed by masonry with participation rates of 22 percent and carpentry with 8 percent.

Table 9. 1: Participation in trade or technical vocational course and current employment status

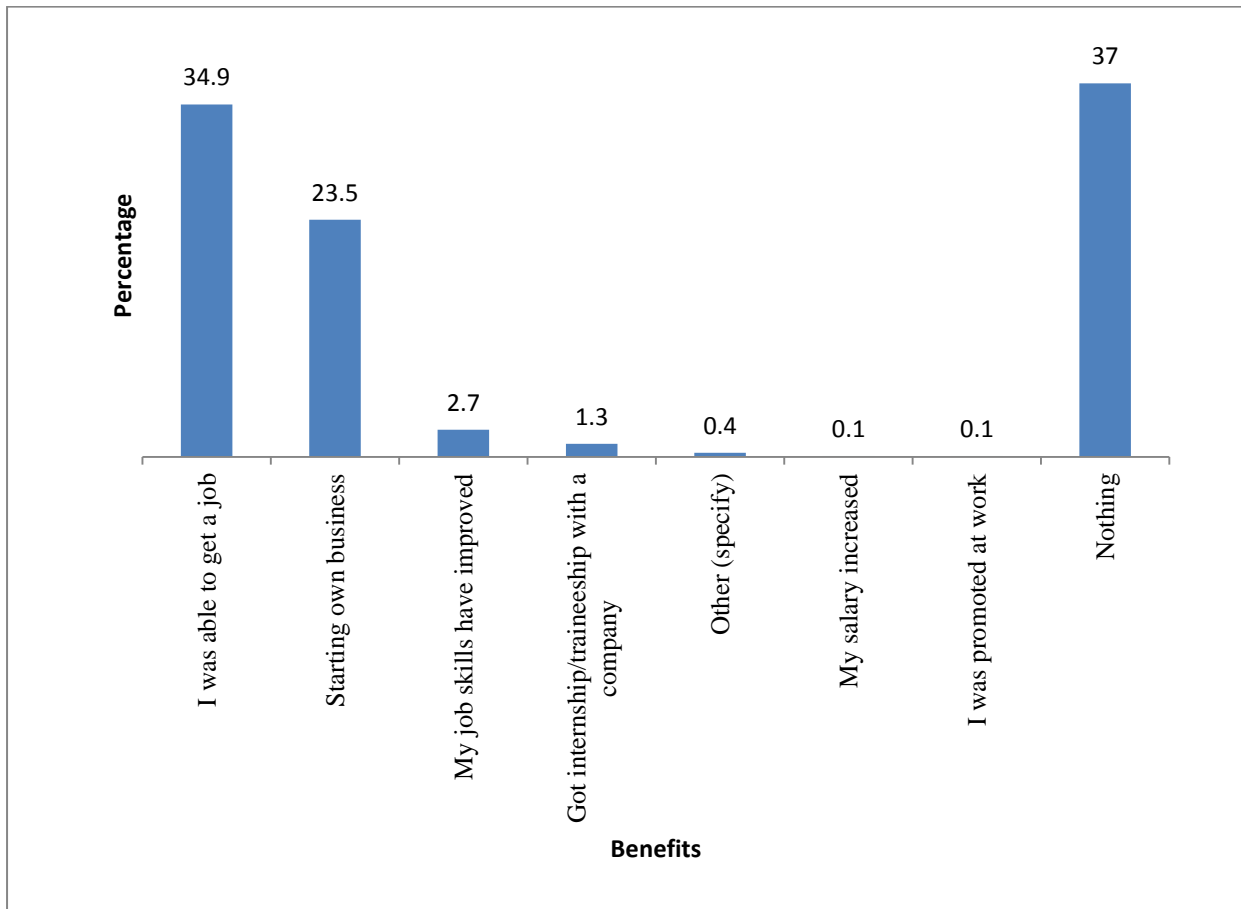
Type of technical skills learned	Completed vocational training		Currently working	
	Number of persons	%	Number of persons	%
Total	607,552	100	356,683	58.7
Tailoring	186,310	30.7	88,418	47.5
Masonry	134,872	22.2	91,494	67.8
Carpentry	49,513	8.1	30,537	61.7
Culinary arts	34,809	5.7	15,504	44.5
Automotive body repair	32,143	5.3	24,339	75.7
Hairdressing	30,200	5	16,170	53.5
Crochet embroidery	19,960	3.3	7,015	35.1
Domestic Electricity	19,385	3.2	13,411	69.2
Welding	19,264	3.2	14,414	74.8
Automotive technology.	10,510	1.7	7,997	76.1
Motor vehicle engine mechanics	7,857	1.3	6,735	85.7
Engine mechanics	6,770	1.1	5,017	74.1
Plumbing	5,192	0.9	3,115	60.0
Painting and decoration	5,040	0.8	3,419	67.8
Other	4,565	0.8	3,562	78.0
Food & Beverage services	4,063	0.7	2,184	53.8
Biding and Jewelries	4,018	0.7	2,443	60.8
Livestock	3,603	0.6	1,638	45.5
Food processing	2,986	0.5	2,360	79.0
Front office	2,786	0.5	1,318	47.3
Industrial electricity	2,253	0.4	928	41.2

Type of technical skills learned	Completed vocational training		Currently working	
	Number of persons	%	Number of persons	%
Software Development	2,597	0.4	1,018	39.2
Computer maintenance	1,790	0.3	897	50.1
Networking	1,782	0.3	1,431	80.3
Leather craft	1,831	0.3	957	52.3
Agri-Business	1,654	0.3	1,616	97.7
Pottery	1,730	0.3	1,608	92.9
NCDs and Palliative Care Community Health	951	0.2	788	82.9
Bee Keeping	965	0.2	458	47.5
Manicure and Pedicure	983	0.2	983	100.0
Film making	1,414	0.2	1,118	79.1
Animal health	856	0.1	127	14.8
Auto- Electricity	767	0.1	767	100.0
Music	492	0.1	492	100.0
Multimedia	692	0.1	692	100.0
Nursery growing	658	0.1	513	78.0
Horticulture production	462	0.1	0	0.0
Beauty therapy	820	0.1	652	79.5
Screen printing	523	0.1	388	74.2
Sport and Medical Massage	487	0.1	159	32.6

Source: LFS August 2017

Evaluating the success or non-success of the training courses in terms of the current employment status of the graduates, it may be said that training courses with the highest percentage of graduates currently employed were the most successful, and training courses with the lowest percentage of graduates currently employed were the least successful. In this sense, it appears that among the training courses with more than 1 percent of the graduates, Motor vehicle engine mechanics was the most successful training course with current employment rate of 85.7 percent, followed by automotive technology (76.1 percent), automotive body repair (75.7 percent), welding (74.8 percent), engine mechanics (74.1 percent), and masonry (67.8 percent)

The LFS August 2017 also included a question (B14) on the success of the training course in terms of “what happened after the completion of the course”. The results presented in Figure 9.1 show that 63.0 percent of the graduates reported improvement in their life status after finishing the training course. These included 34.9 percent who managed to get a job or were able to find a job following the training course and 23.5 percent who managed to start their own business. By contrast a considerable portion (37.0 percent) reported no particular improvement in their situation after completion of the training course.

Figure 9. 1: Reported benefits after completing vocational training

Source: LFS August 2017

The data on participation in training courses may be further analyzed in terms of the length of training course and the year of its completion as well as in terms of the type of institution providing the training course and the main sponsor.

Chapter 10. Working children

In many countries, children below the legal working age are engaged in economic activity, earning money in a variety of casual or informal jobs or helping without pay in family enterprises. Not all work performed by children is however *child labour*. According to the international standards concerning statistics of child labour adopted by the 18th ICLS in 2008, the term *child labour* refers to the engagement of children in prohibited work and, more generally, in types of work to be eliminated as socially and morally undesirable as guided by national legislation and relevant ILO conventions and recommendations.

According to the Ministerial guidelines N° 02 of 10th May 2016 related to the elimination of child labour in Rwanda, children in age group 5-12 are allowed to participate in non-paid activities performed for the household such as carrying household harvest from fields, preparing kitchen garden etc, provided that the allocated time in those activities does not exceed 20 hours per week. The same guidelines stipulates that those aged 13-15 years old are allowed to work not more than 20 hours per week in light non-paid agricultural related activities performed for the household as well as in paid light activities performed outside the household such as selling newspapers, selling air times, hair cutting etc. Children aged 16-17 years old are allowed to work in all activities which don't harm their life during the same working hours as the adult persons aged 18 years and above. The mentioned guidelines provides more example of light works allowed for children aged 5-15 and the list of worst form and hazardous works as well as industries prohibited for all children including those aged 16-17 years old. While the RLFS was not designed to measure child labour, the survey collected data on work activities of children 5-13 years old, in addition to the labour force data on the population 14 years old and over. Thus, some aspects of the activities of all children 5-17 years old can be estimated using the current RLFS data.

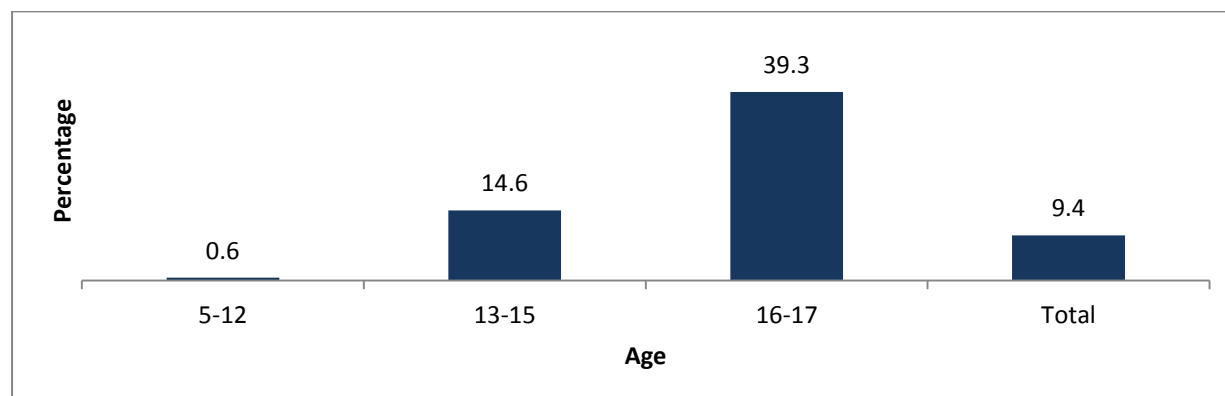
10.1 Working children

According to RLFS August 2017 results, there were in total 3,869,754 children 5 to 17 years old. Among them, 364,915 representing 9.4 percent were working either inside or outside of their households during the reference period. This rate is lower than the world average (11.8 percent) and also below the average rate in Sub-Saharan Africa (26.2 percent) estimated for 2012 by the ILO.¹⁶ It is important to mention that this number includes all working children irrespective of whether they were employed or involved in subsistence agriculture. However, the following information will shed more light on some work characteristics covered by the survey. Figure 10.1 presents the distribution of working children by age group for children 5 to 17 years old. According to these results, the percentage of working children in the age category 5 to 12 years old was only 0.6 percent and the majority (52.6 percent) of them were working 20 hours or

¹⁶ ILO, *Global child labour trends 2008 to 2012*, Yacouba Diallo, Alex Etienne and Farhad Mehran, International Programme on the Elimination of Child Labour (IPEC), International Labour Office, Geneva, 2013.

less per week. In the age category 13 to 15 years old, the percentage of children who were working was 14.6 of which 75.5 percent were engaged in agriculture activities and 24.5 percent in non-agriculture activities. The rate of working children among 16-17 years old was 39.3 and the majority of them were also working in agriculture (71.1%). (Table 10.1)

Figure 10. 1: Child work rate by age group



Source: LFS August 2017

From the table 10.1, it can be also observed that the number of working hours is highly associated with the working sector (agriculture/non-agriculture) and the age of children. While children who worked less hours are predominant in agriculture activities (eg: 69.2 percent of children worked 20 or less hours and only 18.2 percent worked 30 or more hours);the majority of children who worked many hours is found among those who performed non-agriculture activities (61.8 percent% worked more than 30 hours per week and only 31.0 percent worked 20 hour or less).

Table 10. 1: Distribution of working children by age group, working hours and type of work

Weekly working hours		Age group			Total
		5-12yrs	13-15yrs	16-17yrs	
All	1-14 Hours	42.4	61.3	36.1	45.2
	15-20 Hours	10.2	11.1	14	12.8
	21-29 Hours	32.8	6.8	12.1	11
	30-45 Hours	2.3	12.8	21.4	17.7
	46+ Hours	12.3	8	16.6	13.3
	Total	100	100	100	100
	% of all children	0.6%	14.6%	39.3%	9.4%
Agriculture	1-14 Hours	40.8	66.8	44.7	53
	15-20 Hours	0	13.2	18.4	16.2
	21-29 Hours	59.2	7.3	14.9	12.6
	30-45 Hours	0	11.2	17.1	14.7
	46+ Hours	0	1.5	4.8	3.5
	Total	100	100	100	100
		3,106	97,263	157,996	258,365

Weekly working hours		Age group			Total
		5-12yrs	13-15yrs	16-17yrs	
Non agriculture	1-14 Hours	42.9	44.3	14.8	26.4
	15-20 Hours	13.2	4.6	3.2	4.6
	21-29 Hours	25	5.3	5.3	7.2
	30-45 Hours	3	17.7	32.1	24.9
	46+ Hours	15.9	28.1	44.6	36.9
	Total	100	100	100	100
		10,616	31,628	64,306	106,550

10.2 Economic activity of working children 14-17 years

Some industries such as construction, mining, etc are not allowed to engage children below 18 years old. Table 10.2 shed light on the economic activities of working children aged 14-17 years old. Similarly to the information in the previous table, the majority of working children in this age category were engaged in agriculture mostly within their households (73.8%). The remaining children were distributed in different non-agricultural sectors whose the most predominant are households as employers (12.7%), whole sale and retail trade, motor vehicle repair (5.6%) and construction (4.1%).

Table 10. 2: Distribution of working children aged 14-17 years old by economic activity according to age group

Economic activities	14-15yrs	16-17yrs	Total(14-17 yrs)
Agriculture forestry and fishing	78.8	71.1	73.8.0
Mining and quarrying	0.3	0	0.1
Manufacturing	0.9	1.3	1.2
Water supply, gas and remediation services	0.4	0.4	0.4
Construction	2.7	4.9	4.1
Whole sale and retail trade; repair of motorcycles and Moto vehicles	5.4	5.7	5.6
Transportation and storage	0.4	0.3	0.3
Accommodation and food service activities	0	0.6	0.4
Financial and insurance activities	0	0.2	0.1
Public administration and defense; compulsory social	0.3	0	0.1
Human health and social work activities	0	0.3	0.2
Other services	0.9	1.1	1.1
Activities of households as employers	9.9	14.3	12.7
Total	100	100	100
	122,700	222,302	345,002

Source: LFS August 2017

The following table shows the distribution of working children aged 14-17 years old by economic activity, according to working hours. The results shows that children who

were working less hours (20 or less) were predominantly present in agriculture while those working excessive hours (46+ hours) were predominantly working for households as domestic workers.

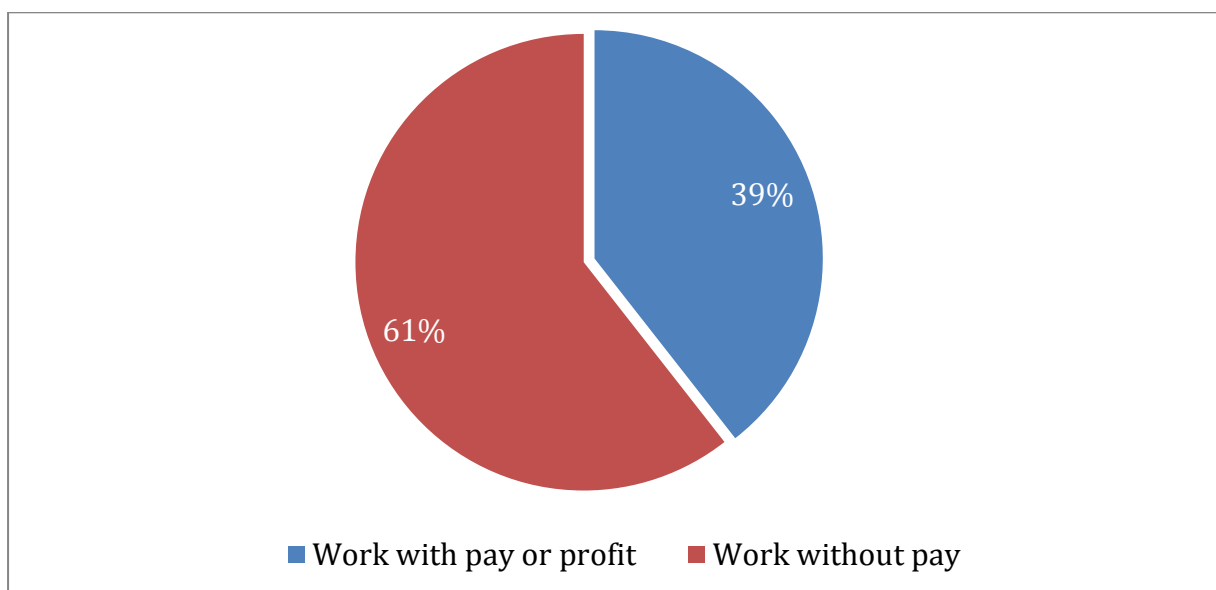
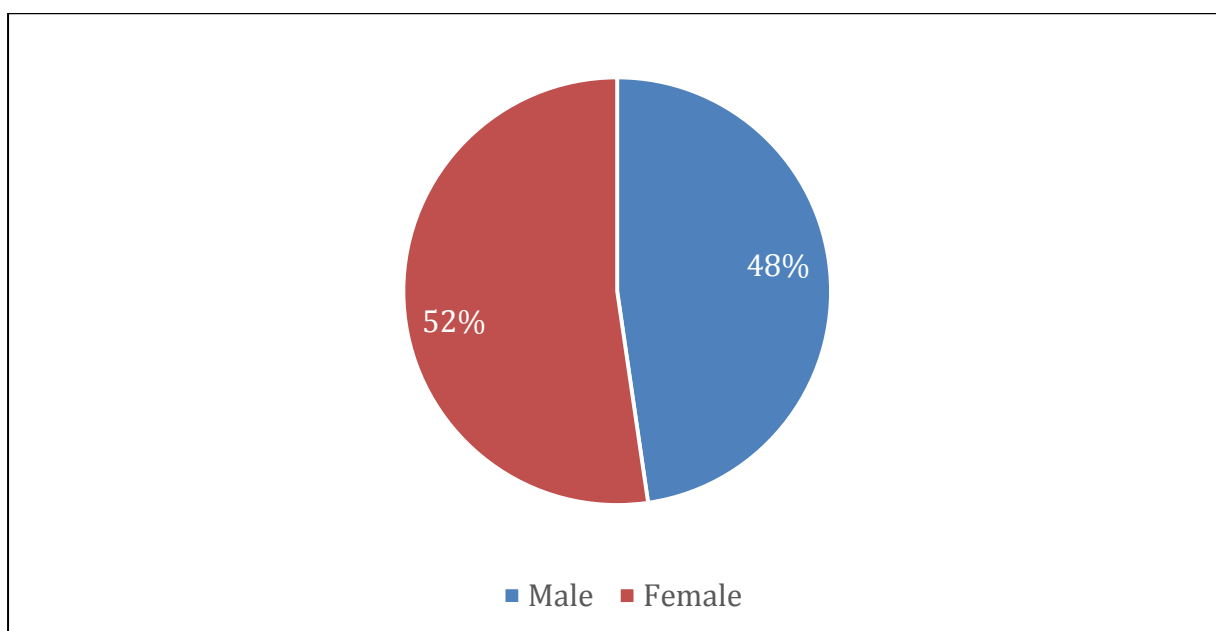
Table 10. 3: Distribution of working children age 14 to 17 by economic activity, according to weekly working hours

Economic activities	1-14 hrs	15-20 hrs	21-29 hrs	30-45 hrs	46+ hrs	Total
Agriculture forestry and fishing	87.4	93.9	85.8	59.1	19.8	73.8
Mining and quarrying	0.3	0	0	0	0	0.1
Manufacturing	0.7	2.9	0	2	1	1.2
Water supply, gas and remediation services	0.3	0	0	1.2	0	0.4
Construction	3.2	1.2	2.6	9.4	3.5	4.1
Whole sale and retail trade; repair of motorcycles and Moto vehicles	5	0.9	4.7	7.9	9.4	5.6
Transportation and storage	0.5	0	0	0.3	0.5	0.3
Accommodation and food service activities	0	0	0.2	0.9	1.4	0.4
Financial and insurance activities	0	0	0	0	0.8	0.1
Public administration and defence; compulsory social	0	0	0	0.5	0	0.1
Human health and social work activities	0	0	0	0.1	1.3	0.2
Other services	1.1	0	0	2.2	1.2	1.1
Activities of households as employers	1.5	1.1	6.6	16.3	61.2	12.7
Total	100	100	100	100	100	100
	154,454	44,570	35,781	64,121	46,077	345,002

Source: LFS August 2017

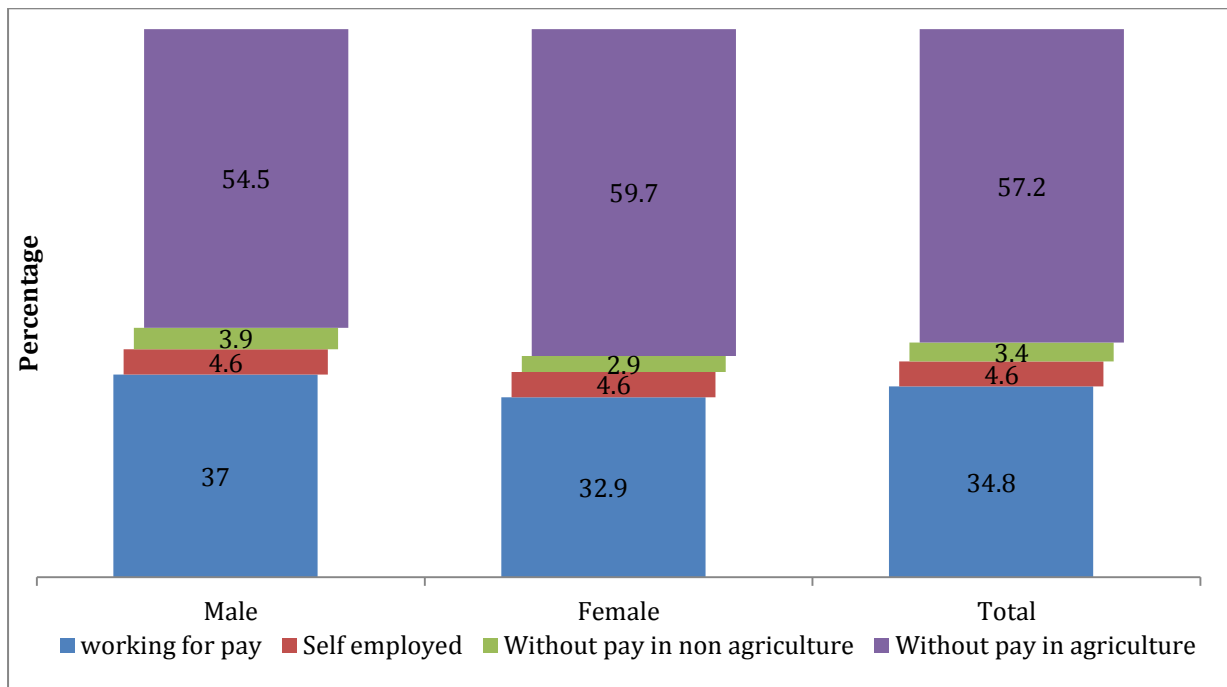
10.3 Type of work among working children 5-17 years

The desegregation of working children (5-17 years) by type of work (Figure 10.2), reveals that 60.6 percent of them were working without pay and 39.4 percent were working for pay or profit. Figure 10.3, shows that female constitutes the majority of working children (52.3 percent). In terms of type of work as presented in figure 10.4, male were engaged at higher rate in paying activities (37.0 percent) than female (32.9 percent). The proportion of female children worked in unpaid agricultural activities (59.7 percent) was higher than the males' (54.5 percent).

Figure 10.2: Working children by type of work**Figure 10.3: Working children by sex**

Source: LFS August 2017

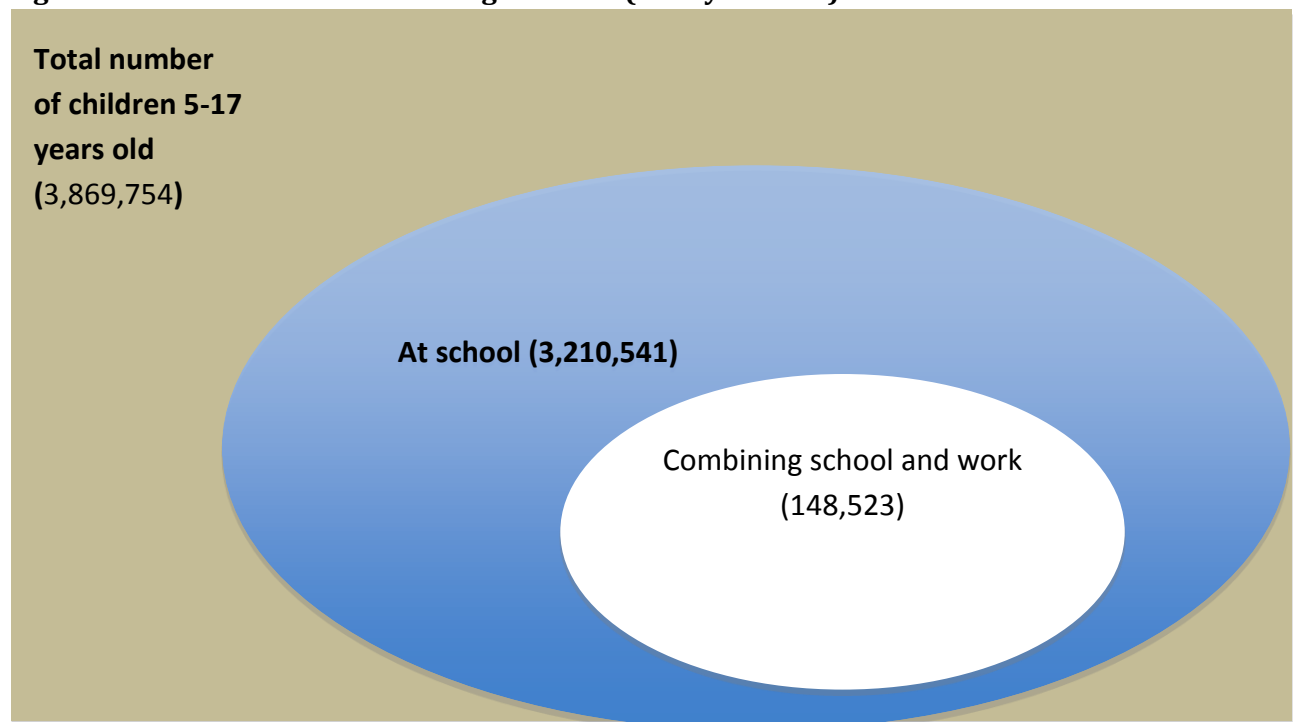
Figure 10.4: Percentage distribution of working children by sex and type of work



Source: LFS August 2017

As shown in figure 10.5, out of the total number of children 5 to 17 years old (3,869,754), the majority (3,210,541) representing 83.0 percent were attending school while 17.0 percent were not attending. Some 148,523 (4.6 percent) were combining school and work, and among those who were not studying (659,212) 32.8 percent, were working.

Figure 10.5: School and work among children (5-17 years old)



Chapter 11. Own-use producers and subsistence foodstuff producers

11.1 Foodstuff producers

The international standards on statistics of work, employment and labour underutilization define *own-use producers* as all persons of working age who were engaged in own-use production work for at least one hour during the reference period. Own-use production comprises any activity to produce goods or provide services for own final use, interpreted to mean production where the intended destination of the output as self-declared is *mainly* for final use by the producer in the form of capital formation, or final consumption by household members, or by family members living in other households. In the case of agricultural, fishing, hunting or gathering goods intended mainly for own consumption, a part or surplus may nevertheless be sold or bartered.

Production of goods is within the SNA production boundary and covers: (i) producing or processing for storage agricultural, fishing, hunting and gathering products; (ii) collecting or processing for storage mining and forestry products, including firewood and other fuels; (iii) fetching water from natural and other sources; (iv) manufacturing household goods (such as furniture, textiles, clothing, footwear, pottery or other durables, including boats and canoes); (v) building, or effecting major repairs to, one's own dwelling, farm buildings, etc.

Provision of services is within the SNA general production boundary and covers (i) household activities of accounting and management, purchasing or transporting goods; (ii) preparing or serving meals, household waste disposal and recycling; (iii) cleaning, decorating and maintaining one's own dwelling or premises, durables and other goods, and gardening; (iv) childcare and instruction, transporting and caring for elderly, dependent or other household members and domestic animals or pets, etc.

Information about participation and time-spent in own-use production work is essential to inform a wide range of policies including those targeting employment creation in rural areas, poverty reduction, food security, and provision of a wide range of services, including water supply, child and elderly care, domestic services, etc. It is also essential for addressing gender issues in the world of work and for better understanding participation and access to labour markets, and related issues such as work-life balance.

The August 2017 LFS questionnaire contained 7 questions on time spent on different types of own-use production work excluding production or processing of food stuff. The results are shown in Table 11.1. The data indicate that about 5,325,973 persons 16 years old and over were engaged in at least one type of own-use production work during the reference week, representing 78.2 percent of the total working age population. Among them 2,164,686 representing 40.6 percent were male and 3,161,286 (59.4 percent) were female. They devoted on average 21.4 hours per week on these activities. The type of activity in which the highest numbers of persons were engaged was "doing household chores including shopping, preparing meals", covering 76.2 percent of the working age population and involving on average 10.6 hours per week, followed by "fetching water for the household, including travel time" (58.2 percent of the working age population) and on average 4.6 hours per week.

Table 11. 1: Average time spend per week on own-use production

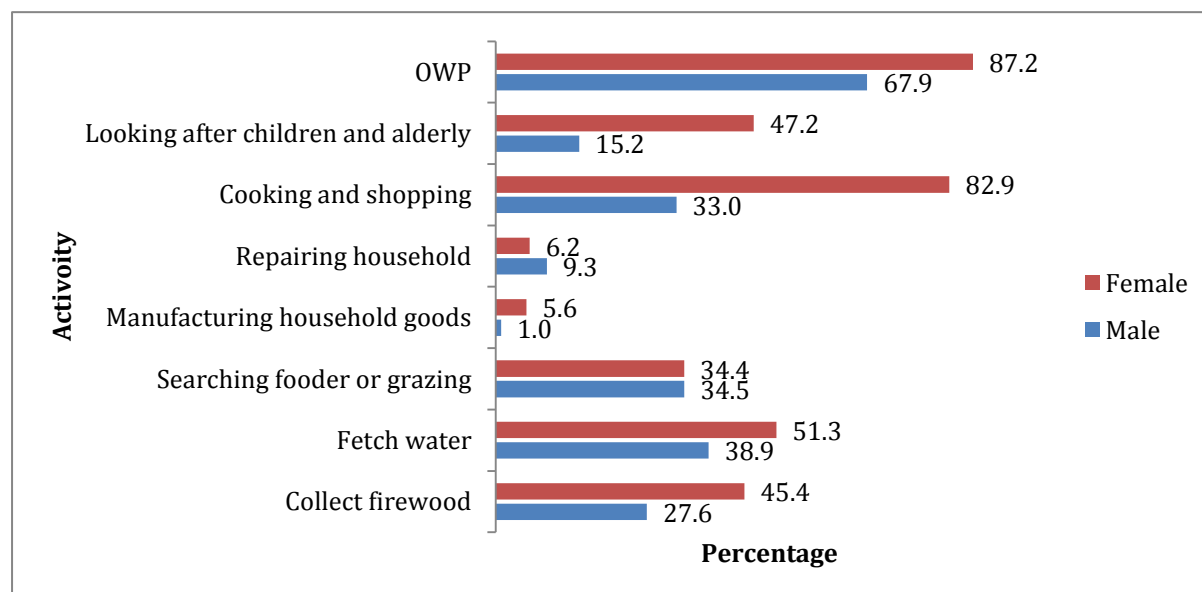
	Number of persons	Percent (%)	Average number of hours
Population 16 years old and over engaged in some type of own-use production work	5,325,973	78.2	21.4
Collecting firewood for the household including travel time	2,527,718	47.5	4.8
Fetching water for the household, including travel time	3,099,644	58.2	4.6
Searching for fodder or grazing for the household's animals	2,346,306	44.1	9.4
Constructing your dwelling, making major repairs on it, farm buildings, private roads, or wells	202,446	3.8	6.9
Manufacturing household goods for own or family use	521,573	9.8	6.6
Doing household chores including shopping, preparing meals	4,058,145	76.2	10.6
Looking after children and elderly	2,195,245	41.2	8.1
Own-use production work among the labour force			
Among labour force	2,750,167	76.4	20.1
Among employed	2,188,232	73.9	19.2
Among unemployed	561,935	87.7	23.9

Source: LFS August 2017

The table also shows that some 2,750,167 persons combined labour force activity with own-use production work. The average time spent per week on own-use production work by labour force participants was 20.1 hours. As expected, the average number of hours of own-use production work was lower among the employed and relatively higher among the unemployed.

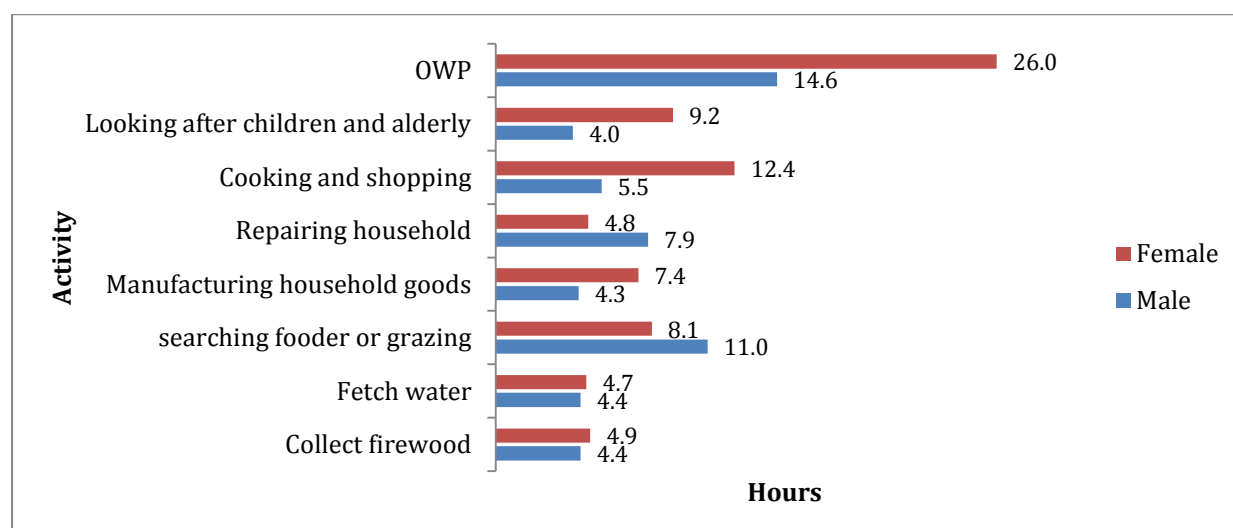
Using data on total hours usually worked at main and secondary jobs of the employed population, the combined hours of work in employment activity and own-use production work of the employed population was about 53.4 hours per week.

Figure 11.1 below illustrates the proportion of working age population who were engaged in own use production activities by sex. Females were more engaged in own-use production (87.7 percent) than males (67.9 percent). Except for repairing of own dwelling and searching fodder or grazing, the proportion of working age females engaged in other type of own use production activities was higher than the proportion of working age males.

Figure 11. 1: Proportion of working age population who are own use producers by sex

Source: LFS February 2017

Figure 11.2 presents the average number of time spent per week in own use production of different services by sex. The time spent by females (26.0 hours) was almost twice as high as the time spent by males (14.6 hours) in those activities. The activities in which females were spending more time were cooking and shopping (12.4 hours) followed by looking after children or elderly (9.2 hours) while males were spending more time in searching folder or grazing (11.0 hours) and repairing own houses (7.9 hours).

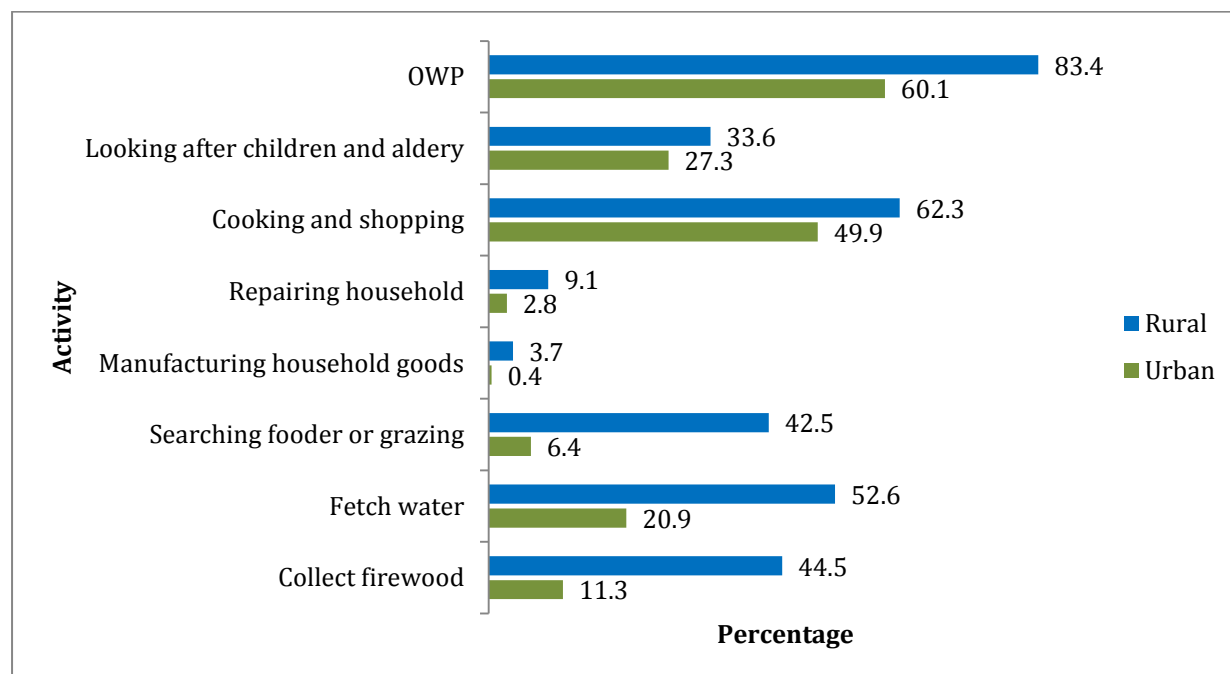
Figure 11.2: Average number of hours spent in own use production activities by type and sex

Source: LFS February 2017

Considering the area of residence, own use services activity was more predominant in rural area (84.0 percent) as compared to urban areas (65.7 percent). More than half of the working age population was engaged in cooking and shopping, and in fetching water

in rural areas. In urban areas, the activities that involve an important proportion of working age population were also cooking and shopping, and fetching water as well as searching fodder or grazing.

Figure 11.3: Proportion of working age population engaged in Own use production of services by residential area and activity



Source: LFS February 2017

11.2 Subsistence foodstuff producers

Subsistence foodstuff producers constitute an important subgroup of persons in own-use production work. They are defined as all those who performed any of the activities specified above as *production of goods* in order to produce foodstuff from agriculture, fishing, or gathering that contribute to the livelihood of the household or family. The definition excludes persons who engaged in such production as recreational or leisure activities.

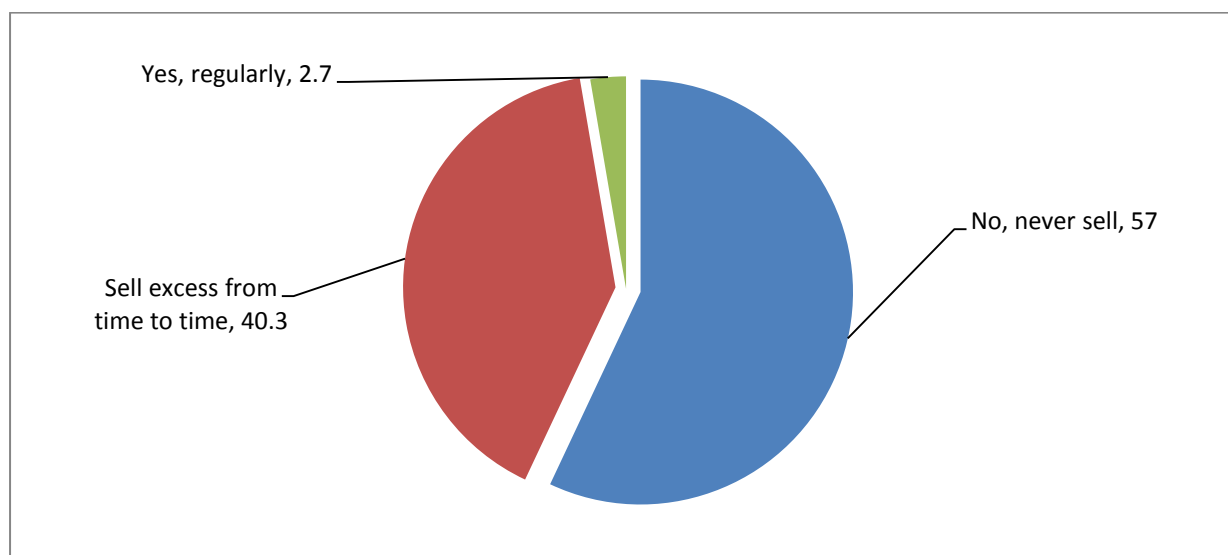
The August, 2017 LFS questionnaire included a section on subsistence agriculture (section H) with 11 questions on subsistence foodstuff production. The basic results are shown in Table 11.2 below. Among the population 16 years old and over, about 3,222,606 persons were engaged in subsistence foodstuff production during the last month from the date of interview, representing 47.3 percent of the total working age population. They have spent on average about 20.5 hours per week on this activity. The average number of hours of work on subsistence foodstuff production among the employed was 16.8 hours per week. It was significantly higher among persons not in employment (20.5 hours per week).

Table 11.2: Average time spend per week on subsistence foodstuff production

	Number of persons	Percent %	Average number of hours
Among total population 16 years old and above	3,222,606	47.3	20.5
Among persons in employment	1,164,092	39.3	16.8
Among persons not in employment	2,058,514	53.4	20.5

Source: RLFS, August 2017

The survey collected additional information on subsistence foodstuff production including on whether any part of the products were sold in the market and the net amount the household obtained from agricultural activities last season as well as the number of paid employees engaged in the activities in addition to family members.

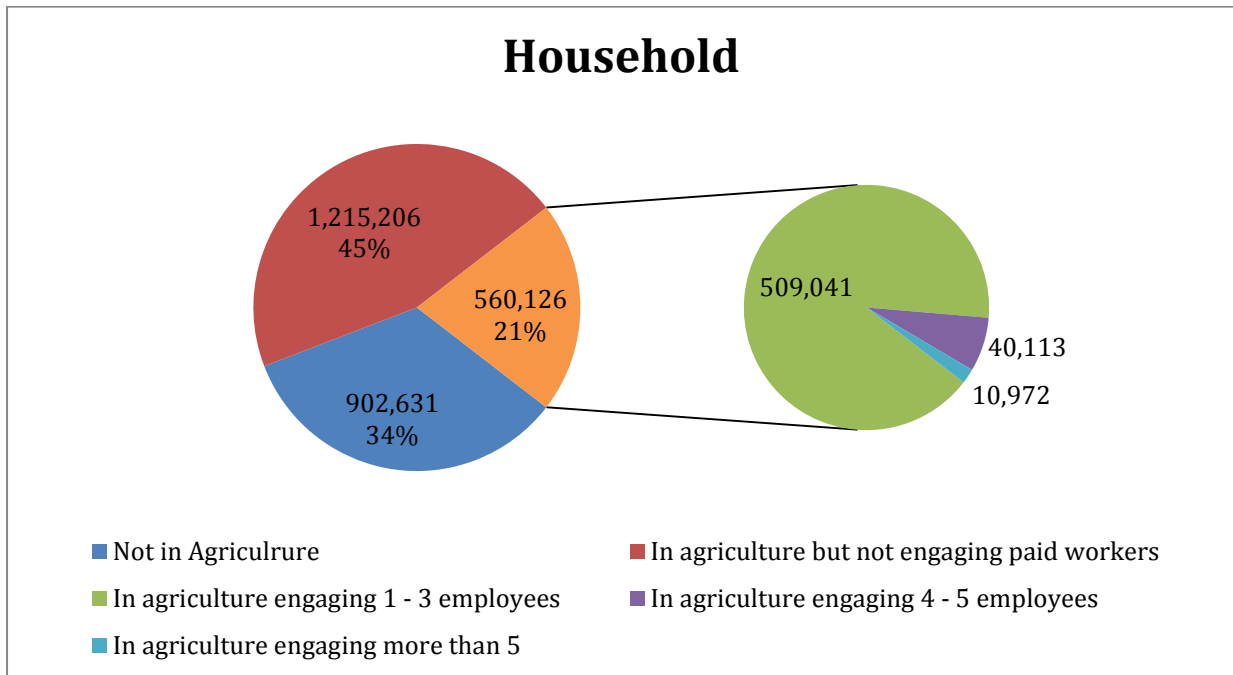
Figure 11.4: Percentage distribution of the use of household production

Source: RLFS, February 2017

Figure 11.4 above shows that 57.0 percent of household in Rwanda did not sell any production in general. As expected in a country with predominant agriculture, production was directly used for the household. Only 2.7 percent of households were selling their production on a regular basis.

The August 2017 LFS estimated 2,677,963 households of which 66.3 percent participated mainly in subsistence agriculture. The remaining proportion of households (33.7 percent) did not participate in the subsistence agriculture. Among the households which participated in subsistence agriculture, 560,126 of them, corresponding to 20.9 percent of all households, employed regularly or sometimes agriculture labourers. The results show that most of households employed between 1 to 3 persons excluding other members of the household (90.9 percent).

Figure 11.5: Participation of paid workers in subsistence agriculture

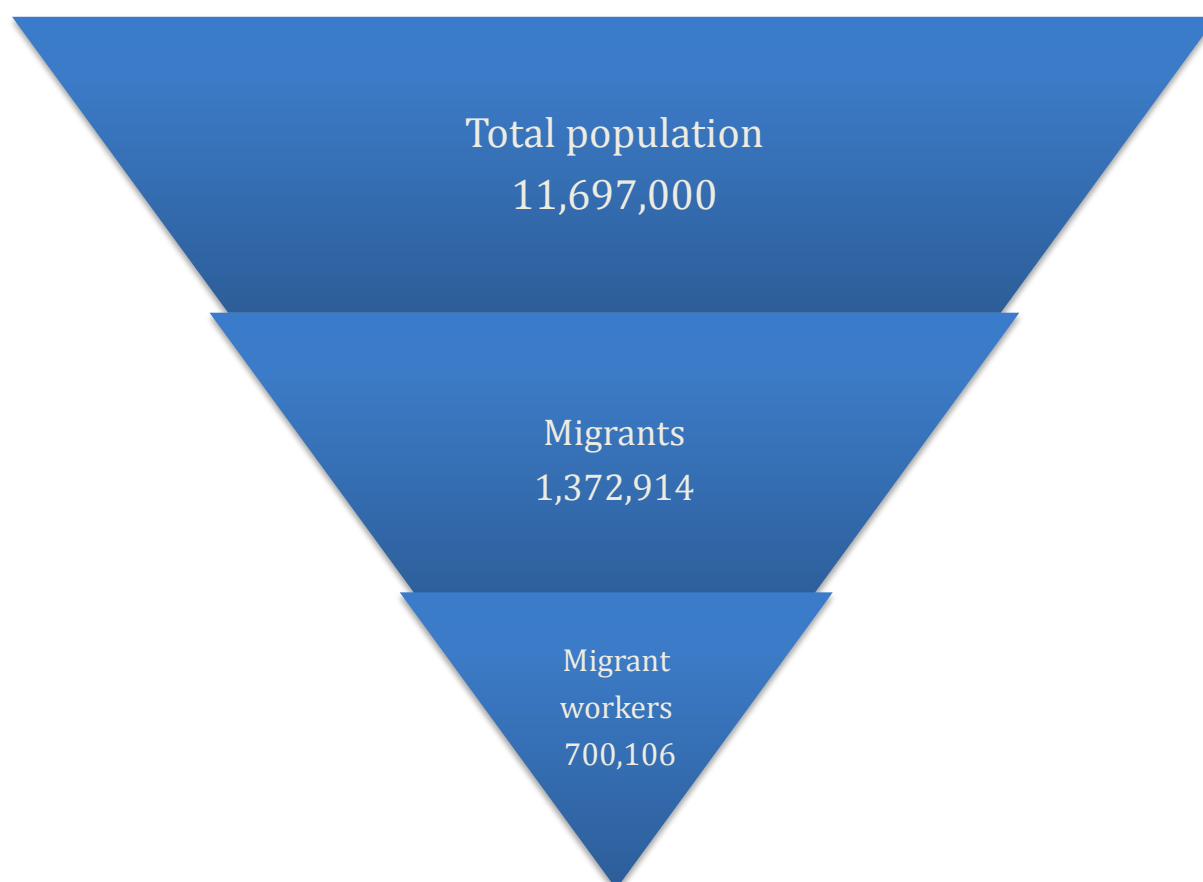


Source: LFS, August 2017

Chapter 12. Migrant workers

According to the results of the LFS August 2017 shown in Figure 12.1 below, the stock of the migrant population at the time of the survey was 1,372,914 persons, representing 11.7 percent of the total population. Among them, an estimated 700,106 were migrant workers. A migrant was defined to be any current resident, member of a private household in Rwanda who has changed his or her district or country of usual residence in the last five years. A migrant worker was defined to be a migrant in the sense described above who was in the labour force of the country, i.e., currently engaged in an employment work or looking and available for employment.

Figure 12. 1: Size of the migrant and migrant workers populations



Source: LFS August 2017

The migrant population includes the internal migrants and the international migrants. Similarly, the migrant workers population includes the internal migrant workers and the international migrant workers. The internal migrant and internal migrant workers were those who have moved from one district of Rwanda to another during the last five years, and the international migrant and international migrant workers were those who have moved from outside the country to Rwanda in the last five years. The bulk of the migrants were internal migrants (1,266,911). The international migrants were 106,003.

The share of international migrants in total population of Rwanda (0.6 percent) remain significantly lower than the world average (3.2 percent).¹⁷

There were relatively more women (53.7 percent) than men (46.3 percent) among internal migrants of working age 16 years old and over, while the reverse is true among international migrants. The percentage of women among international migrants of working age was 48.3 and the percentage of men was 51.7 percent.

The percentage of migrants of working age living in the urban areas was significantly higher than the national average, both for internal migrants and international migrants. The proportion of international migrants in urban areas were around 64.7 percent, substantially more than double the corresponding urban rate at the national level (22.3 percent).

Table 12.1 shows the distribution of internal migrants from the province prior residence to the province of current residence, and Table 12.2 shows the distribution of international migrants from the country of prior residence to the province of current residence.

Table 12. 1: Province of current residence and province of last move of internal migrants

		Province of current residence					
		Kigali	South	West	North	East	Total
Province of last move	Kigali	170,862	38,905	34,084	27,138	101,401	372,391
	South	124,215	108,962	16,273	5,236	54,508	309,194
	West	75,442	25,299	51,196	8,649	47,240	207,825
	North	37,221	9,096	8,384	28,978	66,681	150,360
	East	69,577	19,502	10,423	19,681	107,959	227,141
	Total	477,317	201,764	120,360	89,681	377,789	1,266,911

Source: LFS August 2017

The diagonal elements of Table 12.1 show that about one-third of the internal migrants moved from one district to another district in the same province. The total numbers in the diagonals of the table is 467,957 corresponding to 36.9 percent of the total internal migrant population. The majority or about two-third of the internal migrants moved from one province to another. From the off-diagonal elements of Table 12.1, one can observe that the migration corridor with the largest movement was from the Southern Province to the City of Kigali (124,215 migrants), followed by the movement from the City of Kigali to the Eastern Province (101,401) and the movement from West Province to the City of Kigali (75,442).

¹⁷ International Labour Office, *ILO global estimates on migrant workers. Results and methodology. Special focus on migrant domestic workers.* Labour Migration Branch, Conditions of Work and Equality Department and Department of Statistics, 2015.

It is interesting to note that the City of Kigali was a major destination as well as a major province of origin of migrant workers. More than one-third (37.7 per cent) of the internal migrants currently reside in the City of Kigali. Similarly, more than one-fourth (29.4 per cent) of the internal migrants moved from a district of the City of Kigali to another district inside or outside the City of Kigali in the last five years. The Eastern province was the second pole of attraction as a destination province while the Southern province was the second highest migrant-sending province after the City of Kigali.

Table 12.2: Province of current residence and country of last move of international migrants

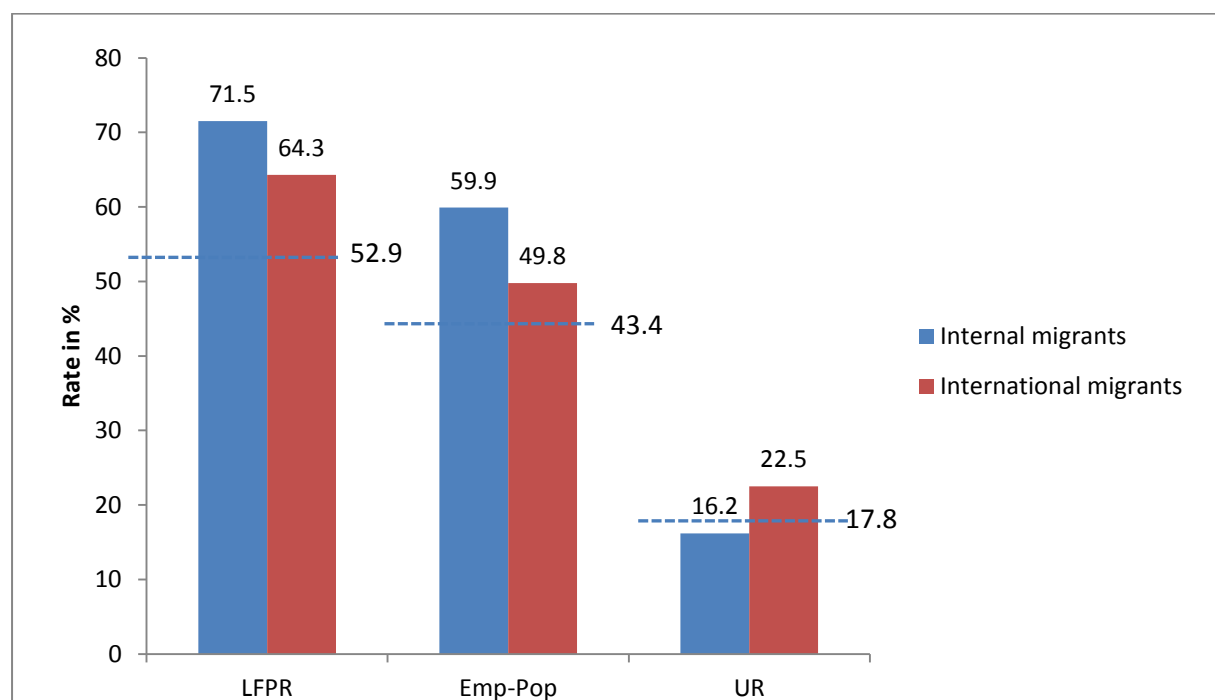
		Province of current residence					
		Kigali	South	West	North	East	Total
Country of last move	Burundi	8,424	5,293	444	0	5,656	19,816
	Congo-Kinshasa	1,738	3,271	25,944	1,238	2,167	34,359
	Kenya	2,316	0	0	0	0	2,316
	Tanzania	961	2,221	0	3,164	3,962	10,308
	Uganda	5,433	459	2674	5,591	13,173	27,330
	Rest of Africa	2,183	0	0	0	0	2,183
	Other countries	3,439	0	0	0	0	3,439
	Total	24,494	11,245	29062	9,993	24,958	99,751

Source: LFS August 2017

In terms of international migration, most migrants were coming from Congo-Kinshasa DRC and Uganda (30.3 and 27.7 per cent, respectively), followed by Burundi (27.0 per cent) and Tanzania (8.4 per cent). The City of Kigali was also the province of destination of the highest number of international migrants (36.4 per cent) followed by the West Province (30.1 per cent).

A large part of the migrant population is migrant workers. Statistics on this category of migrants are particularly important. The management of labour migration and the protection of migrant workers, especially, their labour rights and the promotion of safe and secure working environments are of priority concerns of many countries.

Figure 13.2 shows the summary indicators of the labour force status of internal and international migrants according to the results of the RLFS August 2017.

Figure 12.2: Labour force status of internal and international migrants.

Source: LFS August 2017

Notes: LFPR = Labour force participation rate; Emp-Pop = Employment-to-population ratio; and UR = Unemployment rate. Dotted lines correspond to corresponding national rates or ratio.

It can be observed that the share of the working age migrants engaged in the labour force is significantly higher than the general population as a whole. The labour force participation rate of internal migrants was 71.5 percent and that of the international migrants was 64.3 percent, both significantly higher than the overall labour force participation rate (52.9 percent). Similarly, the employment-to-population ratio of internal migrants (59.9 percent) and that of the international migrants (49.8 percent) were higher than the overall employment-to-population ratio of the country (43.4 percent). On contrary, the unemployment rate of internal migrant workers (16.2 percent) was below the national unemployment rate (17.8 percent) while the unemployment rate for international migrant workers (22.5 percent) was slightly higher than the national unemployment rate.

These results are in line with expectation as migration is often motivated by economic and labour market factors. According to the results of the RLFS August 2017, the main reason to move from the previous place of residence of the working age migrants was to look for work (19.4 percent of respondents) followed by coming back to land (19.3 percent). New job, living with relatives and marriage were next in relative size (14.0, 10.8 and 10.2 percent respectively).

It is also instructive to note that the unemployment rate was lowest (about 2.9 to 9.9 percent) among migrant workers who moved from their previous place of residence

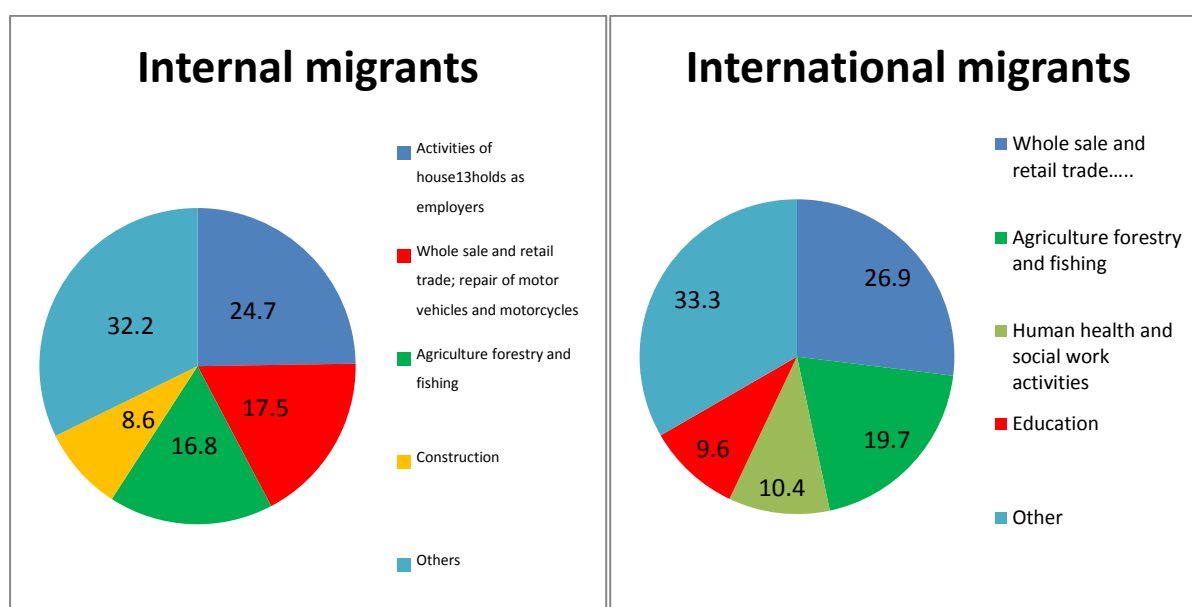
because of a new job, job transfer or looking for employment; (about 18.8 to 40.5 percent) among those who moved for personal reasons such as Parent's move, living with relatives or studies. Correspondingly, the employment-to-population ratio was highest among migrant workers who moved for labour market reasons than those who moved for personal, family or other reasons.

More detailed analysis of the relationship between labour force status and reason of migration of migrant workers may be carried out based on the data presented in Table 54 of the Statistical Annex. One particular result that should be mentioned here is the very high employment-to-population ratio (83.3 percent) and the relatively low unemployment rate (9.9 percent) of migrants whose main reason of migration was to look for work. This result means that many of these migrants found employment following their move, although not all.

The pattern of employment of migrant workers in terms of branch of economic activity is shown below for internal and international migrants, separately. The branch of economic activity with the highest number of internal migrants was activities of households as employers (24.6 percent). Compared with the national share of persons engaged in households as employers (6.8 percent). The results show also that the percentage of agriculture employment among the internal migrant workers (16.8 percent) was lower as compared to the national average (38.7 percent).

The shares of internal migrants engaged in wholesale and retail trade and motor vehicle repair (17.5 percent) and in construction (8.6 percent) are about the same as the corresponding national average (16.5 and 10.3 percent respectively), suggesting that migrant workers in these two branches of economic activity were engaged in the same activity prior and after migration.

Figure 12.3: Employed migrant workers by branch of economic activity.



Source: LFS August 2017

Turning to international migration, the data show that the international migrant workers were mostly engaged wholesale and retail trade and motor vehicle repair (26.9 percent), in agriculture (19.7 percent), Human health and social work (10.4 percent) and Education (9.6 percent). In the branches of economic activity presented in figure 12.3, the share of international migrant workers was above the corresponding national share of employment in 'Wholesale and retail trade repair of motor vehicles and motorcycles' and 'health and social work activities. This indicates that international migrant workers were proportionally more represented in those activities. The share of international workers in wholesale and retail trade was 26.9 percent against 16.5 percent for the employed population as a whole and 10.4 percent against 1.8 percent at the national level in health and social work activities.

Finally, it should be mentioned that migrant workers were defined here in terms of their participation in the labour force, i.e, engaged in or looking for work for pay or profit. Many other migrants were also engaged in subsistence foodstuff production or other own-use production of goods, not considered as employment work under the new international standards.

According to the RLFS August 2017, the proportion of internal migrants of working age, engaged in subsistence foodstuff production, not counted in labour force was 8.8 percent. The proportion among the international migrants was 7.4 percent. Both figures are considerably lower than the corresponding national percentage of 24.8 percent, indicating that migrants are relatively less engaged in subsistence foodstuff activity than the working age population at large. One implication of these results is that the higher labour force participation rate of migrants noted earlier in this chapter would be dissipated if the participation rate would be calculated on the basis employment work as well as subsistence foodstuff production work.

Chapter 13. Workers with disabilities

The National Institute of Statistics of Rwanda implemented the recommendation of the UN formed Washington Group on Disability Statistics, the Rwanda labour force survey recommended questions for identifying people with disabilities and their disaggregation by labour force status and other demographic and economic characteristics. Data collection on disabilities and on workers with disabilities aims to contribute to the UN Sustainable Development Goals (SDG), a universal and ambitious plan of actions for ending poverty and hunger by 2030, leaving no one behind including people with disabilities. Such disaggregated statistics are critical for monitoring progress towards the achievement of the SDGs.

The sample size of the August 2017 LFS is considerably larger and it is considered sufficient for providing preliminary estimates of workers with disabilities and their broad characteristics. According to the results of the August 2017 LFS, there were 333,452 persons aged five years old and over with disabilities, in Rwanda representing a prevalence rate of 3.3 percent. The relative standard error of the estimate is approximately 4.1 percent, corresponding to a margin of error of about +/- 26,700.

The recommended set of questions on disability was administered to persons five years old and above, and therefore the LFS results refer to this age category. In line with recommendations of the Washington Group on Disability Statistics, a person with disability was defined as any individual five years old and above who responded to have “a lot of difficulty” or “cannot do it at all” with respect to one or more of the following six conditions: “seeing, even if wearing glasses”, “hearing, even if using a hearing aid”, “remembering or concentrating”, “walking or climbing steps”, “self-care such as washing all over or dressing”, “communicating, for example, understanding or being understood”.

Table 13.1 shows the estimated number of persons with disabilities by type and degree of disability. The table also gives data on the prevalence rate in relation to the total population five years old and above.

Table 13. 1: Prevalence of disabilities by type of disability.

Type of disability	Total persons with disability		With a lot of difficulty		Cannot do at all	
	Number	Rate	Number	Rate	Number	Rate
Total	333,452	3.3	309,528	3.1	51,301	0.5
Seeing	87,679	0.9	80,633	0.8	7,046	0.1
Hearing	65,684	0.6	53,997	0.5	11,687	0.1
Walking, climbing	152,984	1.5	137,260	1.4	15,724	0.2
Remembering	80,347	0.8	66,416	0.7	13,931	0.1
Washing, dressing	67,188	0.7	43,895	0.4	23,293	0.2
Communicating	40,905	0.4	26,414	0.3	14,491	0.1

Source: LFS August 2017

Note: Details do not add up to totals due to the existence of persons with more than one disability.

The disability with the highest prevalence rate was difficulty in walking or climbing steps, affecting 152,984 persons or 1.5 percent of the population 5 years old and above. Almost as frequent are the disability in seeing even with glasses, affecting 87,679 persons or 0.9 percent of the population 5 years old and above, and the disability in remembering or concentrating, affecting 80,347 persons or 0.8 percent of the population 5 years old and above. The data show that there were about 7,046 persons who cannot see at all, roughly one per thousand persons, and 13,931 who cannot remember or concentrate at all, representing about one per thousand persons.

About 95,157 persons had more than one type of disability, 17,541 persons had both difficult of working and self-care; 14,224 persons had difficulty in seeing as well as difficulty in walking or climbing steps. An estimate of 13,406 persons had difficulty in seeing as well as hearing, and 9,620 persons had difficulties in both remembering or concentrating and washing all over or dressing.

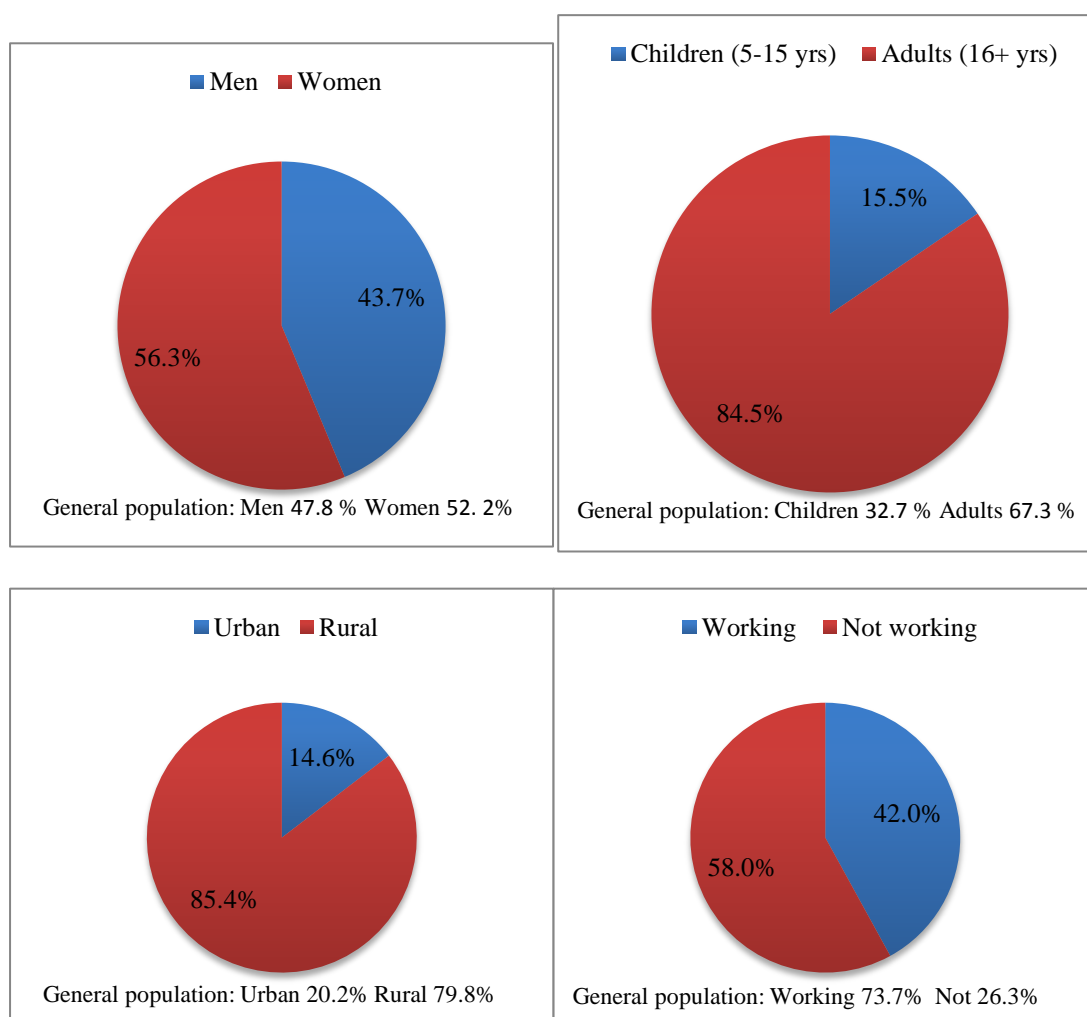
There were also persons who suffer from a combination of three or more difficulties. In particular, there were about 8,385 persons who suffer from difficulties in seeing, hearing and walking or climbing steps. This result is in line with the observation that certain disabilities are correlated with age and therefore it is not surprising to find these persons form the largest category of persons with multiple disabilities. Overall, every person with disability had on average 1.5 disabilities.

The data collected in the survey indicate that women were relatively more affected by disabilities across all types of disabilities except for difficulty with communicating for which the number of men was relatively higher than women. The percentages of women were particularly high among persons with seeing and walking or climbing steps disabilities (61.5 per cent for each)). In general, as shown in Figure 13.1, women are disproportionately affected by disabilities. The percentage of women among persons with disabilities was 56.3 percent, while women formed 52.2 percent of the population 5 years old and above.

The data shown in Figure 13.1 also indicate that adults of working age are disproportionately affected by disabilities. The percentage of persons 16 years and above among persons with disabilities was 84.5 percent while the percentage of persons 16 years and above among the general population 5 years old and over was 67.3 percent. This indicates that disability is more predominant among adults compared to children.

Similarly, the data show that rural areas were disproportionately affected by disabilities. The percentage of persons 5 years and above with disabilities living in rural areas was 85.4 percent while the rural population 5 years old and over was only 79.8 percent of the general population 5 years old and above.

Figure 13. 1: Demographic characteristics and work status of persons with disabilities relative to the general population.



Source: LFS August 2017

Note: General population here refers to the size of the population five years old and above or sixteen years and above according to August 2017 LFS.

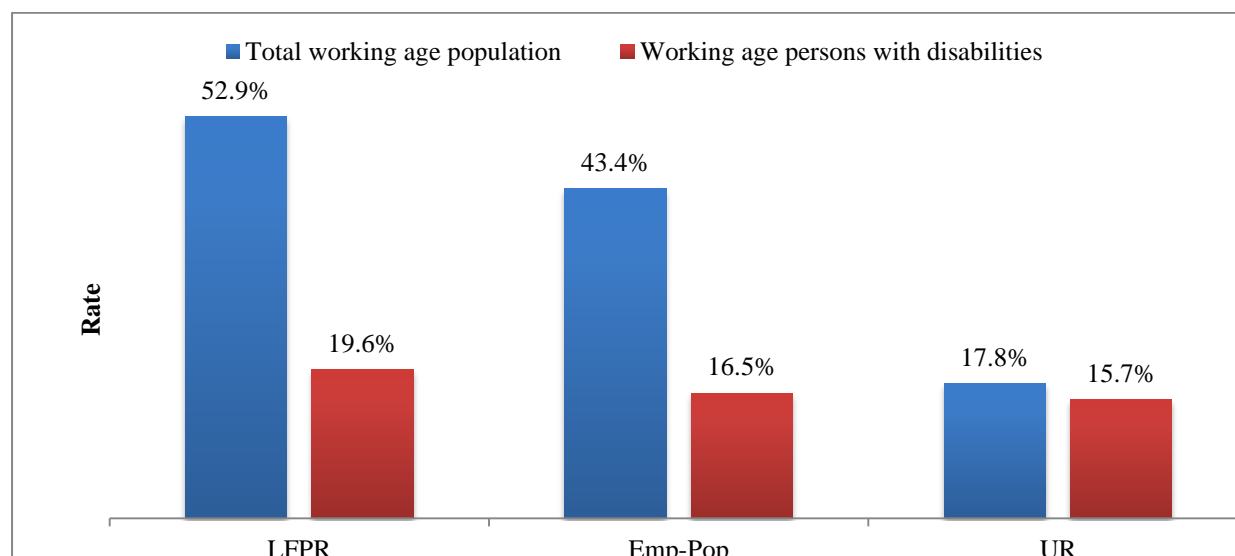
Also, as expected, the data shown in Figure 13.1 indicate that the proportion of working age persons with disabilities who are not working is 58.0 percent relatively higher than the share of persons who are not working in the general working age population (26.3 percent). Work is defined here in a broad sense covering not only employment work but also work on subsistence foodstuff production.

In terms of labour market activity, the data show that despite their handicap there is a relatively high number of persons of working age with disabilities who are engaged in the labour market, either working for pay or profit, or looking for paid jobs or self-employment.

Figure 13.2 compares the main labour market indicators for persons 16 years old and above with disabilities and the corresponding indicator for the working age population at large. The results show that 19.6 percent or almost one-fifth of the working age

persons with disabilities are labour force participants. The corresponding rate for the working age population at large is 52.9 per cent. About 16.5 percent of the working age persons with disabilities are engaged in employment work for pay or profit. The corresponding ratio for the working age population at large is 43.4 percent.

Figure 13.2: Main labour force indicators: Working age persons with disabilities versus working age population at large.



Source: LFS August 2017

Note: LFPR = labour force participation rate; Emp-Pop = Employment-to-population ratio; and UR = Unemployment rate.

It is instructive to note that the data from the August 2017 LFS show that the unemployment rate of persons with disabilities is significantly lower than the unemployment rate of the working age population at large (17.8 percent versus 15.7 percent).

The analysis of employment status of the working age persons with disabilities by type of disability (presented in Table 6 of the Statistical Annex) shows that the employment-to-population ratio is highest among persons with seeing disability (20.0 percent) and lowest among persons with difficulty in washing all over and dressing 6.0 percent). Unemployment rate is lowest among persons with difficulty in communicating (4.9 percent). labour force participation rate is lowest among persons with difficulty in washing all over and dressing(7.2 percent) reflecting their age pattern .While persons with remembering disability have the highest unemployment rate (23.7 percent) followed by persons with washing all over and dressing((16.6 percent) and seeing disability (15.8 percent).

More detailed analysis of workers with disabilities by hours of work, status in employment, occupation and branch of economic activity is possible using the August 2017 LFS. However, the limited number of observations at this level of detail is leading to estimates with low precision, not undertaken in the present report.

Chapter 14. Main indicators at district level

The data from February 2017 LFS combined with those of August 2017 LFS provide the enlarged sample base to calculate district-level estimates of the main labour force indicators. As mentioned in Annex B, the survey is designed to provide semi-annual national estimates of employment and labour underutilization with specified precision, and annual district-level estimates by pooling together the semi-annual data of each calendar year. The timing of the semi-annual rounds are based on the seasonal variations of labour force activities in Rwanda, in particular, the high and low seasons of agriculture activities, in February 2017 and August 2017, respectively. Exceptionally in the first 12-months implementation of the survey, district-level data are compiled using combined data from survey rounds in different calendar years. From 2017 onwards, the district-level data will be released using the combination of data from survey rounds in the same calendar year. The design also permits in time to measure the seasonality in the labour market of the different districts.

This chapter analyses the labour force participation and unemployment rates of districts. More detailed district-level data are presented in the statistical annex of this report. The main results are first examined under the new international standards (19th ICLS, 2013), followed by comparison with the old definitions (13th ICLS, 1982). The chapter concludes that there is a relationship between labour force participation and the concentration of market-oriented agriculture of districts as well as a relationship between unemployment and the level of job opportunity of districts.

14.1. Labour force participation

The following table (Table 1) shows the labour force participation and unemployment rates of thirty districts of Rwanda based on the new and old international standard definitions of labour force and unemployment, respectively. Based on the new international standards adopted in 2013, the national average labour force participation rate was 52.4 per cent in February 2017 and on 52.9 in August 2017. This means that more than half of the working age population 16 years old and above were in employment, engaged in any activity to produce goods or services for pay or profit, or were unemployed, currently available and actively seeking for an employment during the specified reference period. This definition excludes persons engaged mainly in own-use production work unless they were otherwise available and actively seeking for work for pay or profit.

The national average masks considerable variation among districts. The highest labour force participation rates are from Gasabo (67.5 percent), Kicukiro (66.6 percent), and Nyarugenge (65.5 percent), all three districts of the City of Kigali are characterized with urban agglomerations and large market-oriented activities. The districts with the second highest labour force participation rates are Rubavu (62.0 percent) and Nyabihu (61.9 percent) in West province, Nyagatare and Bugesera (59.3 percent, each) in East

Province. The next in line districts are Karongi (55.9), Ruhango (55.0 percent), Nyamagabe (54.8 percent), Rutsiro (54.6 percent) and Kamonyi (54.2 percent) which are also characterized by developing economic activities.

Table 14. 1 Labour force participation rate and unemployment rate by district

District	Labour force participation rate		Unemployment rate	
	New definition ¹	Old definition ²	New definition ¹	Old definition ²
Total	53.4	79.0	17.4	4.8
Nyarugenge	66.4	70.7	22.6	19.2
Gasabo	65.3	75.4	19.6	13.4
Kicukiro	67	71	17.2	14.9
Nyanza	47.7	81.4	8.6	1.3
Gisagara	53.1	84.6	8.3	0.9
Nyaruguru	32.1	74.8	10.5	0.8
Huye	52.5	77.8	12.7	3.4
Nyamagabe	54.9	80.7	12.3	1.1
Ruhango	54.4	80.5	19.8	2.5
Muhanga	41.9	77.6	21.2	4.9
Kamonyi	55.1	80.7	23.2	3.1
Karongi	55.6	83.7	25.3	3.2
Rutsiro	54.6	85.2	26.4	2.6
Rubavu	61.5	71.2	17.3	9.3
Nyabihu	61.9	78.8	18.9	5.5
Ngororero	38.9	79.2	24.1	2.3
Rusizi	49.6	75.6	21.6	4.2
Nyamasheke	45.1	73.3	34.4	6.4
Rulindo	49.4	85.2	14.6	1.5
Gakenke	45	90.2	13.9	0.6
Musanze	52.6	76.1	15.6	4.5
Burera	38.3	76.9	21.5	1.6
Gicumbi	48.8	82.6	14.1	1.8
Rwamagana	52.1	81.6	8.6	2
Nyagatare	59.3	79.6	24.4	7.8
Gatsibo	49	81.6	7.8	0.9
Kayanza	54.4	79.3	7.5	1.5
Kirehe	53.7	84.7	10.4	0.9
Ngoma	49.5	87.2	12	0.5
Bugesera	57.1	79.7	11.2	2.8

Source: RLFS February 2017 - August 2017

Notes: 1 ILO Resolution concerning statistics of work, employment and labour underutilization, 19th International Conference

of Labour Statisticians, Geneva, 2013

2 ILO Resolution concerning statistics of the economically active population, employment, unemployment and underemployment, 13th International Conference of Labour Statisticians, Geneva, 1982.

By contrast, the districts with the lowest labour force participation rates are those in remote or mountainous areas with low market-oriented agriculture and no or limited urban centers. These include in ascending order of labour force participation rate: Nyaruguru (30.5 percent), Burera (38.3 percent), Ngororero(39.6 percent) and Muhanga (41.5 percent)

The other districts with lowest labour force participation rates are Nyamasheke (45.1 percent), Gakenke (45.5 percent) and Gicumbi (48.4 percent). They have moderate cities with little market-oriented agriculture, and life-style of rural areas.

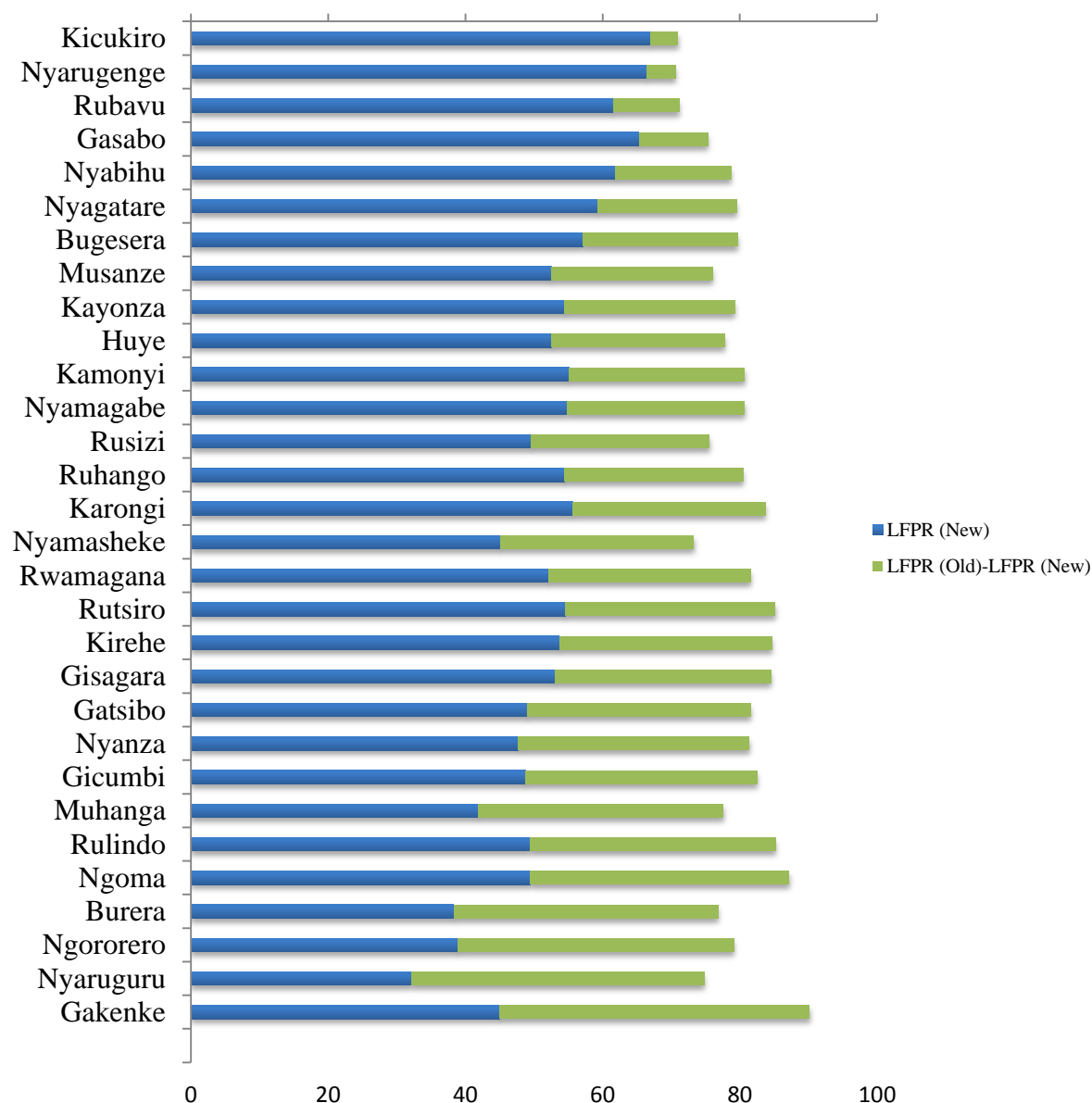
14.1.1 Comparison of LFPR under new and old definitions

The main difference between the new and old standards on the measurement of the labour force concerns the new definition of employment as 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. It excludes subsistence foodstuff producers and more generally persons engaged wholly in activities to produce goods or services for own final use such as producing agricultural, fishing and gathering products for own-consumption or cleaning, decorating, gardening and maintaining one's own dwelling or premises, durables and other goods.

These new definition of employment have implications on the measurement of unemployment and therefore the labour force, the sum of the number of employed and the number of unemployed persons. The following graphic shows the two series in graphic form sorted in ascending order of the difference between the labour force participation rates according to the old and new definitions .

It is instructive to note that there are little variations among the labour force participation rates of the districts according to the old definition. All vary within about 11 percentage points of the national average (79.0 percent). The variation of the district rates is much more significant according to the new definition, the maximum rate deviating about 13.6 percentage points from the national average (53.4 percent) and the minimum about 21.3 percentage points.

Figure 14. 1 District labour force participation rates according to new and old definitions



RLFS February 2017, August 2017

The length of the green bar indicates the difference between the LFPR rate of each district under the new and the old definitions. The smallest differences are for Kicukiro (4.0 percentage points), Nyarugenge (4.3 ppts), Rubavu (9.7 ppts) and Gasabo (10.1 ppts). The largest differences concern Gakenke (42.2 ppts), Nyaruguru (42.7 ppts), Ngororero (40.3 ppts), and Burera (38.6 ppts).

14.1.2 Degree of concentration of market-oriented agriculture

The major factor explaining the differences is the degree of concentration of market-oriented agriculture in the district. In general the higher the concentration of market-oriented agriculture in the district the higher the labour force participation rate of the district under the new definition and the smaller the difference between the

corresponding labour force participation rates under the new and old definitions. Vice versa, the lower the concentration of market-oriented agriculture in the district, the lower the labour force participation rate of the district under the new definition and the larger the difference between the corresponding labour force participation rates under the new and old definitions.

In mathematical terms, the degree of concentration of market-oriented agriculture may be defined in the present context as the ratio of the number of persons employed in agriculture according to the new definition of employment to the total number of workers in agriculture including those in subsistence foodstuff production,

$$\frac{\text{Employed persons in agriculture}}{\text{Total number of persons engaged in agriculture work}}$$

In practice, the denominator is measured here by the sum of employed persons in agriculture and the subsistence foodstuff producers outside the labour force according to the new definitions of employment and labour force. The results show a high positive correlation (0.63) between the degree of concentration of market-oriented agriculture and the labour force participation rate of districts according to the new definition. And, a high negative correlation (-0.49) between the degree of concentration of market-oriented agriculture and the difference between the labour force participation rate of districts according to the old and new definitions.

14.2 Unemployment

A similar approach is adopted for the analysis of the unemployment rates of districts. The right panel of the earlier table 1 shows the unemployment rates of the thirty districts of Rwanda according to both the new and old definitions.

According to the new international standards, the national average unemployment rate was 17.4 percent in the period from February 2017 to August 2017. This means that about one out of every six persons of working age was unemployed. A person of working age 16 years old and over is classified as unemployed, if he or she was without employment during the reference period but was currently available and had undertaken active steps to seek employment during the past four weeks. Persons engaged in own-use production work could be classified as unemployed if they were not otherwise employed and met the other conditions of the definition of unemployment.

There is a great variation in the unemployment rate of districts as indicated in Table 14.1. The districts with highest unemployment rates above the 20 percent level are Nyamasheke (34.4 percent), Rutsiro (26.4 percent), Karongi (25.3 percent), Kamonyi (23.2 percent), Nyagatare (24. percent), Ngororero (24.1 percent), Burera (21.5 percent).

It is instructive to note that districts with highest unemployment rates are in many cases those with lowest labour force participation rates. This is explained by the fact

that areas with limited market-oriented agriculture are also areas with low job opportunities.

Districts with the lowest unemployment rate are Kayonza (7.5 percent), Gatsibo (7.8 percent) and Gisagara (8.3 percent), followed by Nyanza and Rwamagana (8.6 percent each).

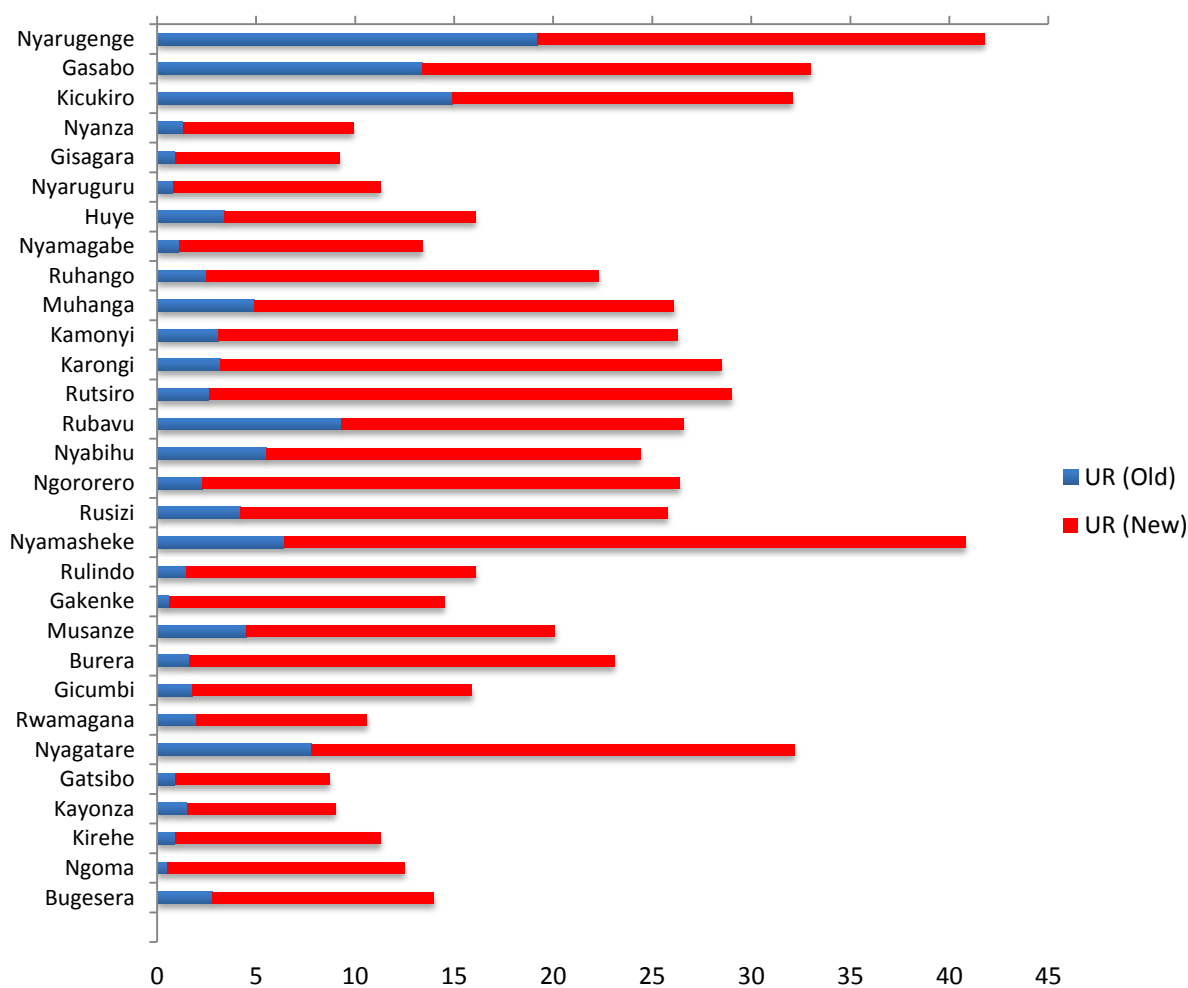
Finally, it should be mentioned that job opportunities are highly seasonal in many of the districts and a low annual average unemployment rate may mask a relatively high unemployment rate in the off-season.

14.2.1 Comparison of unemployment under new and old definitions

The basic elements of the international definition of unemployment have remained the same under the new and old standards. But, because of the changes in the definition of employment, the count of the number of unemployed persons differs under the new and old standards. In particular, subsistence foodstuff producers that would have been classified as employed under the old definition, may now be classified as unemployed if they satisfy the main criteria of unemployment, namely, current availability for employment and active search for employment during the specified reference period.

The new statistical treatment of subsistence foodstuff producers with respect to employment has drastic effect on the measurement of unemployment as indicated in the right panel of Table 14.1 above. The red color bars vastly dominate the blue color bars for all districts except for the first three, Nyarugenge Gasabo and Kicukiro. This means that in virtually all the districts the unemployment rate under the new definition is not just higher than the rate under the old definition, but it is more than twice larger than the old rate. In Ngoma it is 24 times higher and in Gakenke it is 23 times higher, in Burera and Ngororero 13 times higher.. The differences between the unemployment rate according to the new definition and the old definition are the narrowest in Nyarugenge Gasabo and Kicukiro in the City of Kigali where the job opportunities are wider.

The unemployment rate under the new definition provides a clear picture of unemployment situation in different districts as it reflects the pressure on the labour market exercised by all persons not already employed who are seeking work for pay or profit including those who are working on subsistence foodstuff production, or more generally, on other forms of non-employment work.

Figure 14. 2: District unemployment rates according to new and old definitions

RLFS February 2017 August 2017

Also it can be shown using the data presented in Table 14.1 that the unemployment rate and the labour force participation rate under the old definitions are highly correlated indicating that they are measuring along the same dimension. The correlation between the unemployment rate and the labour force participation rate under the new definitions is, however, almost zero, indicating that the two indicators are measuring different dimensions of the labour market as it should be.

14.2.2 Level of job opportunities in districts

It was indicated in the previous section that the labour force participation rate in the present context is probably measuring the degree of concentration of market-oriented agriculture of the different districts. It is surmised that the unemployment rate on the other hand is measuring the level of job opportunities in the labour market of each district. The level of job opportunity of a district may be defined as,

Employed _ persons

Total _ number _ of _ persons _ in _ extended _ labour _ force _ or _ in _ own _ use _ production _ work

where the numerator reflects the demand for labour of the district and the denominator the supply of labour. The ratio is expressed in percentage and varies between 0 and 100. A high ratio indicates a high level of job opportunities in the district and correspondingly a lower district unemployment rate. By contrast, a low rate indicates a low level of job opportunities in the district and a higher district unemployment rate. In practice, the numerator may be measured with the number of employed persons according to the new definition and the denominator with the sum of the labour force according to the new definition and the number of subsistence foodstuff producers not in the labour force.

Table 14. 2: District opportunity

District	District opportunity ratio
Kicukiro	66.7
Rubavu	62.8
Nyarugenge	62.2
Gasabo	61.9
Nyabihu	61.2
Kayonza	60.9
Bugesera	58.6
Nyamagabe	57.0
Huye	55.8
Gisagara	55.5
Rwamagana	55.2
Kirehe	54.7
Musanze	54.1
Nyagatare	52.4
Gatsibo	52.3
Ruhango	52.0
Nyanza	50.7
Kamonyi	49.7
Karongi	48.7
Ngoma	48.5
Gicumbi	48.0
Rusizi	47.7
Rulindo	47.3
Rutsiro	45.3
Gakenke	42.4
Muhanga	38.5
Nyamasheke	37.5
Burera	37.0
Nyaruguru	35.3
Ngororero	34.4
Total	52.1

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).¹⁸ 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 defined as:

- “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” in line with the General production boundary defined in the System of National Accounts 2008.
- Work is defined “irrespective of its formal or informal character or the legality of the activity.”
- It excludes “activities not involving production of goods or services (begging, stealing), self-care (personal grooming, hygiene) and activities that cannot be performed by another person on one’s own behalf (sleeping, learning, own recreation).”

The international standards recognize different forms of work: Own-use production work (production of goods and services for own final use); employment (work performed for others in exchange for pay or profit); unpaid trainee work (work performed for others without pay to acquire workplace experience or skills); volunteer work (non-compulsory work performed for others without pay); and other forms of work (not defined at this time by the international standards). 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. For international reporting, the international standards recommend the lowest age bracket starting with 15 years. To enable comparison with the past and to conform to the international standards, the LFS questionnaire collected data on labour force and labour underutilization characteristics of the population 14 years 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

¹⁸ILO, *Resolution concerning statistics of work, employment and labour underutilization*, 19th International Conference of Labour Statisticians, Geneva, October 2013.

activity to produce goods or provide services for pay or profit. It excludes persons engaged wholly in activities to produce goods or services for own final use such as producing agricultural, fishing and gathering products for own-consumption or cleaning, decorating, gardening and maintaining one's own dwelling or premises, durables and other goods. Persons in employment comprise: (a) employed persons "at work," i.e., who worked in a job for at least one hour; and (b) employed persons "not at work" due to temporary absence from a job, or to working-time arrangements (such as shift work, flexi-time and compensatory leave for overtime).

This definition of employment differs from the definition used in past surveys and censuses that was based on the previous international standards.¹⁹ The main difference concerns the statistical treatment of subsistence foodstuff producers. According to these earlier standards, "persons engaged in the production of goods and services for own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the households." According to the new standards, however, only those are included in employment if the production was "intended mainly for sale or barter, even if part of the output is consumed by the household or family."

- **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. The definition of unemployment provides an exception in the case of *future starters*. They are considered as unemployed even if they did not carry out activities to seek employment during the specified recent period, if satisfy the availability condition.

Although this definition of unemployment is essentially the same as the definition used in past surveys and censuses, the resulting statistics differ considerably from each other. This is due to the impact of the change in the definition of employment. Persons who are not classified as employed under the new definition are now subject to classification as unemployed if they satisfy the other two criteria of unemployment.

¹⁹ ILO, *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the 13th International Conference of Labour Statisticians, Geneva, 1982.

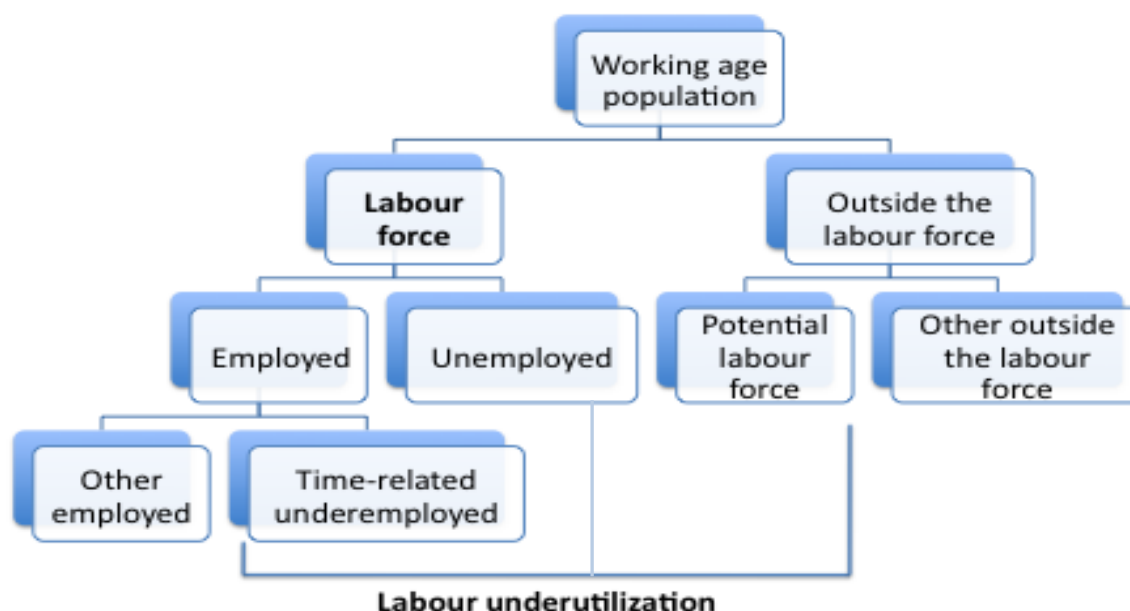
- **Time-related underemployment**

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. It corresponds to the median value of the distribution of hours actually worked at all jobs during the reference week.

- **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 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 relationship among the various concepts is shown in the figure below.

A1. Labour force and labour underutilization framework



Note: The employed excludes workers engaged in the production of goods or services for own consumption or in other forms of work not regarded as employment.

- **Discouraged jobseekers**

Among the potential labour force, one particular group requires separate attention. These are the so-called discouraged jobseekers. Discouraged jobseekers are persons

outside the labour force who wanted employment and were currently available but did not seek employment during the short reference period of measurement for labour market-related reasons as listed below:

- past failure to find a suitable job
- lack of experience
- lack of qualifications or jobs matching the person's skills
- lack of jobs in the area
- considered too young or too old by prospective employers

The discouraged jobseekers are a subset of the potential labour force, or more particularly, a subset of the “available potential jobseekers”. During the survey reference period, they wanted and were available for employment, but were not seeking employment for labour market-related reasons as opposed to personal, family or other non-labour related reasons. They are considered as potential jobseekers because in principle they have been seeking employment in the past but stopped looking for employment after failure or repeated failures to obtain suitable employment due to various reasons related to the unsuitability of their age, qualification, work experience, and similar labour-market reasons. If these obstacles could be overcome, they would presumably be again jobseekers.

• **Others outside the labour force**

The potential labour force is one group of persons outside the labour force. In general, persons outside the labour force include persons of working age population who were neither in employment nor in unemployment during the reference period of measurement. Persons outside the labour force may be classified in terms of their current main activity status as well as the main reason for not being engaged in the labour force and their potential future labour force engagement. The international standards recommend the classification of persons outside the labour force by main activity status, as self-declared, with the following categories:

- own-use production of goods or own-use provision of services;
- unpaid-trainee work;
- volunteer work;
- studies;
- self-care (due to illness or disability);
- leisure activities (social, cultural, recreational).

The main status of the individual is to be determined by the person himself or herself, or in practice by the survey respondent if the survey allows for proxy-response.

Additional classifications of the population outside of the labour force (or more generally, the population not in employment) that may be considered in survey design are past work employment and characteristics of last employment for those who had past employment experience, and main current source of livelihood.

- **Willing non-jobseekers**

One particular group of persons outside the labour force who are not in the potential labour but have some attachment to the labour force are the so-called “willing non-jobseekers”. Willing non-jobseekers are defined as persons who wanted employment but were not seeking employment and were not currently available for employment during the corresponding specified reference periods of measurement.

The willing non-jobseekers are a subset of the persons outside the labour force, and more particularly, a subset of those persons outside the labour force who are not in the potential labour force. The willing non-jobseekers were not seeking employment, nor were available for employment during the appropriate reference periods and as a result are not classified as unemployed or as potential labour force. However, they wanted employment during the appropriate reference period, and in this sense they are considered as a separate category among the population outside the labour force.

- **Own-use production work**

Persons in own-use production work are defined as all those of working age who, during a short reference period, performed any activity to produce goods or provide services for own final use for a cumulative total of at least one hour. “For own final use” is interpreted as production where the intended destination of the output is *mainly* for final use (in the form of capital formation, or final consumption by household members, or by family members living in other households). In the case of agricultural, fishing, hunting or gathering goods intended mainly for own consumption, a part or surplus may nevertheless be sold or bartered.

Subsistence foodstuff producers constitute an important subgroup of persons in own-use production work. They are defined as all those who performed any of the specified activities to produce foodstuff from agriculture, fishing, hunting or gathering that contribute to the livelihood of the household or family. Excluded are persons who engaged in such production as recreational or leisure activities.

Own-use producers and in particular persons engaged in own-use production of goods such as subsistence foodstuff producers (and for that also matter unpaid trainee workers or volunteer workers) may be engaged, in the same reference period, in other activities, including employment or search for employment. On the basis of their other activity, therefore, certain own-use producers may also be in the labour force and classified as employed, unemployed or other labour underutilization category.

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.

A2. 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 ultimate goal of the labour force survey (LFS) programme is to collect data on the employment and labour underutilization characteristics of the population on a continuous basis, providing quarterly estimates of the main labour force aggregates with sufficient precision at the district level. Given this ambitious measurement objective, it has been decided to adopt a gradual approach starting with an annual survey with the sample spread over two points in time. The sample is designed such that the survey provides for:

- Semi-annual national estimates of employment and labour underutilization with specified precision, and
- Annual district-level estimates by pooling together the bi-annual data of each calendar year.

The timing of the bi-annual rounds is based on the seasonal variations of labour force activities in Rwanda, in particular, the high and low seasons of agriculture activities, in February and August, respectively. This approach is in line with the international standards that recommend a national data collection strategy that allows reporting “on a sub-annual basis, main aggregates of employment, the labour force, labour underutilization, including unemployment, and subsistence foodstuff producers, in order to monitor short-term trends and seasonal variations.”

An annual survey with the sample spread over two points in time has a number of advantages in comparison with an approach that starts with an annual survey conducted at one point in time during the year. The semi-annual approach allows NISR to put in place a survey management system that oversees survey operations and data processing tasks that cover the entire year. This would make it easier to transit at a later stage into a more frequent reporting system. It will also lessen the number of transitions and inevitable disruptions at each transition toward the final objective of reaching a continuous survey with quarterly reporting,

A semi-annual approach also provides the possibility of incorporating a rotation scheme into the sample design. A rotation scheme allows to produce more accurate measurement of employment and labour underutilization trends as well as new statistics on labour force dynamics, in particular, flow data on job gains (number of persons obtaining employment during a given period) and corresponding data on job losses (number of persons losing employment during the period).

1. Sample design

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. It excludes the institutional population permanently residing in houses such as hostels; health resorts; correctional establishments etc., as well as persons living in seasonal dwellings not covered in the survey. It also excludes workers living at their work-sites. A household is a group of persons who live together and make common provision for food and other essentials for living. The people in the group may be related or unrelated or a combination of both. A household may consist of only one person or several persons.

- **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. A domain is a well-defined population group for which estimates with pre-determined accuracy are sought. 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.²⁰ Similar calculations for employment gave a sample size requirement of 18,792 households.

Because the sample size should be a multiple of $2 \times 4 \times 16$ 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

²⁰For 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.

Rwanda LFS programme builds on the possibility of transiting to quarterly sub-rounds after a few years of half-annual sub-rounds.

Rwanda LFS: Sample rotation design

2016		2017		2018	
February	August	February	August	February	August
Pilot survey	4 (R1)				
	3 (R2)	4 (R2)			
	2 (R3)	3 (R3)	4 (R3)		
	1 (R4)	2 (R4)	3 (R4)	4 (R4)	
		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 9344 households. From 2017, the survey uses the full sample of 18688 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.

The rotation scheme retains each sample household in four consecutive half-year rounds (2 years) before leaving the sample altogether. The sample size in each round consists therefore of 4 rotation groups, containing households who would remain in the sample three more times, the other who would remain two more times, another who would remain one more time, and finally one who join the sample for the first time.

According to this rotation scheme, there is 75% sample overlap between the semi-annual rounds. The overlap for the same period one-year apart is 50% and the sample overlap between two consecutive years is 60%. It should be mentioned that sample rotation implies a lower number of distinct households in each annual survey. There would be 11,680 distinct households in the sample each year in 2017 and 2018.

- **Sampling frame and sample allocation among districts**

The sample in each survey round consists of four rotation groups comprising in total 9344 households in 584 primary sampling units (PSUs). A primary sampling unit is an enumeration area of the Population and Housing Census 2012. There are altogether 14,784 enumeration areas in the sampling frame constructed by NISR based on the population and housing census.

To ensure adequate geographical distribution of the sample over the different parts of the population, the sample is allocated among the 30 districts of the country. Prior to sample selection, the sampling frame is sorted according to urban and rural areas within districts. This provides an implicit stratification of the population by urban and rural areas. The resulting distribution of the sample of the LFS August 2017 round obtained on the basis of the square-root allocation is shown in the following table. The sample design thus provides a total of 9344 households in 584 enumeration areas, with 3248 urban households in 203 urban enumeration areas and 6096 rural households in 381 rural enumeration areas.

Sample allocation of enumeration areas and households by district, RLFS February 2017

District	Number of sample enumeration areas			Number of sample households		
	Total	Urban	Rural	Total	Urban	Rural
Nyarugenge	68	49	19	1,088	784	304
Gasabo	92	51	41	1,472	816	656
Kicukiro	72	59	13	1,152	944	208
Nyanza	12	1	11	192	16	176
Gisagara	12	-	12	192	-	192
Nyaruguru	12	1	11	192	16	176
Huye	12	4	8	192	64	128
Nyamagabe	12	1	11	192	16	176
Ruhango	12	1	11	192	16	176
Muhanga	12	2	10	192	32	160
Kamonyi	12	2	10	192	32	160
Karongi	12	1	11	192	16	176
Rutsiro	12	-	12	192	-	192
Rubavu	16	6	10	256	96	160
Nyabihu	12	2	10	192	32	160
Ngororero	12	-	12	192	-	192
Rusizi	16	3	13	256	48	208
Nyamasheke	16	-	16	256	-	256
Rulindo	12	-	12	192	-	192
Gakenke	12	-	12	192	-	192
Musanze	16	4	12	256	64	192
Burera	12	-	12	192	-	192
Gicumbi	16	1	15	256	16	240
Rwamagana	12	1	11	192	16	176

District	Number of sample enumeration areas			Number of sample households		
	Total	Urban	Rural	Total	Urban	Rural
Nyagatare	16	2	14	256	32	224
Gatsibo	16	1	15	256	16	240
Kayonza	12	1	11	192	16	176
Kirehe	12	-	12	192	-	192
Ngoma	12	-	12	192	-	192
Bugesera	12	1	11	192	16	176

It should be mentioned that the square-root allocation rule allocates the sample in proportion to the square-root value of the size of the district. It is a compromise between equal and proportional allocation. Equal allocation gives the same allocation to each district regardless of size. It may be appropriate if each district is to be treated as separate reporting unit (domain) with the same precision requirement as the others. Proportional allocation distributes the sample in proportion to the size of the districts. With proportional allocation, the geographical composition of the population is preserved, but it may lead to very small sample sizes for certain districts.

- **Selection of sample enumeration areas**

The next step in sample design was the selection of the 584 sample enumeration areas. The sample was drawn in each district by probability proportional to size (pps) from the sampling frame. In practice, the sample of enumeration areas was selected from the start for an entire sequence of 18 survey rounds from August 2016 to August 2023 when in principle a new sampling frame constructed on the basis of the next population and housing census will become available. The selected sample was then assigned randomly to 18 rotation groups. Sample enumeration areas in rotation groups R1 to R4 formed the sample for LFS August 2016. The sample of enumeration areas assigned to rotation groups R3 to R6 were used for LFS August 2017. The sample enumeration areas assigned to R4 to R7 will be used for LFS February 2018, and so on. The same process will continue on each round with the addition of one rotation group per round.

- **Selection sample households**

The sample enumeration areas were freshly listed prior to selection of the final sample of households. According to the sample design, 16 sample households were selected from the list of households in each sample enumeration area by systematic sampling with equal probability. If the list contained 16 households or less all households in the sample enumeration area were drawn in the sample. If the list contained more than 16 households, a sample of fixed size (16 households) was drawn from the list by systematic random sampling.

The purpose of listing was to ensure that every household currently residing in the sample locality has a non-zero probability of selection. Listing permits to update the

sampling frame and account population movements and new household formations that have occurred since the last preparation of the sampling frame. It aims at covering the newly constructed buildings with living quarters and taking into account demolished or vacant buildings, or transformed dwellings no longer used as living quarters, such as dwelling addresses turned to stores or workshops, or living quarters used as secondary housing units or for holidays.

The listing form consisted a booklet of 24 pages organized in four columns: (1) A three-digit serial number for listing buildings; (2) Another three-digit serial number for listing dwellings within buildings; (3) The name of the head of household residing in the dwelling; and (4) The street address of the household.

- **Sample weights**

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

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

$$p_k = \eta \times N_k$$

where N_k is the number of households in the enumeration area according to the sampling frame and η is the proportionality factor of the pps sampling scheme.

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

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

where 16 is the fixed sample-take in enumeration area k and N_k^1 is the listed or estimated number of households in the enumeration area k .

The overall design weight is the inverse of the product of these two probabilities,

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

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

Finally, the adjusted weights were calibrated to known population projections for four demographic groups:

Male population less than 16 years old living in private households in August 2017 = **2,440,886**

Male population 16 years old and over living in private households in August 2017 = **3,188,634**

Female population less than 16 years old living in private households in August 2017 = **2,443,450**

Female population 16 years old and over living in private households in August 2017 = **3,624,343**

The population projections were derived from the NISR census publication.²¹ 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.²² Accordingly, the final calibrated weights were obtained from the formula,

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

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.

2. Questionnaire design

The questionnaire of the Rwanda Labour Force Survey August 2017 in its present form contains a total of 149 questions organized into 9 sections and a cover page, dealing with following topics:

- A Household roster including activities of children aged 5 to 13 years old
- B Education

²¹ National Institute of Statistics of Rwanda, *Fourth Population and Housing Census, Rwanda, 2012, Thematic Report Population Projections*, January 2014.

²² Deville, J.C., and Sarndäl, C.E., "Calibration Estimators in Survey Sampling," *Journal of the American Statistical Association*, Vol. 87, 1992, pp. 376-382.

- C Identification of employed, time-related underemployed, unemployed and potential labour force
- D Characteristics of main job/activity
- E Characteristics of secondary job/activity
- F Past employment
- G Own-use production of goods and services
- H Subsistence foodstuff production
- I Housing and household assets

Not all questions are addressed to every household member. For children below 14 years of age, a minimum number of questions are asked. For older youngsters and adults 14 years of age and above, the number of questions depends on the situation and activities of the person during the reference period. The basic reference period is the last 7 days prior to the date of the interview. For certain questions, however, other reference periods are used. In each case, the relevant reference period is indicated in the text of the question.

The questionnaire was prepared both in Kinyarwanda and in English. An earlier version of the Kinyarwanda questionnaire was tested during the Pilot LFS February 2016. The field test was conducted in selected urban and rural areas with the aim of assessing the integrity of the instrument, such as understanding of question wordings, duration of interviews, coding and data processing. The experience gained was used to finalize the questionnaire.

Experience gained from the pilot survey led to certain modifications of the questionnaire. The revised questionnaire was again tested prior to the LFS August 2016 and February 2017 through the mock interviews conducted during the training of supervisors and interviewers. Slight modifications were further introduced following the experience gained during the field work of previous LFS rounds.

A specimen of the final version of the questionnaire is presented in Annex C of the present report. It is accompanied with two documents: An extensive manual for interviewers, providing instructions on the role of interviewers, listing of household members, and procedures to be adopted for asking each question and recording the corresponding response;²³ and a set of diagrams and corresponding STATA syntax providing rules for combining the survey responses for constructing the main labour force indicators of the survey. These derived variables included:

Labour force status (STATUS1):

- Employed, Unemployed and Outside the labour force
- Time-related underemployed (TRU)

Potential labour force (PLF)

²³ NISR, *Rwanda Labour Force Survey, Interviewers Manual (RLFS, 2016)*, National Institute of Statistics of Rwanda, Kigali, December 2015. Revised for the RLFS, August 2016.

Discouraged jobseeker (discourage)

Willing non-jobseeker (willing)

Subsistence foodstuff producer (sub)

Employment in informal and formal sector (IS and FS)

Informal and formal employment (IE and FE)

Monthly cash income from of employment of employees at main job (cash)

Not in employment, nor in education or training youth 16-24 years old (NEET youth)

Not in employment, nor in education or training young persons 16-30 years old (NEET young)

Migrant worker (migrant)

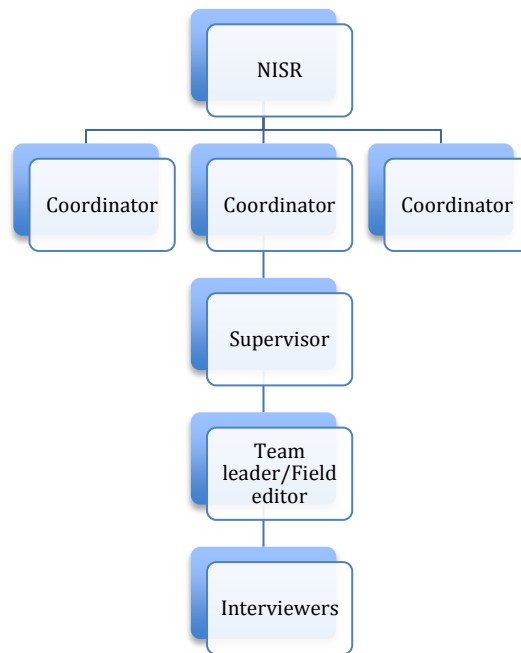
Worker with disability (disable)

3. Field operations

The main pre-survey activities conducted in preparation for the field operations included the establishment of the field organization, the recruitment and training of interviewers and the preparation and printing of the survey documents including maps of the sample enumeration areas, the listing forms, the survey questionnaire and interviewers' instructions.

The following diagram shows the field organization of the survey. It consisted of 3 coordinators, coordinating the work of 10 supervisors, 24 team leaders and 96 interviewers. In many occasions the team leaders and field editors conducted also survey interviews. So altogether the survey interviewing was carried out by a total of 120 interviewers.

Field organization, LFS August 2017



The actual number of interviewers recruited for the survey was in excess of the required number in order to allow for drop-outs, illness, absences and other possible failures.

The training of the survey staff was carried out in two stages. There was first the training of the supervisors followed with the training of the interviewers. The coordinators conducted the training of the supervisors, and the combined pool of supervisors and coordinators conducted the training of the interviewers.

The field operations were conducted from 7th August to 6th October 2017. Listing was conducted at the same time as data collection in Kigali city and others District out of Kigali.

Prior to household selection and interviewing, all households in the sample enumeration areas were listed in a special listing form. A separate manual was prepared for household listing, providing special instructions for segmentation of large clusters and quality control of the results.²⁴ Finally, procedures were developed for selecting sample households from the list as part of the field operations.²⁵

The new 9 sample enumeration areas with very large number of households at the listing stage were segmented according to the segment areas defined by the population and housing census. One segment at random was listed and the number of listed

²⁴ National Institute of Statistics of Rwanda, *Manual for Household Listing, Rwanda Pilot Labour Force Survey (RLFS-P 2016)*, NISR, Kigali, February 2016.

²⁵ Mehran, F., GIZ Consultant, "Rwanda Labour Force Survey February 2016. Selection of households without data entry as part of the field operations." 30 December 2015.

households was proportionally expanded to obtain an estimate of the current number of households residing in the enumeration area.

4. Data processing

Since August 2017 an electronic data collection system has replaced paper based questionnaire and data were collected using computerized assisted interview (CAPI). Data was uploaded to NISR main office from field via wireless network channel by synchronizing every day with the NISR server. It was carried every day to have a daily back up of data. All the activity of codification were also done to the field by interviewers who were trained. Several questions with textual responses were pre-coded in tabled in cascaded way. These concerned education (major field of study in highest qualification attained, and subject of training), occupation and branch of economic activity (at main and secondary job and past employment experience). They were coded into the corresponding national standard classifications using on-screen coding with corresponding dictionaries in Kinyarwanda.²⁶ Coding of geographic areas and addresses was incorporated in the data entry programme as look-up.

Following coding, responses of each questionnaire were edited for blanks, missing values, duplicates, out-of-range values, and inconsistencies such as no head of household or age of child greater than age of head of household using developed batches of controlling inconsistency in CsPro and Stata. Editing specifications on coverage and demographic characteristics were based on the population and housing census (PHC4 2012). Other edit rules were developed for consistency checks on questions related to the measurement of the main labour force variables, including employment, unemployment, multiple jobholding, total hours usually worked at all jobs, total hours actually worked at all jobs, status in employment at main job, etc. Corrections were made mostly with reference to the original physical questionnaire. Many errors were due to data entry.

The resulting data file contained 38,710 records, 22,632 on persons of working age 16 years old and over, and 16,078 on persons below 16 years of age. The data file included records corresponding to households who refused to participate in the survey or were not available for response after repeated visits.

As part of data processing, the data file was augmented by adding a field on sampling weights (weight) and a series of additional fields on derived variables constructed on the basis of the information on each record. Some examples of the construction of the derived variables is schematically shown in diagrams B1 to B5 for employment (E),

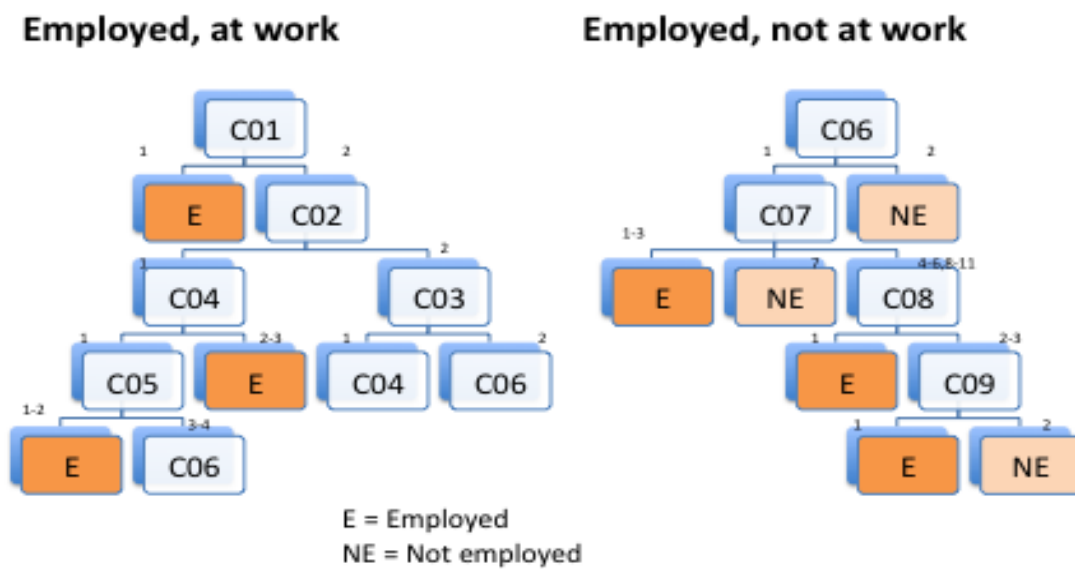
²⁶ National Institute of Statistics of Rwanda, *Customized International Standard Industrial Classification of all Economic Activities (ISIC Rev. 4)*, The Rwanda Classification Manual, 2012 edition.

National Institute of Statistics of Rwanda, *Customized International Standard Classification for Occupation (ISCO-08)*, The Rwanda Classification Manual, 2012 edition.

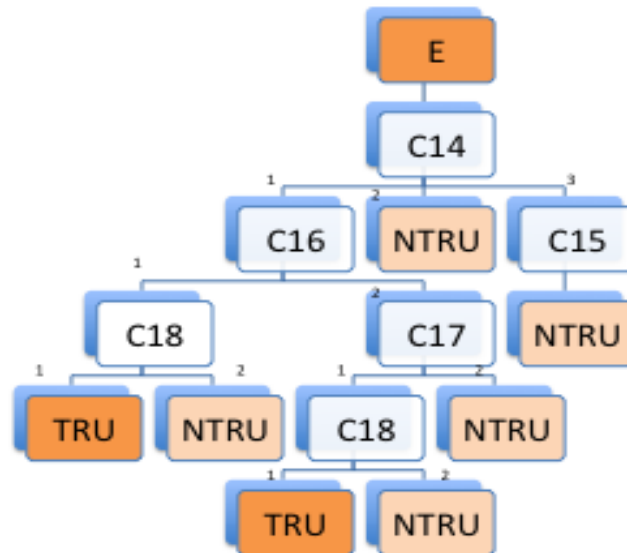
National Institute of Statistics of Rwanda, *Customized International Standard Classification of Education (ISCED 97)*, The Rwanda Classification Manual, 2012 edition.

time-related underemployment (TRU), unemployment (U) and potential labour force (PLF), employment in informal sector (IS) and informal employment (IE) at main and secondary jobs, and monthly cash income from employment of employees at main job (cash). The numbered elements of the diagrams refer to the question numbers and response categories of the LFS questionnaire. The end nodes of the diagrams refer to the derived variable categories, employed, time-related underemployed, unemployed, etc.

B.1 Derived variable: Employment (E)

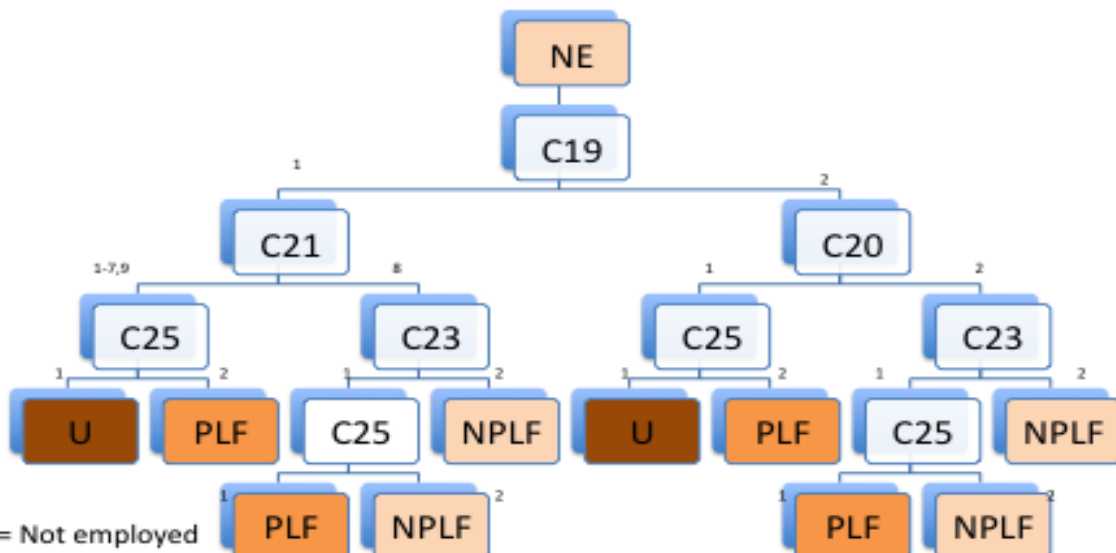


B.2 Derived variable: Time-related underemployment (TRU)



E = Employed
 TRU = Time-related underemployed
 NTRU = Not time-related underemployed

B.3 Derived variables: Unemployment (U) and potential labour force (PLF)



NE = Not employed
 U = Unemployed
 PLF = Potential labour force
 NPLF = Not in potential labour force

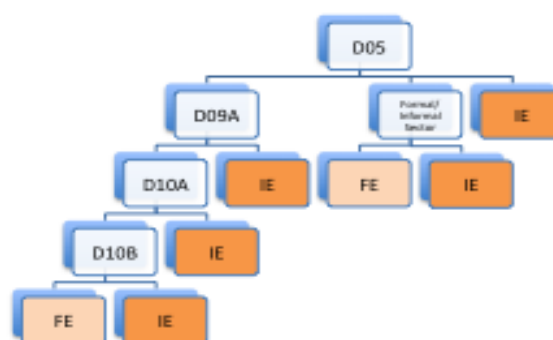
B.4 Derived variables: Informal sector (IS) and informal employment (IE) at main job

Informal sector



IS = Informal sector
 FS = Formal sector
 X = Out-of-scope (Domestic workers engaged by households are excluded from the count of informal and formal sector)

Informal employment



IE = Informal employment
 FE = Formal employment

B.5 Derived variable: Monthly cash income from employment of employees at main job (INC)

Status in employment		Response	Monthly cash income from employment at main job
(1)	(2)	(3)	(4)
Employee or Intern or Other	D05=1,2,7	D12=1 Amount	D12A x 1 if D13=1
			D12A x 26/12 if D13=2
			D12A x 52/12 if D13=3
			D12A x 52/2 if D13=4
			D12A /12 if D13=5
		D12=8,9 Refusal, Don't know	2*20,000/3=13,333 if D17=1
			2/(1/20,000+1/30,000)=24,000 if D17=2
			2/(1/30,000 +1/50,000)=37,500 if D17=3
			2/(1/50,000 +1/100,000)=66,667 if D17=4
			2*100,000 = 200,000 if D17=5

Finally, the augmented data file with derived variables and sampling weights was used for producing the survey estimates specified in the tabulation programme of the survey

as well as other analytical tables for the body of the report. The tabulation programme of the survey included 66 tables presented in the statistical annex of the present report (Annex D).

In order to speed up data processing and ensure better quality data, NISR is planning to introduce tablets for data collection in future LFS rounds. Discussions were held to also consider the possibility of adopting computer assisted coding of the questions with textual responses and automated editing procedures for both detection and correction of errors thus minimizing the need for the time-consuming task of making reference to the physical questionnaires.

5. Data quality

Like in all sample surveys, the results of the LFS August 2017 are subject to sampling and different forms of measurement errors. This section provides information on different sources of survey errors, namely, sampling errors, coverage errors, non-response errors, response errors and other errors such as coding and data entry 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.

Information on sampling errors is used for interpreting the survey results. It provides an assessment of the precision of the estimates and on the degree of confidence that may be attached to them. In the same vein, it allows decision on the degree of detail with which the survey data may be meaningfully tabulated and analyzed. Information on sampling errors is also used for determining whether the survey estimates of change over time or the estimates of differences between two or more population subgroups are statistically significant. Finally, information on sampling errors may be used for future sample design. Rational decisions on the choice of sample size, sample allocation among strata, clustering and estimation procedures, can only be made on the basis of detail knowledge of their effect on the magnitude of sampling errors in the resulting statistics obtained from the survey.

The following table gives the sampling errors of the main labour force estimates obtained from the LFS August 2017 . 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 localities²⁷. 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. They have been carried out in a special Excel file “RLFS AUG2017 sampling errors.xlsx” (sheet Sampling errors 2).

B.6: Sampling errors of estimates of main labour force aggregates

Indicator	Estimate	Standard error	Relative standard error	Confidence interval	
				Lower	Upper
Population 16+ yrs	6,813,000	126,000	1.8%	6,561,000	7,065,000
Labour force	3,600,900	78,000	2.2%	3,444,900	3,756,900
Employment	2,960,000	65,400	2.2%	2,829,200	3,090,800
Unemployment	641,000	24,600	3.8%	591,800	690,200
Outside labour force	3,212,100	73,800	2.3%	3,064,500	3,359,700

Source: RLFS August 2017

As an illustration of the use of the table, consider the second row of the table on the labour force. The total labour force, 3,600,900 is estimated with a relative standard error of 2.2 percent. The true value at 95 percent confidence level lies within the interval 3,444,900 and 3,756,900. Similarly, it can be stated that the total number of unemployed persons, 641,000 is estimated with a relative standard error of 3 percent. And, the true value at 95 percent confidence level lies within the interval 591,800 and 690,200

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 17.8 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, 16.7 to 18.9 percent.

B.7: Sampling errors of estimates of main labour force indicators

Indicator	Estimate	Standard error	Confidence interval	
			Lower	Upper
Labour Force Participation Rate	52.9%	0.6	51.6%	54.1%
Employment-Population Ratio	43.4%	0.6	42.3%	44.6%
Unemployment rate	17.8%	0.5	16.7%	18.9%

Source: RLFS February 2017

²⁷Verma, Vijay, *Sampling Methods*, Manual for Statistical Trainers Number 2, Statistical Institute for Asia and the Pacific (SIAP), Tokyo, Revised 2002.

It is not practical to compute and report sampling errors for every published statistics of a labour force survey. For this purpose, general variance estimates are typically calculated using the approximate relationship between the variance of an estimate and its size, expressed by $\text{var}(y)/y^2 = b + a/y$. The results are presented in the following table.

B.8: Approximate sampling errors by size estimates

Size of estimate	Standard error	Relative standard error	Confidence interval	
			Lower	Upper
5,000,000	101,900	2.0%	479,6200	5,203,800
2,500,000	59,800	2.4%	2380,400	2,619,600
1,000,000	32,200	3.2%	935,600	1,064,400
500,000	21,300	4.3%	457,400	542,600
250,000	14,500	5.8%	221,000	279,000
100,000	9,000	9.0%	82,000	118,000
50,000	6,300	12.6%	37,400	62,600
25,000	4,400	17.6%	16,200	33,800
10,000	2,800	28.0%	4,400	15,600

Source: RLFS August 2017

Thus, an estimate about 5,000,000 has an approximate standard error of 101,900 with a confidence interval at 95% level between 4,796,200 and 5,203,800. Similarly, an estimate of about 500,000 has an approximate standard error of 21,300 with a confidence interval between 457,400 and 542,600. It can be observed that the relative standard error sharply increases as the size of the estimate decreases. Estimates as low as 10,000 have very high relative standard errors, almost 28 percent. The table can be used to decide on the size of estimates that can be meaningfully considered or more as statistically significant for analysis. For size of estimates that are not listed in the table, the approximate standard errors can be obtained by interpolation or extrapolation of the values given in the table.

- **Coverage errors**

Probability sampling requires each element in the target population to have a known non-zero probability of being selected in the sample. This condition is violated if the target population is not fully represented in the sample frame or if the sampling of units from the frame is not according to the selection procedures specified in the sample design. The violation of these conditions generates coverage errors.

Coverage errors may occur due to imperfect frame (under-coverage, over-coverage, or duplication of units) or to practical problems such as confusion in boundary of units or in rules of association between units of different types. Coverage errors may also occur at the stage of selection of individual persons in the sample household because of failure to identify some eligible persons, for example, lodgers, domestic workers or other non-family members of the household. It can even happen due to incorrect data on personal characteristics, for example, if the age of the person is incorrectly recorded as below the

age set for measuring labour force characteristics (under-coverage error), or vice versa the age is incorrectly recorded as above the threshold age (over-coverage error).

A measure of coverage errors may be obtained by counting the number of sample addresses that were found vacant, demolished, out-of-scope (e.g., dwelling addresses turned to stores or workshops) or void of target households for other reasons (e.g., living quarters used as secondary housing units or for summer holidays). In total there were 294 non-eligible sample units: 227 vacant units; 19 units converted to workplaces; and 48 others such as unable to locate address or demolished etc.

Another measure of coverage errors may be obtained by comparing the population estimates obtained from the survey with population projections based on demographic analysis of fertility and mortality rates. Table B.9 shows the estimates of total population by sex and age group (below 16 and 16 years old and above) based on weights with and without calibration.

The largest difference concerns the male working age population 16 years old and over and the smallest difference is for the female population below working age. The main reason for coverage errors is due to the difficulties in listing the large enumeration areas and as a consequence the need for segmentation and estimation of the total number of households in these enumeration areas and also due to the rotation in the households. The problem of coverage error should be examined more closely in future survey rounds in order to find ways to minimize the need for calibration.

B.9: Population estimates based on sampling weights with and without calibration LFS August 2017

Population group	Calibrated weights	Un-calibrated weight	Difference (%)
Total population	11,697,313	11,692,740	-0.04%
Male population	5,629,520	5,567,596	-1.10%
- Less than 16 years old	2,440,886	2,539,432	4.04%
- 16 years old and above	3,188,634	3,028,165	-5.03%
Female population	6,067,793	6,125,144	0.95%
- Less than 16 years old	2,443,450	2,598,758	6.36%
- 16 years old and above	3,624,343	3,526,386	-2.70%

Source: RLFS August 2017

- **Non-response errors**

Non-response occurs due to failure to obtain the required information from the units selected in the sample (unit non-response) or to failure to obtain some items of information for the selected unit (item non-response). Unit non-response may occur due to incorrect address of the sample household, or inaccessibility of certain dwellings or refusal of the sample household to be interviewed, or because no one was at home when the interviewer contacted the household, or for other reasons.

Absence and refusal are considered as non-response while vacant demolished or out-of-scope housing units are considered as non-coverage. Based on the data in the table presented earlier, the non-response rate of the survey may be calculated:

$$Non_response_rate = \frac{153}{9344} = 1.6\%$$

- **Response errors**

Response errors refer to errors originating at the data collection stage. In relation to an individual respondent, response errors may occur because the respondent was unwilling to divulge certain information or because the respondent did not know the answer to the question asked or did not fully understand the meaning of the question. Response errors can also occur due memory lapses, for example by forgetting to report an event, or incorrectly reporting the timing. Response errors may also occur because of errors made by the interviewer or by the instrument used for measurement. Interviewers may introduce errors because of haste and misreporting the responses, or because of misunderstanding of the survey concepts and procedures, or preconceptions and subjective biases. The questionnaire itself may be faulty, with wrong question wordings and incorrect skipping patterns.

The measurement of response errors is one of the most difficult parts of quality assessment of survey data. It generally requires carefully designed re-interview programmes. In the absence of such data, the quality of survey responses may be assessed by comparing the survey results with corresponding information from more reliable external sources such as administrative sources, for example, reconciling the LFS estimate of employment with the corresponding estimate obtained from the Integrated Business Enterprise Survey.²⁸ More detailed assessment may be carried out by comparing the LFS estimates of employment in specific occupations such as primary and secondary school teachers, nurses, and civil servants with corresponding statistics from the line ministries. Other indicators of response errors may be obtained by measuring the degree of self-response against proxy-response, or by testing the internal consistency of certain sets of inter-related responses. The assessment of response errors along the lines described here should be considered in future rounds of the survey when the survey programme has been stabilized.

²⁸National Institute of statistics of Rwanda, *Integrated Business Enterprise Survey*, NISR 2014.

- **Other errors**

Other sources of errors include coding and editing errors, as well as errors in data entry and data processing. Here the occupation and industry coding is evaluated. Table B.10 shows that the employed persons were coded in 330 distinct 4-digit occupation codes and 304 distinct 4-digit industry codes. The percentage of employed persons who were coded with codes ending with the digit “9” was 13.9 percent for occupation and 4.4 percent for branch of economic activity. Codes ending with “9” indicate that the occupation or industry descriptions in the LFS questionnaire could not be precisely found in the classification system and had to be coded as “other”, suggesting insufficient information for precise occupation and industry coding. The number of codes ending with “9” was increased during the current round as compared to the previous round. This increase may be attributed to the fact that the coding is done directly by enumerators during the data correction while it was done in the office by few coders in the previous surveys.

Table B.10: Coding into occupation and branch of economic activity codes ending with “9”

	Occupation (ISCO-08)	Branch of economic activity (ISIC Rev 4)
Distinct 4-digit codes	330	304
Number of employed persons coded in with 4-digit codes ending with “9” (non-weighted)	457	1452
Total number of employed persons (non-weighted)	10,468	10,468
Percent	4.4%	13.9%

Overall, the quality assessment of the results of the LFS August 2017 shows acceptable levels of sampling errors and non-response errors. A fuller assessment of response and coding errors should await future survey rounds when the survey programme is stabilized.

Annex C: Statistical tables

Table 1. Summary labour force indicators, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture	Old definition
Population 16 years old and over	6,812,978	3,188,634	3,624,344	1,520,102	5,292,875	3,222,607	3,590,371	6,812,978
Labour force	3,600,916	1,993,119	1,607,797	999,721	2,601,194	1,530,880	2,070,036	5,292,643
- Employed	2,959,965	1,690,031	1,269,934	814,394	2,145,571	1,164,092	1,795,873	5,018,480
- Unemployed	640,951	303,088	337,863	185,327	455,623	366,788	274,163	274,163
Outside labour force	3,212,062	1,195,515	2,016,547	520,381	2,691,681	1,691,727	1,520,335	1,520,335
Labour underutilization	2,933,785	1,249,127	1,684,658	501,022	2,432,763	1,889,115	1,044,671	-
- Unemployed	640,951	303,088	337,863	185,327	455,623	366,788	274,163	-
- Time-related underemployed	838,906	436,354	402,552	104,734	734,173	503,599	335,308	-
- Potential labour force	1,453,928	509,685	944,243	210,961	1,242,967	1,018,728	435,200	-
Labour force participation rate	52.9%	62.5%	44.4%	65.8%	49.1%	47.5%	57.6%	77.6%
Employment-to-population ratio	43.4%	53.0%	35.0%	53.6%	40.5%	36.0%	50.0%	73.6%
Time related underemployment rate	28.3%	25.8%	31.7%	12.9%	34.2%	43.0%	18.7%	
LU1 - Unemployment rate	17.8%	15.2%	21.0%	18.5%	17.5%	24.0%	13.2%	5.2%
LU2 - Combined rate of unemployment and time-related underemployment	41.1%	37.1%	46.1%	29.0%	45.7%	56.9%	29.4%	
LU3 - Combined rate of unemployment and potential labour force	41.4%	32.5%	50.2%	32.7%	44.2%	54.4%	28.3%	-
LU4 - Composite measure of labour underutilization	58.0%	49.9%	66.0%	41.4%	63.3%	74.1%	41.7%	-
Youth unemployment rate (16-30 yrs)	21.7%	17.9%	26.1%	21.7%	21.7%	29.6%	17.0%	8.0%
Median total monthly earnings at main job	20,800	26,000	18,200	52,000	18,200	18,200	30,000	

Table 2: Comparison of old and new definition

Indicators	Old definition			New definition		
	Total	Urban	Rural	Total	Urban	Rural
LFPR	77.7	70.3	79.8	52.9	65.8	49.1
Employment to population ratio	73.7	59.8	77.7	43.4	53.6	40.5
Unemployment rate	5.2	14.9	2.7	17.8	18.5	17.5
Youth Unemployment rate	8.0	19.4	4.4	21.7	21.7	21.6
OCCUPATION						
Managers	0.9	4.3	0.2	1.5	4.8	0.3
Professionals	3.7	10.4	2.3	6.3	11.6	4.3
Technician & AP	0.8	2.7	0.4	1.4	3.1	0.7
Clarical&support workers	0.5	2.2	0.1	0.8	2.5	0.2
Service and sales waorkers	11.3	25.5	8.2	19.2	28.4	15.7
Skilled agricultural	45.0	11.6	52.4	6.8	1.4	8.8
Craft and related trade workers	4.5	7.6	3.8	7.6	8.4	7.3
Plant and machines operators	1.4	4.8	0.7	2.5	5.4	1.3
Elementary occupations	31.8	30.9	32.0	53.9	34.4	61.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Economic activity						
Agriculture, forestry and fishing	63.3	15.9	73.6	37.5	6.5	49.7
Mining and quarrying	1.1	0.3	1.3	1.8	0.3	2.4
Manufacturing	3.6	5.5	3.2	6.1	6.2	6
Electricity, gas, steam and air conditioning supply	0.2	0.6	0.1	0.3	0.6	0.2
Water supply, sewerage and waste management	0.2	0.6	0.1	0.4	0.7	0.3
Construction	6.1	7.6	5.7	10.3	8.5	10.9
Wholesale, retail trade, repair of motor vehicles, motorcylces	9.8	21.3	7.3	16.6	23.6	13.8
Transportation and storage	2.4	6.1	1.5	4	6.8	2.9

Indicators	Old definition			New definition		
	Total	Urban	Rural	Total	Urban	Rural
Accommodation and food service activities	1	3.3	0.4	1.6	3.7	0.8
Information and communication	0.3	1.2	0.1	0.5	1.4	0.1
Financial and insurance activities	0.4	1.8	0.1	0.7	2	0.2
Real estate activities	0.1	0.2	0	0.1	0.3	0
Professional, scientific and technical activities	0.5	1.9	0.2	0.9	2.1	0.4
Administrative and support service activities	0.6	2	0.3	1	2.1	0.6
Public administration and defence	1.4	4.3	0.8	2.4	4.8	1.5
Education	2.3	4.1	1.9	3.9	4.6	3.7
Human health and social work activities	1.1	2.8	0.7	1.8	3.2	1.3
Arts, entertainment and recreation	0.3	0.9	0.1	0.5	1	0.3
Other service activities	1.3	2.8	0.9	2.1	3.1	1.7
Activities of households as employers	4	15.8	1.4	6.8	17.7	2.7
Activities of extraterritorial organizations and bodies	0.3	1	0.2	0.6	1.1	0.3
Total	100	100	100	100	100	100

Table 3 : Population by sex, age group and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural
Population	11,697,313	5,629,520	6,067,793	2,324,164	9,373,149
0-4 yrs	1,580,739	797,018	783,721	277,784	1,302,955
5-9 yrs	1,461,358	741,059	720,299	231,717	1,229,641
10-14 yrs	1,560,632	771,686	788,945	242,479	1,318,152
15-19 yrs	1,296,160	625,933	670,226	280,655	1,015,505
20-24 yrs	1,052,853	511,669	541,184	292,414	760,439
25-29 yrs	935,226	444,790	490,436	268,593	666,633
30-34 yrs	845,433	410,318	435,115	194,531	650,901
35- 39 yrs	679,611	325,946	353,666	155,201	524,410
40-44 yrs	490,731	219,899	270,832	110,569	380,162
45-49 yrs	407,705	172,814	234,891	79,927	327,778
50-54 yrs	345,107	154,225	190,881	59,290	285,817
55-59 yrs	359,732	164,131	195,601	50,238	309,494
60-64 yrs	230,616	106,314	124,302	30,928	199,689
65-69 yrs	165,406	73,472	91,934	17,022	148,384
70-74 yrs	101,966	42,716	59,250	10,444	91,522
75+	184,039	67,530	116,509	22,373	161,666

Table 4: Households by household size, sex of head of household and urban/rural area, August 2017

Household size	Total number households	Head of household		Area of residence	
		Male	Female	Urban	Rural
Total number of HHs	2,677,963	1,970,561	707,403	546,153	2,131,810
1	231,732	138,046	93,687	73,244	158,489
2	306,019	138,929	167,091	70,746	235,274
3	448,286	301,603	146,683	80,648	367,638
4	498,449	374,032	124,417	90,181	408,267
5	435,061	349,434	85,628	76,652	358,410
6	339,005	291,223	47,782	61,323	277,682
7	209,843	187,249	22,594	41,036	168,808
8	113,607	104,243	9,364	27,183	86,425
9	54,039	48,609	5,431	10,673	43,366
10+	41,921	37,194	4,727	14,468	27,453

Table 5: Disabled persons by sex, age group, urban/rural area and type of disability, RLFS August 2017

Type of disability	Total	Male	Female	Urban	Rural	5-15 yrs	16+ yrs
Total disabled persons	333,452	145,840	187,612	48,850	284,603	51,769	281,683
- Seeing	87,679	33,722	53,957	12,604	75,076	10,576	77,104
- Hearing	65,684	26,341	39,343	11,534	54,150	13,187	52,497
- Walking	152,984	58,848	94,136	23,661	129,323	14,560	138,424
- Remembering	80,347	33,215	47,133	10,743	69,604	14,154	66,193
- Washing, dressing	67,188	30,152	37,036	9,031	58,157	12,423	54,764
- Communicating	40,905	23,689	17,216	9,590	40,118	17,285	23,620

Table 6: Disabled working age persons by labour force status and type of disability, RLFS August 2017

Type of disability	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Disabled working age persons (16+ yrs)	281,683	46,573	8,692	226,418	19.6	16.5	15.7
- Seeing	77,104	15,407	2,883	58,814	23.7	20.0	15.8
- Hearing	52,497	7,510	835	44,152	15.9	14.3	10.0
- Walking	138,424	13,882	2,446	122,096	11.8	10.0	15.0
- Remembering	66,193	8,661	2,687	54,845	17.1	13.1	23.7
- Washing, dressing	54,764	3,291	654	50,819	7.2	6.0	16.6
- Communicating	23,620	4,137	212	19,271	18.4	17.5	4.9

Note: Details may not add to totals because disabled persons may be reporting more than one type of disability.

Table 7: Population 16 years old and over by education status and urban/rural area, August 2017

Currently studying	Total	Sex		Area of residence		Participated in subsistence agr.	Not participated in subsistence agr
		Male	Female	Urban	Rural		
Total	6,812,977	3,188,634	3,624,343	1,520,102	5,292,875	3,222,606	3,590,372
Currently studying	878,230	476,257	401,973	272,256	605,974	143,506	734,724
Not Currently studying	878,230	2,712,377	3,222,370	1,247,846	4,686,901	3,079,100	2,855,648

Table 8: Population 16 years old and over by sex, level of educational attainment and urban/rural area, August 2017

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	6,812,977	3,188,634	3,624,343	1,520,102	5,292,875	3,222,606	3,590,372
None	3,383,891	1,501,424	1,882,467	372,392	3,011,500	1,961,204	1,422,687
Primary	2,036,713	978,023	1,058,690	430,818	1,605,895	1,001,671	1,035,042
Lower secondary	532,640	261,976	270,665	204,564	328,077	121,211	411,429
Upper secondary	562,661	281,652	281,009	289,166	273,495	112,188	450,473
University	297,072	165,559	131,513	223,163	73,909	26,332	270,740

Table 9: Population 16 years old and over with respective field of education by sex, urban/rural area, August 2017

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	6,812,977	3,188,634	3,624,343	1,520,102	5,292,875	3,222,606	3,590,372
General program	4,650,994	2,232,405	2,418,589	789,389	3,861,605	2,447,715	2,201,279
Education	111,177	54,776	56,401	37,241	73,936	30,759	80,418
Humanities and arts	95,819	46,108	49,711	28,522	67,297	22,792	73,027
Social sciences, business and law	329,410	136,040	193,371	232,465	96,945	38,476	290,934
Science	367,220	187,064	180,156	165,005	202,214	67,273	299,947
Engineering, manufacturing and construction	142,847	120,935	21,911	88,227	54,620	16,020	126,826
Agriculture	42,938	28,950	13,988	21,744	21,194	7,674	35,264
Health and welfare	62,240	26,369	35,871	37,805	24,434	5,745	56,495
Services	38,338	14,367	23,971	30,303	8,035	1,257	37,081
Not Specified	971,996	341,620	630,376	89,401	882,595	582,896	389,099

Table 10: Population 16 years old and over in trade/attended or training courses by sex, duration of training, and urban/rural area, August 2017

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	997,363	546,259	451,105	336,859	660,504	381,887	615,476
Less than One month	5,327	2,851	2,476	376	4,950	3,179	2,148
1-3 months	54,286	27,690	26,596	14,746	39,539	26,423	27,863
3-6 Months	231,750	110,808	120,942	64,812	166,938	109,518	122,232
One Year	321,755	163,846	157,909	107,547	214,208	122,615	199,140
Two Years	130,496	75,820	54,676	38,758	91,738	49,957	80,539
Three years or more	253,751	165,245	88,505	110,619	143,132	70,196	183,555

Table 11: Population 16 years old in/attended trade and technical training by sex, technical skills, and urban/rural area, August 2017

Technical skills learned	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	997,363	546,259	451,105	336,859	660,504	381,887	615,476
Masonry	220,811	211,793	9,018	56,634	164,177	90,749	130,062
Carpentry	74,623	72,890	1,733	11,913	62,710	32,790	41,833
Automotive technology.	18,742	17,848	894	10,049	8,693	2,672	16,070
Culinary arts	48,075	13,070	35,005	29,296	18,780	12,484	35,591
Domestic Electricity	26,146	24,436	1,710	15,222	10,924	2,374	23,772
Welding	29,024	28,428	596	13,308	15,715	6,621	22,403
Plumbing	5,779	5,123	657	3,107	2,672	1,256	4,523
Food processing	5,142	3,107	2,036	1,917	3,225	1,268	3,875
Animal health	1,099	969	130	666	433	63	1,037
Auto- Electricity	1,776	1,634	142	1,052	724	0	1,776
Automotive body repair	63,410	61,014	2,397	31,115	32,295	10,705	52,705
Computer maintenance	4,027	2,974	1,053	3,135	892	0	4,027
Engine mechanics	11,358	11,255	103	4,950	6,408	2,810	8,548
Music	1,223	1,223	0	712	511	0	1,223
Painting and decoration	7,441	5,793	1,649	2,946	4,496	1,349	6,092
Multimedia	1,282	775	507	590	692	0	1,282
Networking	3,457	2,889	569	2,684	773	295	3,162
Tailoring	311,612	26,361	285,251	84,679	226,933	152,889	158,723
Industrial electricity	3,910	3,670	241	3,200	711	537	3,373
Nursery growing	658	145	513	145	513	0	658
Livestock	4,041	1,931	2,110	1,254	2,787	1,722	2,318
Horticulture production	462	0	462	0	462	0	462
Food & Beverage services	6,267	1,260	5,007	4,570	1,697	1,897	4,371

Technical skills learned	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Front office	5,115	2,337	2,778	2,954	2,161	377	4,739
Leather craft	2,346	1,429	918	1,472	875	1,390	957
Hairdressing	49,188	9,955	39,233	21,443	27,744	15,873	33,315
Biding and Jewelries	8,873	1,742	7,131	1,596	7,277	4,681	4,192
Software Development	5,265	1,534	3,731	3,754	1,511	344	4,921
NCDs and Palliative Care Community Health	1,197	782	415	673	524	0	1,197
Agriculture Mechanization	116	116	0	116	0	0	116
Agri-Business	2,858	753	2,106	753	2,106	1,497	1,361
Bee Keeping	965	507	458	458	507	507	458
Manicure and Pedicure	983	0	983	549	434	0	983
Beauty therapy	2,653	1,193	1,459	1,666	987	359	2,294
Screen printing	1,003	1,003	0	609	394	260	743
Sport and Medical Massage	487	328	159	487	0	0	487
Crochet embroidery	36,767	1,617	35,150	4,167	32,600	28,032	8,736
Pottery	2,240	1,640	600	508	1,731	1,000	1,240
Motor vehicle engine mechanics	16,041	15,865	176	6,927	9,114	2,512	13,529
Film making	1,964	1,545	418	1,137	827	0	1,964
Other	8,936	5,327	3,609	4,445	4,491	2,575	6,361

Table 12: Population 16 years old and over who received trade and technical training by sex, place of the training, main sponsor, Outcome of the Training and urban/rural area, August 2017

Place of Technical skills	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total	997,363	546,259	451,105	336,859	660,504	381,887	615,476
Vocational School Course	628,073	329,150	298,922	232,653	395,420	217,763	410,309
Apprenticeship or on job Training	125,919	96,922	28,996	40,677	85,242	47,898	78,021
Learned from a friend or Family	169,024	99,577	69,447	41,393	127,631	79,336	89,688
NGO	58,046	15,399	42,648	18,596	39,450	27,899	30,147
Community organization	13,898	3,582	10,316	3,258	10,640	8,411	5,487
Apprenticeship or on job Training	2,404	1,628	776	282	2,122	580	1,824
main sponsor							
Government	71,533	37,286	34,248	22,454	49,080	30,763	40,770
Employer	2,875	2,796	80	1,584	1,292	1,012	1,864
Self-financing/Parents	583,333	324,068	259,264	221,336	361,996	195,644	387,689
Private institutions/agencies/persons	10,822	5,929	4,893	3,027	7,794	6,398	4,424
Non-profit organization/charity	102,601	35,928	66,672	30,304	72,297	40,014	62,587
International organization	10,489	3,734	6,756	3,927	6,563	4,722	5,767
He/she didn't pay	215,710	136,519	79,191	54,227	161,483	103,335	112,375
Thing happened after completion of the training							
Nothing	224,909	89,445	135,464	72,233	152,676	98,478	126,431
Starting own business	142,501	67,083	75,418	45,332	97,169	60,416	82,085
I was able to get a job	212,063	159,925	52,138	92,936	119,128	59,590	152,473
My salary increased	621	621	-	82	538	538	82
I was promoted at work	811	811	-	582	230	-	811
My job skills have improved	16,587	11,175	5,412	4,349	12,238	7,115	9,472
Got internship/traineeship with a company	7,686	3,406	4,280	2,709	4,977	2,352	5,334
Other (specify)	2,374	758	1,616	112	2,262	1,852	522

Table 13: Population 16 years old and over by labour force status, sex, age group, and urban/rural area, August 2017

	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	6,812,977	3,600,916	2,959,965	640,951	3,212,062	52.9%	43.4%	17.8%
16-24 yrs	2,067,405	857,318	660,113	197,205	1,210,088	41.5%	31.9%	23.0%
25-34 yrs	1,780,659	1,251,264	1,022,453	228,811	529,395	70.3%	57.4%	18.3%
35-54 yrs	1,923,153	1,225,272	1,043,306	181,966	697,882	63.7%	54.2%	14.9%
55-64 yrs	590,348	214,559	188,366	26,193	375,789	36.3%	31.9%	12.2%
65+ yrs	451,412	52,503	45,727	6,776	398,909	11.6%	10.1%	12.9%
		-						
Population 16 yrs and over (Male)	3,188,634	1,993,119	1,690,031	303,088	1,195,515	62.5%	53.0%	15.2%
16-24 yrs	1,006,480	459,001	365,209	93,792	547,479	45.6%	36.3%	20.4%
25-34 yrs	855,107	703,416	602,582	100,834	151,691	82.3%	70.5%	14.3%
35-54 yrs	872,883	672,550	586,139	86,411	200,333	77.0%	67.1%	12.8%
55-64 yrs	270,446	121,276	105,172	16,104	149,169	44.8%	38.9%	13.3%
65+ yrs	183,718	36,876	30,929	5,947	146,842	20.1%	16.8%	16.1%
Population 16 yrs and over (Female)	3,624,343	1,607,797	1,269,934	337,863	2,016,547	44.4%	35.0%	21.0%
16-24 yrs	1,060,925	398,318	294,904	103,414	662,608	37.5%	27.8%	26.0%

	Total	Labour force status				Labour force participation rate	Employment-population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
25-34 yrs	925,551	547,848	419,871	127,977	377,704	59.2%	45.4%	23.4%
35-54 yrs	1,050,270	552,722	457,167	95,555	497,549	52.6%	43.5%	17.3%
55-64 yrs	319,903	93,283	83,194	10,089	226,620	29.2%	26.0%	10.8%
65+ yrs	267,693	15,627	14,798	829	252,067	5.8%	5.5%	5.3%
Population 16 yrs and over (Urban)	1,520,102	999,721	814,394	185,327	520,381	65.8%	53.6%	18.5%
16-24 yrs	520,986	244,323	189,133	55,190	276,663	46.9%	36.3%	22.6%
25-34 yrs	463,125	381,242	309,225	72,017	81,882	82.3%	66.8%	18.9%
35-54 yrs	404,987	325,902	275,236	50,666	79,085	80.5%	68.0%	15.5%
55-64 yrs	81,165	39,870	33,040	6,830	41,295	49.1%	40.7%	17.1%
65+ yrs	49,839	8,383	7,759	624	41,457	16.8%	15.6%	7.4%
		-						
Population 16 yrs and over (Rural)	5,292,875	2,601,194	2,145,571	455,623	2,691,681	49.1%	40.5%	17.5%
16-24 yrs	1,546,419	612,994	470,979	142,015	933,425	39.6%	30.5%	23.2%
25-34 yrs	1,317,534	870,021	713,228	156,793	447,513	66.0%	54.1%	18.0%
35-54 yrs	1,518,166	899,370	768,070	131,300	618,797	59.2%	50.6%	14.6%
55-64 yrs	509,183	174,689	155,326	19,363	334,494	34.3%	30.5%	11.1%
65+ yrs	401,572	44,120	37,968	6,152	357,452	11.0%	9.5%	13.9%

Table 14: Population 16 years old and over by labour force status, sex, educational attainment, and urban/rural area, August 2017

	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	6,812,977	3,600,916	2,959,965	640,951	3,212,062	52.9	43.4	17.8
None	3,383,891	1,714,693	1,432,179	282,514	1,669,199	50.7	42.3	16.5
Primary	2,036,713	1,083,079	905,264	177,815	953,633	53.2	44.4	16.4
Lower secondary	532,640	186,097	144,511	41,586	346,544	34.9	27.1	22.3
Upper secondary	562,661	358,609	264,896	93,713	204,051	63.7	47.1	26.1
University	297,072	258,437	213,114	45,323	38,635	87.0	71.7	17.5

Table 15: Population 16 years old and over by labour force status, sex, marital status, and urban/rural area, August 2017

	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	6,812,977	3,600,916	2,959,965	640,951	3,212,062	52.9	43.4	17.8
Married	2,634,993	1,481,758	1,254,653	227,105	1,153,236	56.2	47.6	15.3
Living together	953,317	649,269	543,031	106,238	304,048	68.1	57.0	16.4
Divorced/separated	222,996	141,959	121,681	202,78	81,037	63.7	54.6	14.3
Single	2,516,605	1,182,167	914,264	267,903	1334,438	47.0	36.3	22.7
Widow/widower	485,066	145,763	126,336	19,427	339,303	30.1	26.0	13.3

Table 16: Employed population by sex, age group, and urban/rural area, August 2017

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population 16+	2,959,965	1,690,031	1,269,934	814,394	2,145,571	1,164,092	1,795, 873
16-19 yrs	237,327	118,153	119,174	58,846	178,481	83,925	153,402
20-24 yrs	422,786	247,056	175,730	130,287	292,499	134,498	288,288
25-29 yrs	518,075	304,252	213,823	171,906	346,169	172,837	345,238
30-34 yrs	504,378	298,331	206,047	137,320	367,058	194,828	309,551
35- 39 yrs	392,642	227,424	165,217	109,810	282,832	161, 780	230 862
40-44 yrs	274,320	155,692	118,628	76,107	198,213	11,7987	156, 333
45-49 yrs	214,663	111,847	102,816	53,613	161,050	102,055	112,609
50-54 yrs	161,681	91,176	70,505	35,707	125,974	84, 723	76,958
55-59 yrs	133,246	72,440	60,806	22,361	110,885	63,718	69,528
60-64 yrs	55,120	32,732	22,388	10,679	44,441	26, 342	28,779
65-69 yrs	28,424	18,576	9,848	3,844	24,580	16,153	12,271
70-74 yrs	10,374	7,248	3,126	1,078	9,296	2,640	7,734
75+	6,929	5,105	1,824	2,837	4,092	2,607	4,322

Table 17: Employed population by sex, occupation group, and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in Subsistence agriculture	Not participated in subsistence agriculture
ISCO High level	2,959,965	1,690,031	1,269,934	814,394	2,145,571	1,164,092	1,795,873
Managers	45,706	31,569	14,137	38,729	6,977	3,185	42,521
Professionals	187,371	119,295	68,076	94,427	92,943	32,798	154,573
Technicians and associate professionals	40,894	28,327	12,567	24,923	15,972	3,857	37,037
Clerical support workers	24,746	9,965	14,780	20,385	4,360	647	24,099
Service and sales workers	568,415	290,332	278,083	231,836	336,578	189,678	378,737
Skilled agricultural, forestry and fishing	201,171	111,862	89,309	11,389	189,782	11,188	189,983
Craft and related trades workers	224,244	169,575	54,669	68,662	155,582	73,171	151,073
Plant and machine operators and assemble	72,313	67,441	4,872	43,593	28,720	8,545	63,768
Elementary occupations	1,595,105	861,666	733,439	280,449	1,314,656	841,022	754,083

Table 18: Employed population by sex, current education attendance, and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Employed population	2,959,965	1,690,031	1,269,934	814,394	2,145,571	1,164,092	1,795,873
Currently studying	98,745	67,519	31,225	38,720	60,024	21,376	77,368
Not currently studying	2,861,220	1,622,512	1,238,708	775,674	2,085,546	1,142,715	1,718,505

Table 19: Employed population by sex, educational attainment, and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Employed population	2,959,965	1,690,031	1,269,934	814,394	2,145,571	1,164,092	1,795,873
None	1,432,179	789,020	643,159	201,771	1,230,408	734,965	697,215
Primary	905,264	532,465	372,800	249,888	655,376	343,769	561,496
Lower secondary	144,511	89,671	54,839	65,274	79,237	27,706	116,805
Upper secondary	264,896	149,574	115,323	137,096	127,801	39,877	225,020
University	213,114	129,301	83,812	160,365	52,749	17,776	195,338

Table 20: Employed population by sex, occupation group and level of educational attainment, August 2017

	Total	None	Primary	Lower secondary	Upper secondary	University
Employed population	2,959,965	1,432,179	905,264	144,511	264,896	213,114
Managers	45,706	0	1,304	762	6,529	37,111
Professionals	187,371	1,474	11,367	5,231	64,903	104,396
Technicians and Associate Professionals	40,894	3,175	6,101	2,327	13,217	16,074
Clerical Support Workers	24,746	892	1,168	463	10,006	12,216
Service and Sales Workers	568,415	190,015	204,975	42,228	98,890	32,306
Skilled Agricultural, Forestry and Fishery Workers	201,171	97,099	87,292	7,900	7,155	1,726
Craft and Related Trades Workers	224,244	75,486	104,968	21,570	18,452	3,768
Plant and Machine Operators and Assemblers	72,313	15,861	33,936	10,642	8,651	3,224
Elementary Occupations	1,595,105	1,048,178	454,153	53,387	37,094	2,292
Employed population (Male)	1,690,031	789,020	532,465	89,671	149,574	129,301
Managers	31,569	0	1,138	762	4,381	25,287
Professionals	119,295	1,474	10,383	4,439	36,906	66,092

	Total	None	Primary	Lower secondary	Upper secondary	University
Technicians and Associate Professionals	28,327	2,321	4,721	2,012	10,412	8,860
Clerical Support Workers	9,965	430	979	463	2,604	5,489
Service and Sales Workers	290,332	97,241	110,148	22,219	45,904	14,820
Skilled Agricultural, Forestry and Fishery Workers	111,862	51,463	51,075	3,233	4,805	1,286
Craft and Related Trades Workers	169,575	59,524	76,984	14,673	15,554	2,839
Plant and Machine Operators and Assemblers	67,441	14,984	31,169	10,114	8,330	2,843
Elementary Occupations	861,666	561,583	245,867	31,756	20,676	1,784
Employed population (Female)	1,269,934	643,159	372,800	54,839	115,323	83,812
Managers	14,137	0	166	0	2,147	11,824
Professionals	68,076	0	983	792	27,997	38,304
Technicians and Associate Professionals	12,567	854	1,379	315	2,805	7,214
Clerical Support Workers	14,780	462	189	0	7,402	6,727
Service and Sales Workers	278,083	92,774	94,828	20,009	52,986	17,486
Skilled Agricultural, Forestry and Fishery Workers	89,309	45,636	36,217	4,668	2,349	440
Craft and Related Trades Workers	54,669	15,962	27,984	6,897	2,898	929
Plant and Machine Operators and Assemblers	4,872	876	2,767	527	321	380
Elementary Occupations	733,439	486,595	208,287	21,631	16,417	508

Table 21 : Employed population by sex, branch of economic activity, and urban/rural area, August 2017

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	2,959,965	1,690,031	1,269,934	814,394	2,145,571	1,164,092	1,795,873
Agriculture, forestry and fishing	1,110,612	513,740	596,872	49,977	1,060,636	653,682	456,931
Mining and quarrying	54,618	49,756	4,862	2,749	51,869	18,903	35,715
Manufacturing	179,926	109,269	70,657	49,884	130,042	66,509	113,416
Electricity, gas, steam and air conditioning supply	9,227	8,499	728	5,142	4,085	464	8,763
Water supply, sewerage and waste management	11,030	7,442	3,588	5,361	5,669	2,848	8,182
Construction	304,473	270,355	34,118	68,676	235,797	118,375	186,099
Wholesale, retail trade, repair of motor vehicles, motorcylces	492,486	239,626	252,860	193,380	299,106	176,065	316,421
Transportation and storage	119,181	115,770	3,411	55,778	63,403	22,630	96,550
Accommodation and food service activities	47,902	26,125	21,777	30,179	17,723	11,334	36,568
Information and communication	14,031	9,066	4,965	11,248	2,784	-	14,031
Financial and insurance activities	21,545	13,318	8,227	16,388	5,157	586	20,959
Real estate activities	2,595	1,349	1,246	2,041	554	-	2,595
Professional, scientific and technical activities	25,407	18,408	6,999	17,280	8,127	1,512	23,895
Administrative and support service activities	30,247	20,299	9,948	18,165	12,081	3,809	26,438
Public administration and defence	71,556	53,100	18,457	38,643	32,913	12,166	59,391
Education	116,713	68,055	48,658	37,323	79,390	31,018	85,695
Human health and social work	52,794	24,634	28,160	25,747	27,047	8,714	44,080

	Total	Sex		Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
activities							
Arts, entertainment and recreation	14,344	6,754	7,589	8,342	6,002	2,103	12,241
Other service activities	62,292	40,597	21,695	25,224	37,068	17,849	44,443
Activities of households as employers	202,632	83,390	119,242	143,891	58,741	11,790	190,842
Activities of extraterritorial organizations and bodies	16,354	10,479	5,875	8,975	7,379	3,734	12,620

Table 22: Employed population by sex, branch of economic activity and level of educational attainment, August 2017

	Total	None	Primary	Lower secondary	Upper secondary	University
Employed population	2,959,965	1,432,179	905,264	144,511	264,896	213,114
Agriculture, forestry and fishing	1,110,612	771,368	298,646	22,220	14,533	3,846
Mining and quarrying	54,618	37,669	11,201	2,987	2,100	662
Manufacturing	179,926	67,902	79,568	14,134	12,698	5,624
Electricity, gas, steam and air conditioning supply	9,227	1,025	1,573	766	3,708	2,154
Water supply, sewerage and waste management	11,030	2,371	4,637	807	2,328	887
Construction	304,473	151,989	110,439	19,230	17,633	5,182
Wholesale, retail trade, repair of motor vehicles, motorcylces	492,486	181,101	179,682	31,688	75,290	24,725
Transportation and storage	119,181	47,206	47,109	11,183	7,204	6,480
Accommodation and food service activities	47,902	10,527	14,404	4,294	12,740	5,937
Information and communication	14,031	0	2,412	790	4,315	6,514
Financial and insurance activities	21,545	0	1,723	2,201	2,583	15,038
Real estate activities	2,595	1,215	151	202	443	584
Professional, scientific and technical activities	25,407	2,249	2,712	1,072	8,104	11,269
Administrative and support service activities	30,247	7,134	7,775	2,388	8,163	4,786

	Total	None	Primary	Lower secondary	Upper secondary	University
Public administration and defence	71,556	9,567	11,574	5,809	17,052	27,554
Education	116,713	8,120	4,492	3,305	48,096	52,700
Human health and social work activities	52,794	5,612	6,763	1,851	11,065	27,504
Arts, entertainment and recreation	14,344	3,154	4,199	956	4,380	1,655
Other service activities	62,292	28,372	21,852	6,060	4,141	1,866
Activities of households as employers	202,632	94,196	89,834	12,021	5,963	618
Activities of extraterritorial organizations and bodies	16,354	1,404	4,520	548	2,355	7,528
Employed population (Male)	1,690,031	789,020	532,465	89,671	149,574	129,301
agriculture forestry and fishing	513,740	348,017	140,672	12,307	9,610	3,134
mining and quarrying	49,756	34,429	10,020	2,642	2,003	662
manufacturing	109,269	47,014	44,589	6,556	7,792	3,317
electricity gas steam and air conditioning supply	8,499	1,025	1,573	766	3,425	1,710
water supply, gas and remediation services	7,442	1,589	2,801	807	1,619	627
construction	270,355	132,329	101,073	17,256	15,551	4,146
whole sale and retail trade; repair of motor vehicles and motorcycles	239,626	87,406	92,482	16,290	30,422	13,026
transportation and storage	115,770	46,791	47,109	11,183	6,763	3,925
accommodation and food services activities	26,125	5,950	7,937	1,076	6,529	4,635
information and communication	9,066	0	1,899	350	2,331	4,487
financial and insurance activities	13,318	0	1,723	1,068	1,616	8,911
professional, scientific and technical activities	1,349	554	151	202	443	0
administrative and support activities	18,408	2,060	2,416	972	4,232	8,729
public administration and defense; compulsory social security	20,299	4,103	6,823	1,398	4,966	3,008
education	53,100	4,302	10,872	5,435	15,470	17,019
human health and social work activities	68,055	5,362	3,824	1,653	23,578	33,637
arts, entertainment and recreation	24,634	2,204	4,526	1,549	4,907	11,448
other services	6,754	358	1,827	956	2,461	1,152

	Total	None	Primary	Lower secondary	Upper secondary	University
activities of house13holds as employers	40,597	20,311	14,884	2,212	2,297	894
activities of extraterritorial organizations and bodies	83,390	44,911	32,356	4,483	1,204	437
Employed population (Female)	1,269,934	643,159	372,800	54,839	115,323	83,812
Agriculture, forestry and fishing	596,872	423,351	157,973	9,913	4,923	712
Mining and quarrying	4,862	3,239	1,181	345	97	0
Manufacturing	70,657	20,887	34,979	7,578	4,905	2,308
Electricity, gas, steam and air conditioning supply	728	0	0	0	284	444
Water supply, sewerage and waste management	3,588	782	1,836	0	709	261
Construction	34,118	19,660	9,365	1,975	2,081	1,036
Wholesale, retail trade, repair of motor vehicles, motorcylces	252,860	93,695	87,201	15,398	44,868	11,698
Transportation and storage	3,411	415	0	0	441	2,555
Accommodation and food service activities	21,777	4,577	6,467	3,218	6,212	1,302
Information and communication	4,965	0	513	441	1,984	2,027
Financial and insurance activities	8,227	0	0	1,133	967	6,127
Real estate activities	1,246	662	0	0	0	584
Professional, scientific and technical activities	6,999	189	296	100	3,873	2,540
Administrative and support service activities	9,948	3,031	952	990	3,198	1,778
Public administration and defence	18,457	5,265	702	373	1,582	10,535
Education	48,658	2,758	668	1,651	24,518	19,063
Human health and social work activities	28,160	3,408	2,237	301	6,158	16,057
Arts, entertainment and recreation	7,589	2,796	2,372	0	1,919	503
Other service activities	21,695	8,061	6,969	3,848	1,845	973
Activities of households as employers	119,242	49,285	57,478	7,538	4,759	181
Activities of extraterritorial organizations and bodies	5,875	1,097	1,611	38	0	3,129

Table 23: Employed population by sex, status in employment, and urban/rural area, August 2017

	Total	Sex		Area of Residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population	2,959,965	1,690,031	1,269,934	814,394	2,145,571	1,164,092	1,795,873
Employee, Paid apprentice/intern	2,017,013	1,182,839	834,174	541,253	1,475,761	885,663	1,131,350
Employer	42,412	30,302	12,110	25,192	17,221	6,934	35,478
Own-account worker	758,905	444,734	314,171	217,860	541,045	238,421	520,485
Member of cooperative	11,872	7,091	4,781	1,609	10,262	2,335	9,536
Contributing family worker	129,366	24,668	104,697	28,084	101,282	30,739	98,627
Other	397	397	-	397	-	-	397

Table 24: Employed population by sex, hours usually worked per week at all jobs, and urban/rural area, August 2017

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employed population	2,959,965	1,690,031	1,269,934	814,394	457,459	356,935	2,145,571	1,232,572	912,998
less than 24 hours	741,596	369,808	371,788	85,907	47,956	37,952	655,688	321,852	333,836
25-34 hours	336,810	168,047	168,762	40,976	23,592	17,383	295,834	144,455	151,379
35-40 hours	572,385	320,056	252,329	107,068	61,388	45,679	465,318	258,668	206,650
41-48 hours	503,518	306,946	196,572	188,303	106,136	82,167	315,214	200,810	114,405
49-61 hours	407,649	268,590	139,058	178,919	103,007	75,911	228,730	165,583	63,147
62-79 hours	281,475	179,462	102,012	148,948	76,414	72,534	132,526	103,048	29,478
80 hours+	116,532	77,122	39,411	64,273	38,965	25,308	52,259	38,157	14,102

Table 25: Employees by sex, duration of employment contract at main job and urban/rural area, August 2017

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Total employees/paid apprentices 16 +	2,017,013	1,182,839	834,174	541,253	1,475,761	885,663	1,131,350
Permanent (without a known limited duration)	564,502	1,182,839	834,174	320,158	1,475,761	85,888	478,614
Temporary contract	1,452,511	845,630	606,882	221,095	1,231,416	799,776	652,736
- Day	1,180,605	663,384	517,222	115,785	1,064,820	733,380	447,225
- Week	52,897	38,711	14,186	6,433	46,464	29,040	23,857
- Month	122,509	80,550	41,959	49,922	72,586	25,029	97,480
- Less than one year	37,115	22,377	14,738	13,978	23,138	6,815	30,301
- One year or more	59,385	40,608	18,777	34,976	24,408	5,513	53,872

Table 26: Employed population by sex, formal/informal sector employment, status in employment at main job and urban/rural area, August 2017

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Employed population 16+ in formal and informal sector	2,750,550	1,601,851	1,148,700	668,457	2,082,094	1,149,843	1,600,707
Formal sector	516,876	337,849	179,027	272,677	244,199	90,208	426,668
Employee	454,716	301,947	152,769	235,014	219,702	83,308	371,408
Employer (with regular employees)	12,884	9,152	3,732	12,013	870	-	12,884
Account worker(without regular employees)	34,651	21,502	13,148	18,900	15,751	4,864	29,787
Member of cooperative	6,368	4,500	1,868	241	6,127	919	5,449
Contributing family worker	8,258	748	7,510	6,509	1,749	1,118	7,140
Informal sector	2,233,674	1,264,002	969,673	395,780	1,837,895	1,059,635	1,174,039
- Employee	1,357,498	794,778	562,720	162,212	1,195,285	789,018	568,479
- Employer	29,344	20,966	8,378	13,178	16,166	6,841	22,502
- Own-account worker	719,947	421,473	298,474	197,049	522,898	232,738	487,209
- Member of cooperative	5,504	2,590	2,913	1,368	4,135	1,417	4,087
- Contributing family worker							

	Total	Sex		Residence area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
	120,986	23,798	97,188	21,576	99,411	29,621	91,365
- Other	397	397	-	397	-	-	397
Formal sector out of agriculture	487,519	322,672	164,847	269,810	217,709	77,933	409,586
Employee	433,142	291,327	141,815	232,147	200,996	72,195	360,947
Employer (with regular employees)	12,884	9,152	3,732	12,013	870	-	12,884
account worker(without regular employees)	33,030	20,724	12,306	18,900	14,130	4,620	28,410
Member of cooperative	837	721	116	241	596	-	837
Contributing family worker	7,626	748	6,878	6,509	1,118	1,118	6,509
Informal sector out of agriculture	1,156,842	768,363	388,479	349,385	807,457	420,311	736,531
- Employee	498,336	414,986	83,350	128,893	369,444	170,816	327,520
- Employer	19,583	12,430	7,154	11,141	8,442	6,446	13,137
- Own-account worker	578,953	324,739	254,214	188,702	390,251	219,179	359,774
- Member of cooperative	2,921	1,506	1,415	1,368	1,553	1,417	1,504
- Contributing family worker	56,652	14,306	42,347	18,885	37,767	22,452	34,200
- Other	397	397	-	397	-	-	397

Table 27: Formal and informal employment by sex, branch of economic activity, August 2017

Economic activity	Total			Male		Female	
	Total	Formal employment	Informal employment	Formal employment	Informal employment	Formal employment	Informal employment
Total	2,959,965	278,530	2,681,435	178,542	1,511,490	99,988	1,169,945
Agriculture, forestry and fishing	1,110,612	1,548	1,109,064	1,306	512,434	242	596,630
Mining and quarrying	54,618	1,249	53,369	1,249	48,507	0	4,862
Manufacturing	179,926	10,982	168,944	8,703	100,566	2,279	68,378
Electricity, gas, steam and air	9,227	1,859	7,367	1,416	7,084	444	284
Water supply, sewerage and	11,030	2,944	8,086	2,576	4,866	368	3,221
Construction	304,473	3,527	300,946	3,257	267,098	270	33,848
Wholesale, retail trade, repair of	492,486	10,774	481,712	7,009	232,617	3,765	249,095
Transportation and storage	119,181	8,346	110,835	6,253	109,517	2,093	1,318
Accommodation and food	47,902	6,435	41,467	3,840	22,286	2,595	19,181
Information and communication	14,031	3,902	10,129	2,593	6,473	1,309	3,656
Financial and insurance	21,545	16,166	5,379	9,540	3,778	6,626	1,601
Real estate activities	2,595	0	2,595	0	1,349	0	1,246
Professional, scientific and	25,407	7,398	18,009	5,633	12,775	1,765	5,234
Administrative and support	30,247	11,566	18,681	7,504	12,794	4,062	5,886
Public administration and	71,556	54,171	17,385	43,841	9,258	10,330	8,127
Education	116,713	88,855	27,858	51,377	16,678	37,478	11,180
Human health and social work	52,794	34,125	18,670	13,779	10,855	20,346	7,814
Arts, entertainment and	14,344	1,999	12,344	823	5,932	1,177	6,413
Other service activities	62,292	3,217	59,075	2,111	38,486	1,106	20,589
Activities of households as	202,632	894	201,739	164	83,226	730	118,513
Activities of extraterritorial	16,354	8,572	7,782	5,567	4,913	3,006	2,869

Table 28: Formal and informal Sector by sex, branch of economic activity, August 2017

	Total			Male		Female	
	Formal/Informal sector employment			Formal/Informal sector employment		Formal/Informal sector employment	
	Total	Informal sector	Formal sector	Informal sector	Formal sector	Informal sector	Formal sector
Total	2,750,551	2,233,674	516,876	1,264,002	337,849	969,673	179,027
Agriculture, forestry and fishing	1,106,189	1,076,832	29,357	495,639	15,177	581,193	14,180
Mining and quarrying	54,618	33,991	20,627	30,189	19,567	3,802	1,060
Manufacturing	179,433	146,931	32,502	85,317	23,459	61,614	9,043
Electricity, gas, steam and air conditioning supply	8,575	2,796	5,780	2,660	5,187	135	592
Water supply, sewerage and waste management	11,030	5,899	5,131	3,939	3,502	1,960	1,629
Construction	304,377	280,909	23,468	252,440	17,818	28,468	5,650
Wholesale, retail trade, repair of motor vehicles, motorcycles	492,086	425,514	66,572	197,380	41,963	228,134	24,609
Transportation and storage	119,181	102,160	17,021	101,646	14,124	514	2,896
Accommodation and food service activities	47,781	29,740	18,041	15,231	10,774	14,510	7,267
Information and communication	14,031	7,044	6,988	3,901	5,165	3,142	1,822
Financial and insurance activities	21,545	1,733	19,812	1,112	12,206	620	7,607
Real estate activities	2,595	2,011	584	1,349		662	584
Professional, scientific and technical activities	25,407	10,642	14,764	9,386	9,022	1,256	5,743
Administrative and support service activities	30,116	10,800	19,316	7,194	12,974	3,606	6,342
Public administration and defense	71,556		71,556		53,100		18,457
Education	116,713	23,688	93,025	14,711	53,344	8,977	39,681
Human health and social work activities	52,703	9,699	43,005	3,283	21,260	6,416	21,744
Arts, entertainment and recreation	14,344	8,964	5,380	3,218	3,536	5,746	1,843
Other service activities	61,916	54,322	7,594	35,406	5,190	18,916	2,404
Activities of extraterritorial organizations and bodies	16,354		16,354		10,479		5,875

Table 29: Average number of hours usually worked per week at main job by sex, branch of economic activity, urban/rural area August 2017

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Employed population	39.6	41.8	36.8	50.5	35.5	30.6	45.5
Agriculture, forestry and fishing	29.9	32.0	28.1	34.2	29.7	27.7	33.0
Mining and quarrying	41.2	42.2	31.6	39.8	41.3	33.1	45.5
Manufacturing	40.3	43.5	35.4	47.1	37.7	31.5	45.5
Electricity, gas, steam and air conditioning supply	47.3	47.1	50.1	43.5	52.2	30.0	48.3
Water supply, sewerage and waste management	43.0	42.7	43.6	47.5	38.7	28.6	48.0
Construction	38.7	39.0	35.7	42.0	37.7	34.0	41.6
Wholesale, retail trade, repair of motor vehicles, motorcycles	44.0	46.9	41.2	52.3	38.6	31.9	50.7
Transportation and storage	49.7	49.9	43.7	54.6	45.4	39.2	52.2
Accommodation and food service activities	49.8	48.5	51.2	55.8	39.4	31.2	55.5
Information and communication	46.7	45.0	49.7	44.6	55.1	0.0	46.7
Financial and insurance activities	49.4	48.9	50.2	49.2	50.2	55.3	49.2
Real estate activities	39.5	36.8	42.5	34.0	60.0	0.0	39.5
Professional, scientific and technical activities	45.4	44.4	48.1	46.1	43.8	52.4	44.9
Administrative and support service activities	58.0	60.9	52.3	53.5	64.9	63.9	57.2
Public administration and defense	55.9	60.4	42.7	56.7	54.9	37.0	59.7
Education	44.1	45.0	42.8	43.8	44.2	43.2	44.4
Human health and social work activities	47.4	48.4	46.5	46.2	48.5	44.7	47.9
Arts, entertainment and recreation	35.5	35.2	35.8	35.6	35.4	35.1	35.6
Other service activities	42.4	44.6	38.4	52.5	35.6	31.2	47.0
Activities of households as employers	57.8	55.0	59.7	59.6	53.3	41.5	58.8
Activities of extraterritorial organizations and bodies	47.0	47.3	46.6	46.4	47.8	43.8	48.0

Table 30: Average monthly cash income from employment of employees at main job by sex, age group, level of educational attainment, occupation group and urban/rural area, August 2017

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (16+ yrs)	58,702	69,277	43,850	132,353	157,726	97,171	32,336	37,843	24,566
16-24 yrs	28,073	31,191	24,219	35,846	48,969	4,481	24,665	25,077	24,069
25-34 yrs	62,238	67,043	54,901	124,915	127,243	121,541	5,759	42,357	25,455
35-54 yrs	76,909	94,210	52,197	213,976	235,480	70,486	35,961	44,139	25,381
55-64 yrs	57,675	80,881	28,577	286,106	394,567	108,343	26,020	31,557	19,324
65+ yrs	75,318	101,103	19,477	438,977	487,764	13,000	19,956	20,056	19,768
None	23,743	27,941	18,588	31,022	38,254	23,368	22,675	26,543	17,819
Primary	36,740	47,388	19,758	51,857	72,565	21,332	30,794	37,902	19,096
Lower secondary	62,143	73,259	35,924	80,217	105,381	40,617	47,430	52,661	29,292
Upper secondary	91,933	98,913	80,725	120,644	140,944	89,385	66,846	63,283	72,783
University	299,020	331,211	250,776	355,012	386,543	305,953	148,632	174,074	114,106
Managers	503,079	562,195	367,368	584,614	637,546	453,548	160,414	204,356	85,470
Professionals	169,026	179,303	152,250	253,274	262,952	236,836	89,866	98,389	76,456
Technicians and associate professions	237,231	227,961	257,411	302,799	291,918	327,577	105,569	93,961	128,710
Clerical support workers	225,219	214,384	231,613	221,246	234,252	211,979	240,644	51,302	287,033
Service and sales workers	72,741	66,806	89,548	94,923	90,469	103,391	45,762	44,376	53,082
Skilled agricultural, forestry and fishery workers	51,186	66,274	27,722	104,675	120,893	75,789	37,193	51,030	16,410
Craft and related trades workers	83,526	83,260	89,734	123,097	125,205	106,291	67,586	68,054	31,257
Plant and machine operators, and assemblers	133,460	133,923	79,634	155,509	156,326	70,000	93,471	93,399	104,000
Elementary occupations	24,058	28,568	18,980	30,485	40,190	22,201	22,739	26,549	18,199

Table 31: Median monthly cash income from employment of employees at main job by sex, age group, level of educational attainment, occupation group and urban/rural area, August 2017

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (16+ yrs)	20,800	26,000	18,200	52,000	70,000	26,000	18,200	24,000	18,200
16-24 yrs	15,600	18,200	15,000	15,000	20,000	15,000	18,200	18,200	15,600
25-34 yrs	26,000	32,500	20,000	66,667	80,000	43,333	20,800	26,000	18,200
35-54 yrs	26,000	35,000	18,200	108,000	130,000	70,000	20,800	26,000	18,200
55-64 yrs	18,200	21,667	18,200	80,000	200,000	70,000	18,200	20,800	15,600
65+ yrs	18,200	18,200	15,600	100,000	100,000	13,000	18,200	18,200	15,600
None	18,200	20,800	17,333	20,800	26,000	18,200	18,200	19,500	15,600
Primary	20,800	26,000	18,200	26,000	40,000	15,000	20,800	26,000	18,200
Lower secondary	35,000	50,000	20,800	52,000	80,000	25,000	26,000	30,000	19,500
Upper secondary	55,000	65,000	50,000	80,000	100,000	65,000	45,000	44,000	45,000
University	200,000	200,000	200,000	200,000	200,000	200,000	120,000	134,000	100,000
Managers	220,000	300,000	200,000	300,000	316,000	200,000	134,000	200,000	83,000
Professionals	100,000	117,300	80,000	200,000	200,000	190,000	52,000	58,000	50,000
Technicians and associate professions	200,000	180,000	200,000	200,000	200,000	200,000	66,667	66,667	30,000
Clerical support workers	182,000	200,000	150,000	200,000	200,000	200,000	60,000	24,000	100,000
Service and sales workers	45,000	41,000	50,000	60,000	60,000	66,667	30,000	28,000	39,000
Skilled agricultural, forestry and fishery workers	24,000	31,200	18,200	66,667	66,667	66,667	20,800	24,000	18,200
Craft and related trades workers	65,000	65,000	37,500	104,000	104,000	78,000	65,000	65,000	32,500
Plant and machine operators, and assemblers	130,000	130,000	104,000	150,000	150,000	70,000	69,000	69,000	104,000
Elementary occupations	18,200	20,800	17,333	20,000	26,000	15,000	18,200	19,500	18,200

Table 32: Size distribution of monthly cash income from employment of employees at main job by sex and urban/rural area, August 2017

	Total	Rwanda			Urban			Rural		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	2,017,013	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 20,000 RWF	877,081	43.5	33.7	57.3	22.8	13.4	36.1	51.1	41.2	65.1
20,000 – 29,999 RWF	384,770	19.1	18.9	19.3	12.6	10.5	15.7	21.4	22.0	20.7
30,000 – 49,999 RWF	232,985	11.6	13.6	8.6	10.8	10.9	10.7	11.8	14.7	7.8
50,000 – 99,999 RWF	228,103	11.3	15.6	5.2	15.6	19.3	10.5	9.7	14.3	3.2
100,000 RWF and above	261,374	13.0	16.1	8.5	34.8	41.9	24.7	5.0	6.7	2.6
Not stated	32,700	1.6	2.0	1.1	3.4	4.2	2.3	1.0	1.2	0.6

Table 33: Median/Mean cash income from employment of employees at main job by Quintiles sex and urban/rural area, August 2017

Median	Total	Rwanda			Urban			Rural		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	1,984,402	20,800	26,000	18,200	52,000	70,000	26,000	18,200	24,000	18,200
Quintile1	445,153	13,000	13,000	13,000	12,000	10,000	12,000	13,000	13,000	13,000
Quintile2	470,801	18,200	18,200	18,200	20,000	20,000	20,000	18,200	18,200	18,200
Quintile3	404,483	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000	26,000
Quintile4	377,687	50,000	52,000	45,000	52,000	52,000	50,000	49,000	52,000	43,333
Quintile5	286,278	200,000	182,000	200,000	200,000	200,000	200,000	130,000	130,000	130,000
		Rwanda				Urban			Rural	
Mean	Total	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	1,984,402	58,702	69,277	43,850	132,353	157,726	97,171	32,336	37,843	24,566
Quintile1	445,153	11,278	10,985	11,538	11,825	11,503	12,006	11,095	10,862	11,335
Quintile2	470,801	17,318	17,447	17,211	19,106	19,549	18,836	17,179	17,313	17,066
Quintile3	404,483	25,041	25,387	24,553	26,071	26,208	25,943	24,852	25,266	24,221

Table 34: Youth and Young Population by sex, and residential area, August 2017

		Sex			Area of residence		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Total	Male	Female	Urban	Rural		
Young Population 16-30yrs		3,170,650	1,527,709	1,642,941	834,667	2,335,983	1,163,898	2,006,753
Employed	16-24	660,113	365,209	294,904	189,133	470,979	218,422	441,690
	16-30	1,276,339	724,757	551,582	392,220	884,120	421,532	854,807
Unemployed	16-24	197,205	93,792	103,414	55,190	142,015	104,032	93,173
	16-30	352,831	157,936	194,895	108,738	244,093	177,814	175,017
Outside Labour Force	16-24	1,210,088	547,479	662,608	276,663	933,425	372,215	837,873
	16-30	1,541,481	645,016	896,464	333,710	1,207,771	564,552	976,929

Table 35: Young population 16–30 years old by sex, level of educational attainment, labour force status and urban/rural area, August 2017

	Total	Labour force status				Labour force participation rate	Employment-to population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Young population 16-30 yrs	3,170,650	1,629,170	1,276,339	352,831	1,541,481	51.4	40.3	21.7
None	1,218,014	705,411	577,373	128,038	512,603	57.9	47.4	18.2
Primary	1,006,185	480,357	386,622	93,735	525,828	47.7	38.4	19.5
Lower secondary	425,161	117,182	87,806	29,376	307,979	27.6	20.7	25.1
Upper secondary	406,140	231,537	157,675	73,862	174,603	57	38.8	31.9
University	115,150	94,682	66,862	27,820	20,468	82.2	58.1	29.4
Young population 16-30 yrs (Male)	1,527,709	882,693	724,757	157,936	645,016	57.8	47.4	17.9
None	607,422	396,917	337,279	59,638	210,505	65.3	55.5	15

	Total	Labour force status				Labour force participation rate	Employment-to population ratio	Unemployment rate
		Labour force	Employed	Unemployed	Outside labour force			
Primary	463,704	255,174	215,918	39,256	208,530	55	46.6	15.4
Lower secondary	205,367	64,172	51,086	13,086	141,195	31.2	24.9	20.4
Upper secondary	196,074	117,308	83,229	34,079	78,766	59.8	42.4	29.1
University	55,143	49,122	37,245	11,877	6,021	89.1	67.5	24.2
Young population 16-30 yrs (Female)	1,642,941	746,477	551,582	194,895	896,464	45.4	33.6	26.1
None	610,592	308,495	240,095	68,400	302,098	50.5	39.3	22.2
Primary	542,481	225,183	170,704	54,479	317,298	41.5	31.5	24.2
Lower secondary	219,794	53,010	36,720	16,290	166,784	24.1	16.7	30.7
Upper secondary	210,067	114,229	74,446	39,783	95,838	54.4	35.4	34.8
University	60,007	45,560	29,617	15,943	14,447	75.9	49.4	35
Young population 16-30 yrs (Urban)	834,667	500,958	392,220	108,738	333,710	60	47	21.7
None	168,621	122,283	106,917	15,366	46,338	72.5	63.4	12.6
Primary	228,981	140,754	121,409	19,345	88,228	61.5	53	13.7
Lower secondary	152,182	47,097	33,744	13,353	105,085	30.9	22.2	28.4
Upper secondary	201,354	121,606	80,621	40,985	79,748	60.4	40	33.7
University	83,529	69,218	49,530	19,688	14,311	82.9	59.3	28.4
Young population 16-30 yrs (Rural)	2,335,983	1,128,213	884,120	244,093	1,207,771	48.3	37.8	21.6
None	1,049,393	583,128	470,456	112,672	466,265	55.6	44.8	19.3
Primary	777,204	339,603	265,213	74,390	437,600	43.7	34.1	21.9
Lower secondary	272,979	70,086	54,063	16,023	202,894	25.7	19.8	22.9
Upper secondary	204,787	109,931	77,055	32,876	94,856	53.7	37.6	29.9
University	31,621	25,465	17,333	8,132	6,157	80.5	54.8	31.9

Table 36: Youth Unemployed by sex, duration of seeking employment, and urban/rural area, August 2017

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Youth Unemployed (16-24 yrs)	184,683	87,874	96,808	23,382	28,462	64,493	68,347
0 – less than 3 months	73,540	34,396	39,145	6,916	8,334	27,480	30,811
3 – less than 6 months	43,446	20,625	22,820	4,522	5,341	16,104	17,480
6 – less than 12 months	32,266	15,639	16,627	2,985	7,069	12,654	9,558
1 – less than 2 years	19,995	12,337	7,658	7,040	4,058	5,296	3,600
2 years or more	15,436	4,878	10,558	1,919	3,660	2,959	6,898

Table 37: Young Unemployed by sex, duration of seeking employment, and urban/rural area, August 2017

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Young Unemployed (16-30 yrs)	329,400	149,703	179,696	44,802	58,634	104,901	121,062
0 – less than 3 months	129,448	63,141	66,307	14,193	14,884	48,948	51,423
3 – less than 6 months	77,311	36,447	40,864	9,362	9,263	27,086	31,600
6 – less than 12 months	51,216	22,452	28,763	6,728	13,106	15,725	15,657
1 – less than 2 years	38,269	17,952	20,317	9,229	9,922	8,723	10,395
2 years or more	33,156	9,711	23,445	5,291	11,459	4,420	11,986

Table 38: Youth not in employment and not currently in education or training by sex, age group, and urban/rural area, August 2017

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Young not in employment nor in education (16-30 yrs)	1,096,707	391,784	704,923	67,539	128,589	324,245	576,335
16-19 yrs	265,761	117,253	148,508	17,395	17,861	99,858	130,647
20-24 yrs	393,800	139,079	254,721	23,390	47,419	115,689	207,302
25-30 yrs	437,146	135,451	301,695	26,754	63,309	108,697	238,386
None	498,692	185,109	313,583	11,607	33,000	173,502	280,584
Primary	342,051	116,016	226,034	14,519	30,041	101,498	195,993
Lower secondary	82,221	25,616	56,605	10,481	12,880	15,135	43,725
Upper secondary	134,707	51,918	82,789	22,121	32,462	29,797	50,326
University	39,037	13,125	25,912	8,812	20,205	4,313	5,707

Table 39: Unemployed population by sex, broad age group and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Unemployed population 16+	640,951	303,088	337,863	185,327	455,623	366,788	274,163
16-24 yrs	197,205	93,792	103,414	55,190	104,032	93,173	150,556
25-34 yrs	228,811	100,834	127,977	72,017	117,215	111,595	90,675
35-54 yrs	181,966	86,411	95,555	50,666	119,730	62,236	23,243
55-64 yrs	26,193	16,104	10,089	6,830	19,930	6,264	48,124
65+ yrs	6,776	5,947	829	624	5,881	895	25,265

Table 40: Unemployed population by sex, level of educational, and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Unemployed population 16+	640,951	366,788	274,163	185,327	455,623	366,788	274,163
None	282,514	131,958	150,556	37,411	245,102	202,984	79,530
Primary	177,815	87,140	90,675	39,082	138,733	116,479	61,336
Lower secondary	41,586	18,343	23,243	20,014	21,572	17,830	23,756
Upper secondary	93,713	45,589	48,124	54,765	38,948	26,532	67,181
University	45,323	20,058	25,265	34,055	11,267	2,963	42,360

Table 41: Unemployed population(who looked for a job) by sex,method of seeking employment, and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
	Unemployed population who looked for a job	585,726	282,820	302,906	173,061		
Arranging for financial resources, applying for permits, licenses	81,956	34,625	47,332	31,829	50,127	45,293	36,663
Looking for land, premises, ,machinery, supplies, farming inputs	14,489	6,084	12,514	2,668	11,821	10,906	3,583
Seeking the assistance of friends, relatives or other types of intermediaries	151,163	77,667	135,227	41,766	109,397	78,195	72,969
Registering with or contacting public or private employment services	23,012	10,498	19,589	12,890	10,122	7,152	15,860
Applying to employers directly, checking at worksites, farms, factory gates, markets	269,787	134,560	6,261	50,388	219,399	179,176	90,611
Placing or answering newspaper or online job advertisements	34,965	15,376	82	25,647	9,318	4,967	29,997
Placing and updating resumes on professional or social networking sites online	10,121	3,860	302,906	7,686	2,435	1,782	8,339
Other method	234	151	-	187	47	-	234

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 42: Unemployed population(who looked for a job) by sex, duration of seeking employment, and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Unemployed population 16+	585,726	282,820	302,906	173,061	412,665	327,470	258,256
Less than 3 months	240,652	121,845	118,807	49,747	190,905	145,542	95,110
Less than 6 months	150,887	74,031	76,856	37,266	113,621	91,372	59,514
Less than 12 months	76,623	37,576	39,047	27,898	48,725	37,758	38,866
1 year to less than 2 years	63,138	29,383	33,755	29,902	33,236	29,590	33,548
2 years and above	54,426	19,985	34,441	28,248	26,178	23,208	31,218

Table 43: Time related under employment by age group sex and area of residence

age group	Total	Male	Female	Urban	Rural
Total	838,906	436,354	402,552	104,734	734,173
16-24 yrs	192,987	101,076	91,910	21,706	171,281
25-34 yrs	293,450	155,561	137,888	40,353	253,096
35-54 yrs	284,728	139,647	145,080	35,534	249,194
55-64 yrs	60,044	33,666	26,378	5,971	54,073
65+ yrs	7,699	6,403	1,296	1,170	6,529

Table 44: Time-related underemployed persons by sex, main branch of economic activity and urban-rural areas.

ISIC High level	Total	Male	Female	Urban	Rural
Total	838,906	436,354	402,552	104,734	734,173
Agriculture, forestry and fishing	451,458	194,500	256,958	16,067	435,391
Manufacturing	14,613	12,146	2,467	1,038	13,575
Mining and quarrying	49,891	24,926	24,965	8,713	41,179
Electricity, gas, steam and air conditioning supply	1,115	1,115	-	402	713
Water supply, sewerage and waste management	3,126	2,072	1,054	448	2,678
Construction	93,252	81,921	11,331	18,175	75,077
Wholesale, retail trade, repair of motor vehicles, motorcycles	130,771	55,409	75,362	24,891	105,880
Transportation and storage	25,201	24,786	415	6,817	18,383
Accommodation and food service activities	8,627	5,302	3,324	2,261	6,365
Information and communication	1,979	1,704	275	1,660	319
Financial and insurance activities	903	527	376	688	215
Professional, scientific and technical activities	1,256	594	662	1,256	-
Administrative and support service activities	3,918	3,139	779	2,093	1,825
Public administration and defense	1,773	963	809	988	784
Education	2,440	1,471	969	168	2,272
Human health and social work activities	8,307	4,679	3,628	3,692	4,614
Arts, entertainment and recreation	2,876	1,459	1,417	1,796	1,081
Other service activities	5,321	2,479	2,841	2,816	2,505
Activities of households as employers	17,581	8,825	8,756	3,386	14,196
Activities of extraterritorial organizations and bodies	13,349	7,399	5,950	7,214	6,134

Table 45: Population outside the labour force by sex, degree of labour market attachment, and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Population outside the labour force (16+)	3,212,062	1,195,515	2,016,547	520,381	2,691,681	1,691,727	1,520,335
Seeking but not available	16,585	4,994	11,591	2,468	14,116	11,353	5,231
Not seeking but available	1,437,343	504,691	932,652	208,492	1,228,851	1,007,375	429,969
Neither seeking nor available but want employment	139,421	48,039	91,382	20,126	119,295	73,170	66,251
Neither seeking nor available who do not want employment	1,618,713	637,791	980,922	289,294	1,329,419	599,829	1,018,884

Table 46: Population outside the labour force by sex, main source of livelihood, and urban/rural area, August 2017

	Total	Male	Female	Urban	Rural	Participated in subsistence agriculture	Not participated in subsistence agriculture
Population outside the labour force (16+)	3,212,062	1,195,515	2,016,547	520,381	2,691,681	1,691,727	1,520,335
Parents	1,005,603	497,267	508,336	230,478	775,126	283,720	721,883
Husband/wife	349,274	46,898	302,376	83,580	265,695	159,714	189,560
Child	83,290	16,116	67,174	17,189	66,100	21,314	61,975
Other family members	221,028	84,294	136,734	78,156	142,872	45,675	175,353
Pension	7,847	4,332	3,515	4,006	3,840	2,805	5,042
Own production	1,335,338	468,920	866,418	55,403	1,279,935	1,106,865	228,473
Assistance received [VUP]	42,733	9,401	33,332	1,687	41,047	13,673	29,061
Assistance received [FARG]	6,449	615	5,833	1,336	5,112	2,551	3,898
Assistance received [Church, Other NGO]	4,207	1,615	2,592	1,722	2,486	1,136	3,071
Assistance from friends	36,039	8,546	27,493	8,453	27,586	6,797	29,243
Revenue from own property/savings	46,798	18,997	27,801	20,175	26,623	17,360	29,438
Past work	63,125	32,236	30,890	13,941	49,184	27,985	35,140
Scholarship	7,598	5,353	2,245	3,624	3,974	1,176	6,421
Other	2,733	925	1,807	631	2,102	956	1,777

Table 47: Working age population, by reported status of non-employment

	Rwanda			Urban		Rural	
	Total	Male	Female	Male	Female	Male	Female
Total	3,853,013	1,498,603	2,354,410	291,366	414,342	1,207,237	1,940,068
Unemployed	1,558,451	631,437	927,014	131,869	215,243	499,568	711,771
Performing a job such as unpaid work in a family business or apprenticeship or	8,852	4,106	4,746	518	838	3,587	3,908
Pupil, student, post graduate	721,617	378,128	343,488	119,013	96,682	259,116	246,806
Retirement or early retirement or given up business activity	365,793	132,341	233,452	15,545	35,079	116,797	198,373
Permanently unable to work due to longstanding health problems	264,909	106,745	158,164	13,550	15,926	93,196	142,237
In compulsory military or civilian service	6,641	2,772	3,869	161	684	2,611	3,185
Person fulfilling domestic task in own household	915,222	238,569	676,652	9,517	47,278	229,052	629,374
Finish school, waiting for results	4,433	1,588	2,845	517	1,319	1,071	1,525
Other status, Specify	7,095	2,916	4,180	676	1,292	2,239	2,888

Table 48: Average time spent in own-use production work by sex, type of own-use production and urban/rural area, August 2017

	Rwanda			Total	Urban		Total	Rural	
	Total	Male	Female		Male	Female		Male	Female
Total own-use production	5,325,973	2,164,686	3,161,286	913,467	354,577	558,891	4,412,506	1,810,110	2,602,396
Collecting firewood for the household including travel time	2.3	1.8	2.6	0.8	0.8	0.9	2.5	2	2.9
Fetching water for the household, including travel time	2.7	2.5	2.7	1.4	1.4	1.3	2.9	2.8	3
Searching for fodder or grazing for the household's animals	4.2	5.6	3.2	1.4	1.4	0.6	4.8	6.4	3.7
Manufacturing household goods for own or family use	0.3	0.1	0.4	0	0	0	0.3	0.1	0.5
Constructing your dwelling, making major repairs on it, farm buildings, private roads, or wells	0.6	1.1	0.3	0.3	0.3	0.1	0.7	1.2	0.4
Doing household chores including shopping, preparing meals	8.1	2.7	11.8	4.1	4.1	11.5	8	2.4	11.8
Looking after children and elderly	3.3	0.9	5	1.3	1.3	6.2	3.1	0.8	4.7
Total number of persons(16+)	6,812,977	2,439,809	3,624,343	1,520,102	748,825	771,277	5,292,875	2,439,809	2,853,066
Collecting firewood for the household including travel time	1.8	1.2	2.2	0.5	0.4	0.7	2.1	1.5	2.7
Fetching water for the household, including travel time	2.1	1.7	2.4	0.8	0.6	1	2.4	2.1	2.8
Searching for fodder or grazing for the household's animals	3.2	3.8	2.8	0.5	0.7	0.4	4	4.7	3.4
Manufacturing household goods for own or family use	0.2	0	0.4	0	0	0	0.3	0	0.4
Constructing your dwelling, making major repairs on it, farm buildings, private roads, or wells	0.5	0.7	0.3	0.1	0.1	0.1	0.6	0.9	0.4
Doing household chores including shopping, preparing meals	6.3	1.8	10.3	5.2	1.9	8.3	6.6	1.8	10.8
Looking after children and elderly	2.6	0.6	4.4	2.6	0.6	4.5	2.6	0.6	4.3

Table 49: Average time spent per week on own-use production of goods of working age population by sex, age group, employment status, and urban/rural area, August 2017

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (16+ yrs)	7.3	6.8	7.8	1.9	1.7	2.1	8.9	8.3	9.3
16-24 yrs	7.2	7.3	7.1	2	2.4	1.7	8.9	9	8.9
25-34 yrs	7.6	6.6	8.5	1.6	1.1	2.2	9.7	8.6	10.7
35-54 yrs	7.4	6.3	8.3	1.9	1.4	2.5	8.9	7.8	9.7
55-64 yrs	8	7.6	8.3	2.2	2.1	2.3	8.9	8.5	9.2
65+ yrs	5.3	5.6	5.1	1.6	1.7	1.5	5.8	6	5.6
Employed	5.9	5.3	6.8	1.2	1.1	1.3	7.8	6.9	9
Unemployed	9	8.8	9.1	2.9	1.7	3.1	11.5	11.3	11.6
Outside labour force	8.2	8.3	8.1	2.6	0	2.5	9.3	9.5	9.2

Table 50: Average time spent per week on own-use provision of services of working age population by sex, age group and urban/rural area, August 2017

	Rwanda			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (16+ years)	9.4	3.2	14.9	7.9	2.7	12.9	9.9	3.3	15.5
16-24 yrs	6.9	2.5	11	5.4	2.3	8.3	7.4	2.6	12
25-34 yrs	12.5	4	20.3	10.2	3.6	16.8	13.3	4.2	21.5
35-54 yrs	10.5	3.4	16.5	8.9	2.5	15.6	11	3.6	16.7
55-64 yrs	7.9	2.6	12.3	6.9	2	11.5	8	2.8	12.4
65-74 yrs	6.1	2.2	8.7	5.1	0.8	7.6	6.2	2.4	8.9
Employed	8.2	3.2	14.9	6	2.6	10.4	9	3.4	16.7
Unemployed	12	4.4	18.7	12	4.3	18.8	12	4.5	18.7
Outside labour force	10	2.8	14.3	9.3	2.3	13.8	10.2	2.9	14.4

Table 51: Children 5-17 years old by sex, school attendance, current work status and urban/rural area, August 2017

	Total	Total		Male		Female	
		Schooling	Not schooling	Schooling	Not schooling	Schooling	Not schooling
Total children 5-13 years old	3,869,754	3,210,541	659,212	557,307	83,937	2,653,234	575,276
Not working	3,504,418	3,062,125	442,293	549,230	57,039	2,512,895	385,254
Work with pay	144,362	30,353	114,009	1,778	23,626	28,575	90,383
Work without pay	220,974	118,063	102,911	6,299	3,272	111,764	99,639
Total children in urban areas	1,917,819	1,591,076	326,743	280,478	39,439	276,829	44,498
Not working	1,743,818	1,514,891	228,927	275,756	29,609	273,474	27,430
Work with pay	72,788	17,620	55,167	784	7,421	995	16,205
Work without pay	101,212	58,564	42,648	3,938	2,409	2,361	863
Total children in rural areas	1,951,935	1,619,465	332,470	1,310,598	287,304	1,342,636	287,972
Not working	1,760,599	1,547,234	213,366	1,239,135	199,318	1,273,760	185,936
Work with pay	71,574	12,732	58,841	16,837	47,746	11,738	42,636
Work without pay	119,762	59,499	60,263	54,626	40,239	57,138	59,400

Table 52: Migrants by sex, age group, urban/rural area and place of residence prior to migration, RLFS August 2017

Place of usual residence prior to migration	Total	Male	Female	Urban	Rural	0-15 yrs	16+ yrs
Rwanda	1,266,911	599,946	666,966	552,169	714,742	347,063	919,848
Nyarugenge	105,501	49,484	56,018	82,385	23,116	20,126	85,375
Gasabo	208,355	98,337	110,018	160,799	47,556	38,264	170,091
Kicukiro	163,460	83,871	79,589	145,769	17,691	26,747	136,713
Nyanza	34,360	17,107	17,253	6,081	28,280	9,685	24,675
Gisagara	12,180	4,480	7,700	0	12,180	5,022	7,158
Nyaruguru	8,124	4,189	3,935	0	8,124	3,176	4,948
Huye	24,893	10,160	14,733	17,853	7,040	6,604	18,289
Nyamagabe	13,873	4,970	8,902	3,091	10,782	3,142	10,730
Ruhango	33,185	15,730	17,455	4,901	28,284	12,075	21,110
Muhanga	32,528	15,569	16,959	19,581	12,947	8,873	23,655
Kamonyi	42,622	23,378	19,244	3,021	39,601	15,854	26,768
Karongi	27,805	13,276	14,529	2,682	25,123	9,316	18,488
Rutsiro	3,151	603	2,548	0	3,151	1,228	1,923
Rubavu	23,747	9,027	14,720	19,229	4,518	6,658	17,089
Nyabihu	15,291	5,132	10,159	2,186	13,105	5,087	10,204
Ngororero	3,540	1,893	1,647	0	3,540	2,149	1,391
Rusizi	17,754	10,090	7,664	7,829	9,925	5,864	11,889
Nyamasheke	29,073	14,053	15,020	0	29,073	9,231	19,843
Rulindo	28,195	13,316	14,879	0	28,195	10,675	17,520
Gakenke	16,864	9,882	6,982	0	16,864	3,281	13,583
Musanze	18,506	6,064	12,442	10,424	8,082	2,691	15,815
Burera	12,916	6,422	6,494	0	12,916	3,573	9,343
Gicumbi	13,201	7,137	6,064	1,750	11,451	2,028	11,172
Rwamagana	84,068	36,677	47,391	15,628	68,440	30,804	53,264
Nyagatare	97,870	50,358	47,511	16,470	81,399	35,032	62,837

Place of usual residence prior to migration	Total	Male	Female	Urban	Rural	0-15 yrs	16+ yrs
Gatsibo	33,292	16,260	17,033	5,186	28,106	11,288	22,004
Kayonza	43,482	18,633	24,849	7,962	35,520	15,016	28,466
Kirehe	28,328	13,329	14,999	0	28,328	10,596	17,732
Ngoma	18,614	8,155	10,458	0	18,614	5,373	13,241
Bugesera	72,135	32,362	39,773	19,343	52,793	27,604	44,532
Outside Rwanda	106,003	54,492	51,510	65,975	40,028	39,668	66,335
- Burundi	28,669	13,298	15,371	19,891	8,778	8,496	20,173
- Congo-Kinshasa DRC	32,084	18,865	13,218	25,698	6,386	14,310	17,774
- Kenya	1,394	673	720	1,394	0	542	852
- Tanzania	8,940	5,263	3,677	1,593	7,346	3,524	5,416
- Uganda	29,361	13,932	15,428	12,234	17,127	12,216	17,145
- Rest of Africa	588	319	269	588	0	0	588
- Other country	4,968	2,141	2,827	4,578	390	581	4,387

Table 53: Internal and international migrants by labour force status, sex, urban/rural area, RLFS August 2017

	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Total migrants (16+ yrs)	986,183	583,954	116,152	286,077	71.0	59.2	16.6
Male	459,934	322,235	50,372	87,327	81.0	70.1	13.5
Female	526,248	261,719	65,780	198,749	62.2	49.7	20.1
Urban	494,536	323,034	57,668	113,834	77.0	65.3	15.1
Rural	491,646	260,920	58,483	172,242	65.0	53.1	18.3
Internal migrants (16+ yrs)	919,848	550,910	106,551	262,386	71.5	59.9	16.2
Male	425,639	302,058	45,965	77,615	81.8	71.0	13.2
Female	494,209	248,852	60,586	184,771	62.6	50.4	19.6

	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Urban	451,643	301,754	49,758	100,131	77.8	66.8	14.2
Rural	468,205	249,157	56,793	162,256	65.3	53.2	18.6
International migrants (16+ yrs)	66,335	33,044	9,600	23,690	64.3	49.8	22.5
Male	34,295	20,177	4,406	9,712	71.7	58.8	17.9
Female	32,039	12,867	5,194	13,978	56.4	40.2	28.8
Urban	42,893	21,280	7,910	13,703	68.1	49.6	27.1
Rural	23,441	11,764	1,691	9,987	57.4	50.2	12.6

Table 54: Internal and international migrants by labour force status and main reason for migration, RLFS August 2017

Main reason for migration	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Total migrants (16+ yrs)	986,183	583,954	116,152	286,077	71.0	59.2	16.6
Parents moved	77,105	18,213	12,419	46,473	39.7	23.6	40.5
To live with relatives	106,243	31,715	16,193	58,335	45.1	29.9	33.8
To attend school	43,283	10,282	6,273	26,728	38.2	23.8	37.9
Marriage	100,547	40,470	15,773	44,304	55.9	40.2	28.0
Family quarrel	11,371	6,168	1,575	3,628	68.1	54.2	20.3
Divorce	10,185	5,658	2,316	2,211	78.3	55.6	29.0
New job	137,600	129,076	3,915	4,609	96.7	93.8	2.9
Job transfer	17,514	16,322	564	628	96.4	93.2	3.3
To look for work	191,387	159,371	17,422	14,594	92.4	83.3	9.9
Looking for land to farm	40,926	23,032	5,460	12,434	69.6	56.3	19.2
Loss of employment	25,637	15,172	3,479	6,986	72.8	59.2	18.7
Employment of spouse	23,642	12,006	3,598	8,038	66.0	50.8	23.1

Main reason for migration	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Coming back in country	190,743	112,447	25,973	52,323	72.6	59.0	18.8
Other	9,999	4,022	1,192	4,785	52.1	40.2	22.9
Internal migrants (16+ yrs)	919,847	550,910	106,551	262,386	71.5	59.9	16.2
Parents moved	70,044	16,033	11,196	42,815	38.9	22.9	41.1
To live with relatives	95,283	29,771	15,147	50,365	47.1	31.2	33.7
To attend school	41,383	10,124	5,608	25,651	38.0	24.5	35.6
Marriage	99,150	40,279	15,207	43,664	56.0	40.6	27.4
Family quarrel	10,830	5,886	1,575	3,369	68.9	54.3	21.1
Divorce	9,973	5,591	2,171	2,211	77.8	56.1	28.0
New job	133,337	124,813	3,915	4,609	96.5	93.6	3.0
Job transfer	16,323	15,131	564	628	96.2	92.7	3.6
To look for work	187,013	156,241	16,744	14,028	92.5	83.5	9.7
Looking for land to farm	40,647	22,753	5,460	12,434	69.4	56.0	19.4
Loss of employment	24,677	14,983	3,271	6,423	74.0	60.7	17.9
Employment of spouse	22,401	11,232	3,464	7,705	65.6	50.1	23.6
Coming back in country	162,328	95,362	21,630	45,336	72.1	58.7	18.5
Other	6,461	2,712	601	3,148	51.3	42.0	18.1
International migrants (16+ yrs)	66,334	33,044	9,600	23,690	64.3	49.8	22.5
Parents moved	7,060	2,179	1,223	3,658	48	31	36
To live with relatives	10,960	1,944	1,046	7,970	27	18	35
To attend school	1,901	159	665	1,077	43	8	81
Marriage	1,398	192	566	640	54	14	75
Family quarrel	542	282	0	260	52	52	0

Main reason for migration	Total	Employed	Unemployed	Outside labour force	LFPR	Emp-Pop	UR
Divorce	212	67	145	0	100	32	68
New job	4,263	4,263	0	0	100	100	0
Job transfer	1,191	1,191	0	0	100	100	0
To look for work	4,374	3,130	678	566	87	72	18
Looking for land to farm	279	279	0	0	100	100	0
Loss of employment	961	190	208	563	41	20	52
Employment of spouse	1,242	775	134	333	73	62	0
Coming back in country	28,414	17,084	4,344	6,986	75	60	20
Other	3,538	1,310	591	1,637	54	37	31

Table 55: Migrant workers by sex, urban/rural area, prior place of residence and branch of economic activity, RLFS August 2017

	Total	Male	Female	Urban	Rural	Internal migrants	External migrants
Total migrant workers (employed migrants)	583,954	322,235	261,719	323,034	260,920	550,910	33,044
Agriculture, forestry and fishing	99,281	49,795	49,486	5,120	94,161	92,763	6,518
Manufacturing	4,607	4,325	282	562	4,045	4,607	-
Mining and quarrying	25,761	13,341	12,420	13,819	11,942	24,383	1,378
Electricity, gas stream and air condition	2,814	2,672	142	2,087	726	2,589	224
Water supply, gas and remediation services	2,446	1,849	596	1,962	484	2,446	-
Construction	48,150	42,646	5,504	18,281	29,870	47,227	923
Wholesale and retail trade, repair of motor vehicles ...	105,508	49,107	56,401	68,149	37,359	96,608	8,900
Transportation and storage	27,225	26,370	855	14,584	12,642	26,361	864
Accommodation and food services	13,808	6,799	7,008	9,823	3,985	13,235	573
Information and communication	4,692	3,040	1,653	4,566	127	4,004	689
Financial and insurance activities	6,902	4,125	2,777	5,192	1,709	6,591	311
Real estate activities	102	102	0	102	0	102	0
Professional, scientific and technical activities	8,731	6,779	1,952	7,285	1,446	7,720	1,012
Administrative and support activities	10,666	7,362	3,305	6,500	4,166	10,283	383
Public administration and defense, compulsory	18,304	14,644	3,660	11,521	6,784	17,829	475

	Total	Male	Female	Urban	Rural	Internal migrants	External migrants
Education	27,526	17,389	10,137	12,922	14,604	24,339	3,187
Human health and social work activities	16,293	7,637	8,656	13,180	3,113	12,849	3,444
Arts, entertainment and recreation	3,772	2,420	1,352	2,799	973	3,516	256
Other services	14,606	8,101	6,505	8,415	6,191	14,026	580
Activities of households as employers	138,096	50,392	87,704	112,913	25,183	135,834	2,261
Activities of extraterritorial organizations	4,664	3,340	1,324	3,253	1,412	3,599	1,065

Table 56: Summary labour force indicators, RLFS August 2017(City of Kigali)

	Total	Sex		Residential Area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Population 16 years old and over	1,151,569	575,411	576,159	848,461	303,109	137,734	1,013,836
Labour force	765,801	430,030	335,772	589,957	175,845	67,120	98,682
Employed	610,374	356,586	253,788	469,351	141,024	46,282	564,093
Unemployed	155,427	73,444	81,984	120,606	34,821	20,838	134,589
Outside labour force	385,768	145,381	240,387	258,504	127,264	70,614	315,154
Labour underutilization	422,453	179,104	243,350	274,684	147,769	87,977	334,476
Unemployed	155,427	73,444	81,984	120,606	34,821	20,838	134,589
Time-related underemployed	97,808	54,434	43,374	53,386	44,422	21,343	76,464
Potential labour force	169,218	51,226	117,992	100,692	68,526	45,796	123,423
Labour force participation rate	66.5	74.7	58.3	69.5	58.0	48.7	68.9
Employment-to-population ratio	53.0	62.0	44.0	55.3	46.5	33.6	55.6
LU1 - Unemployment rate	20.3	17.1	24.4	20.4	19.8	31.0	19.3
LU2 - Combined rate of unemployment and time-related underemployment	33.1	29.7	37.3	29.5	45.1	62.8	30.2
LU3 - Combined rate of unemployment and potential labour force	34.7	25.9	44.1	32.0	42.3	59.0	31.4
LU4 - Composite measure of labour underutilization	45.2	37.2	53.6	39.8	60.5	77.9	40.7
Youth unemployment rate (16-24 yrs)	23.9	21.3	26.2	23.9	24.1	40.7	22.9
Unemployment rate of young people (16-30 yrs)	23.6	20	27.4	23.8	22.9	33.6	22.9
Median monthly cash earnings of employees at main job	52,000	66,667	26,000	65,000	26,000	26,000	52,000

Table 57: Summary labour force indicators, RLFS August 2017(South province)

	Total	Sex		Residential Area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Population 16 years old and over	1,664,177	773,835	890,343	233,212	1,430,965	909,838	754,339
Labour force	805,993	444,186	361,808	135,192	670,801	423,879	382,114
Employed	674,926	382,727	292,200	111,844	563,082	326,548	348,378
Unemployed	131,067	61,459	69,608	23,348	107,719	97,331	33,736
Outside labour force	858,184	329,649	528,535	98,020	760,164	485,959	372,225
Labour underutilization	7456,64	320,929	424,736	76,198	669,467	54,4701	200963
Unemployed	131,067	61,459	69,608	23,348	107,719	97,331	33,736
Time-related underemployed	185,609	100,681	84,928	13,615	171,995	121,602	64,007
Potential labour force	428,988	158,789	270,200	39,235	389,753	325,768	103,220
Labour force participation rate	48.4	57.4	40.6	58.0	46.9	46.6	50.7
Employment-to-population ratio	40.6	49.5	32.8	48.0	39.3	35.9	46.2
LU1 - Unemployment rate	16.3	13.8	19.2	17.3	16.1	23.0	8.8
LU2 - Combined rate of unemployment and time-related underemployment	39.3	36.5	42.7	27.3	41.7	51.6	25.6
LU3 - Combined rate of unemployment and potential labour force	45.3	36.5	53.8	35.9	46.9	56.4	28.2
LU4 - Composite measure of labour underutilization	60.4	53.2	67.2	43.7	63.1	72.7	41.4
Youth unemployment rate (16-24 yrs)	20.4	20.2	20.6	18.1	20.8	27.4	14
Unemployment rate of young people (16-30 yrs)	19.2	16.6	22.7	18.8	19.3	26.7	12.9
Median monthly cash earnings of employees at main job	18,200	20,800	18,200	31,200	18,200	18,200	26,000

Table 58: Summary labour force indicators, RLFS August 2017(West province)

			Sex		Residential Area		Participated in subsistence agriculture	Not participated in subsistence agriculture
	Total			Urban	Rural			
		Male	Female					
Population 16 years old and over	1,342,364	616,584	725,780	178,779	1,163,584	691,280	651,083	
Labour force	686,731	370,910	315,821	108,003	578,727	345,575	341,156	
Employed	515,326	292,338	222,988	91,897	423,429	226,719	288,607	
Unemployed	171,405	78,572	92,833	16,106	155,298	118,856	52,549	
Outside labour force	655,633	245,674	409,959	70,776	584,857	345,705	309,927	
Labour underutilization	611,995	265,372	346,624	63,519	548,475	423,661	188,334	
Unemployed	171,405	78,572	92,833	16,106	155,298	118,856	52,549	
Time-related underemployed	169,599	90,645	78,955	18,533	151,066	106,662	62,937	
Potential labour force	270,991	96,155	174,836	28,880	242,111	198,143	72,848	
Labour force participation rate	51.2	60.2	43.5	60.4	49.7	50	52.4	
Employment-to-population ratio	38.4	47.4	30.7	51.4	36.4	32.8	44.3	
LU1 - Unemployment rate	25	21.2	29.4	14.9	26.8	34.4	15.4	
LU2 - Combined rate of unemployment and time-related underemployment	49.7	45.6	54.4	32.1	52.9	65.3	33.9	
LU3 - Combined rate of unemployment and potential labour force	46.2	37.4	54.6	32.9	48.4	58.3	30.3	
LU4 - Composite measure of labour underutilization	63.9	56.8	70.6	46.4	66.8	77.9	45.5	
Youth unemployment rate (16-24 yrs)	34	29.5	39.1	21.8	36.1	46.8	22.3	
Unemployment rate of young people (16-30 yrs)	31.9	26.1	38.1	15.7	35.1	44.5	20.4	
Median monthly cash earnings of employees at main job	20,800	26,000	18,200	39,000	20,800	18,200	26,000	

Table 59: Summary labour force indicators, RLFS August 2017(North province)

	Total	Sex		Residential Area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Population 16 years old and over	1,070,596	481,280	589,316	99,924	970,672	643,377	427,221
Labour force	496,402	276,202	220,200	54,488	441,914	278,781	217,622
Employed	439,705	244,303	195,402	50,149	389,556	232,623	207,082
Unemployed	56,697	31,899	24,798	4,339	52,358	46,158	10,540
Outside labour force	574,194	205,078	369,116	45,436	528,758	364,596	209,599
Labour underutilization	464,164	193,632	270,532	38,946	425,219	362,878	101,287
Unemployed	56,697	31,899	24,798	4,339	52,358	46,158	10,540
Time-related underemployed	142,886	67,720	75,166	11,585	131,302	102,817	40,069
Potential labour force	264,581	94,013	170,568	23,022	241,559	213,903	50,678
Labour force participation rate	46.4	57.4	37.4	54.5	45.5	43.3	50.9
Employment-to-population ratio	41.1	50.8	33.2	50.2	40.1	36.2	48.5
LU1 - Unemployment rate	11.4	11.5	11.3	8.0	11.8	16.6	4.8
LU2 - Combined rate of unemployment and time-related underemployment	40.2	36.1	45.4	29.2	41.6	53.4	23.3
LU3 - Combined rate of unemployment and potential labour force	42.2	34.0	50.0	35.3	43.0	52.8	22.8
LU4 - Composite measure of labour underutilization	61.0	52.3	69.2	50.2	62.2	73.7	37.8
Youth unemployment rate (16-24 yrs)	15.4	15	16	12.7	15.8	25	5.6
Unemployment rate of young people (16-30 yrs)	15.9	11.8	16.6	11.8	16.6	24.4	7.2
Median monthly cash earnings of employees at main job	20,800	26,000	18,200	39,000	20,000	18,200	30,000

Table 60: Summary labour force indicators, RLFS August 2017(East province)

	Total	Sex		Residential Area		Participated in subsistence agriculture	Not participated in subsistence agriculture
		Male	Female	Urban	Rural		
Population 16 years old and over	1,584,271	741,526	842,747	159,725	1,424,546	840,378	743,893
Labour force	845,988	471,792	374,197	112,081	733,907	415,525	430,463
Employed	719,633	414,077	305,557	91,153	628,480	331,920	387,713
Unemployed	126,355	57,715	68,640	20,928	105,427	83,605	42,750
Outside labour force	738,283	269,734	468,550	47,644	690,639	424,853	313,430
Labour underutilization	689,508	290,091	399,418	47,675	641,833	469,898	219,610
Unemployed	126,355	57,715	68,640	20,928	105,427	83,605	42,750
Time-related underemployed	243,004	122,874	120,130	7,616	235,388	151,174	91,830
Potential labour force	320,149	109,502	210,648	19,131	301,018	235,119	85,030
Labour force participation rate	53.4	63.6	44.4	70.2	51.5	49.4	57.9
Employment-to-population ratio	45.4	55.8	36.3	57.1	44.1	39.5	52.1
LU1 - Unemployment rate	14.9	12.2	18.3	18.7	14.4	20.1	9.9
LU2 - Combined rate of unemployment and time-related underemployment	43.7	38.3	50.4	25.5	46.4	56.5	31.3
LU3 - Combined rate of unemployment and potential labour force	38.3	28.8	47.8	30.5	39.3	49	24.8
LU4 - Composite measure of labour underutilization	59.1	49.9	68.3	36.3	62	72.2	42.6
Youth unemployment rate (16-24 yrs)	19.9	16.2	24.5	26	18.9	27.8	14
Unemployment rate of young people (16-30 yrs)	16.7	12.1	22.2	24.8	15.4	21.9	12.7
Median monthly cash earnings of employees at main job	18,200	20,000	15,600	39,000	18,200	18,200	20,800

Table 61: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(City of Kigali)

Employed population 16 years old and over	Total	Male	Female	Urban	Rural
	610,374	356,586	253,788	469,351	141,024
Agriculture, forestry and fishing	43,125	18,796	24,329	9,529	33,597
Manufacturing	6,190	5,239	951	1,985	4,205
Mining and quarrying	36,177	21,805	14,372	26,432	9,745
Electricity, gas stream and air condition	5,456	4,729	728	4,277	1,179
Water supply, gas and remediation services	4,013	2,894	1,119	3,543	471
Construction	63,929	56,458	7,471	39,530	24,399
Wholesale and retail trade, repair of motor vehicles ...	139,219	67,893	71,326	108,766	30,453
Transportation and storage	43,402	41,247	2,155	32,156	11,246
Accommodation and food services	19,817	10,544	9,273	18,958	859
Information and communication	9,560	6,773	2,788	8,652	909
Financial and insurance activities	13,401	9,139	4,261	12,586	815
Real estate activities	352	352	-	352	-
Professional, scientific and technical activities	15,452	10,440	5,011	14,407	1,045
Administrative and support activities	17,474	11,849	5,625	15,046	2,428
Public administration and defense, compulsory service	21,720	15,581	6,139	20,291	1,429
Education	20,134	10,390	9,744	17,772	2,363
Human health and social work activities	13,744	5,505	8,239	12,579	1,165
Arts, entertainment and recreation	6,830	3,996	2,834	6,309	521
Other services	15,781	8,968	6,814	12,625	3,156
Activities of households as employers	107,758	40,168	67,590	97,001	10,757
Activities of extraterritorial organizations	6,838	3,820	3,018	6,556	281

Table 62: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(South province)

Employed population 16 years old and over	Total	Male	Female	Urban	Rural
	674,926	382,727	292,200	111,844	563,082
Agriculture, forestry and fishing	311,014	152,156	158,858	15,142	295,872
Manufacturing	14,596	13,881	715	-	14,596
Mining and quarrying	35,996	18,893	17,103	6,196	29,800
Electricity, gas stream and air condition	1,794	1,794	-	350	1,444
Water supply, gas and remediation services	3,178	2,019	1,159	440	2,739
Construction	74,806	68,011	6,795	9,601	65,205
Wholesale and retail trade, repair of motor vehicles ...	87,800	45,389	42,411	20,459	67,341
Transportation and storage	14,684	14,684	-	4,651	10,033
Accommodation and food services	8,290	4,182	4,108	3,801	4,489
Information and communication	515	515	-	515	-
Financial and insurance activities	4,447	2,473	1,974	2,825	1,622
Real estate activities	1,137	554	584	584	554
Professional, scientific and technical activities	899	899	-	584	316
Administrative and support activities	3,133	1,795	1,338	1,518	1,615
Public administration and defence, compulsory ...	11,570	8,854	2,716	5,818	5,751
Education	30,090	15,246	14,844	6,802	23,288
Human health and social work activities	14,859	5,951	8,908	6,960	7,899
Arts, entertainment and recreation	4,111	799	3,313	1,603	2,508
Other services	15,713	8,569	7,145	3,968	11,746
Activities of households as employers	35,750	15,521	20,229	20,027	15,723
Activities of extraterritorial organizations	542	542	-	-	542

Table 63: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(West province)

Employed population 16 years old and over	Total	Male	Female	Urban	Rural
	515,326	292,338	222,988	91,897	423,429
Agriculture, forestry and fishing	200,026	91,457	108,569	10,519	189,507
Manufacturing	14,724	13,175	1,549	283	14,441
Mining and quarrying	32,185	19,748	12,437	5,196	26,989
Electricity, gas stream and air condition	1,462	1,462	-	-	1,462
Water supply, gas and remediation services	505	-	505	102	403
Construction	59,480	50,554	8,926	7,796	51,685
Wholesale and retail trade, repair of motor vehicles ...	85,718	37,728	47,990	25,015	60,703
Transportation and storage	20,301	20,301	-	7,304	12,997
Accommodation and food services	7,639	5,150	2,489	3,560	4,079
Information and communication	2,081	1,037	1,044	2,081	-
Financial and insurance activities	1,500	402	1,098	-	1,500
Real estate activities	443	443	-	443	-
Professional, scientific and technical activities	1,978	1,978	-	1,801	178
Administrative and support activities	1,400	748	652	1,112	287
Public administration and defense, compulsory ...	15,851	8,671	7,180	3,279	12,573
Education	20,537	14,531	6,006	3,829	16,708
Human health and social work activities	14,338	6,574	7,763	4,614	9,724
Arts, entertainment and recreation	2,961	1,959	1,002	430	2,531
Other services	4,882	3,481	1,401	1,194	3,688
Activities of households as employers	21,488	9,417	12,071	11,411	10,077
Activities of extraterritorial organizations	5,826	3,519	2,307	1,930	3,896

Table 64: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(North province)

Employed population 16 years old and over	Total	Male	Female	Urban	Rural
	439,705	244,303	195,402	50,149	389,556
agriculture forestry and fishing	198,555	75,814	122,741	7,289	191,265
mining and quarrying	12,180	10,533	1,647	481	11,698
manufacturing	31,328	20,263	11,065	3,610	27,718
electricity gas steam and air conditioning supply	514	514	-	514	-
water supply, gas and remediation services	1,235	1,235	-	481	754
construction	45,967	39,812	6,155	8,842	37,124
whole sale and retail trade; repair of motor vehicles and motorcycles	64,862	32,559	32,303	9,294	55,567
transportation and storage	19,437	19,022	415	5,256	14,180
accommodation and food services activities	5,449	2,756	2,693	3,371	2,077
information and communication	392	-	392	-	392
financial and insurance activities	785	380	406	-	785
real estate activities	662	-	662	662	-
professional, scientific and technical activities	2,903	1,871	1,032	-	2,903
administrative and support activities	1,236	746	490	-	1,236
public administration and defense; compulsory social security	10,541	9,529	1,011	1,849	8,692
education	20,419	14,771	5,648	3,329	17,090
human health and social work activities	4,053	2,485	1,568	-	4,053
other services	9,744	7,009	2,734	3,834	5,910
activities of house13holds as employers	7,423	3,533	3,890	1,335	6,089
activities of extraterritorial organizations and bodies	2,021	1,471	550	-	2,021

Table 65: Employment by sex, urban/rural area and branch of economic activity, RLFS August 2017(East province)

Employed population 16 years old and over	Total	Male	Female	Urban	Rural
	719,633	414,077	305,557	91,153	628,480
agriculture forestry and fishing	357,893	175,517	182,376	7,498	350,394
mining and quarrying	6,928	6,928	-	-	6,928
manufacturing	44,240	28,561	15,680	8,451	35,790
water supply, gas and remediation services	2,098	1,294	805	796	1,302
construction	60,291	55,520	4,770	2,907	57,384
whole sale and retail trade; repair of motor vehicles and motorcycles	114,887	56,057	58,830	29,846	85,041
transportation and storage	21,357	20,516	841	6,410	14,946
accommodation and food services activities	6,706	3,493	3,214	488	6,218
information and communication	1,483	742	742	-	1,483
financial and insurance activities	1,411	923	488	977	434
professional, scientific and technical activities	4,174	3,218	956	488	3,685
administrative and support activities	7,004	5,161	1,843	488	6,515
public administration and defense; compulsory social security	11,875	10,464	1,411	7,406	4,469
education	25,533	13,117	12,416	5,591	19,942
human health and social work activities	5,801	4,120	1,681	1,595	4,206
arts, entertainment and recreation	441	-	441	-	441
other services	16,171	12,569	3,602	3,604	12,567
activities of house13holds as employers	30,213	14,751	15,462	14,119	16,094
activities of extraterritorial organizations and bodies	1,128	1,128	-	488	640

Table 66: Labour market indicators and educational type (general and Technical)

Attainment status of vocation and general trainings	LFPR	Empl/pop ratio	Unemployment rate	Labour underutilisation rate	Working age population
Rwanda	52.9	43.4	17.8	58.0	6,812,977
No level completed	50.1	41.8	16.6	63	3,257,643
Completed general	52.3	42.2	19.4	54.9	2,947,782
Completed TVET	70.6	58.7	16.8	49	607,552
Urban	65.8	53.6	18.5	41.4	1,520,102
No level completed	63.6	53.5	15.9	46.5	345,421
Completed general	63.6	51.1	19.7	39.9	956,347
Completed TVET	78.6	64.5	17.8	39.7	218,334
Rural	49.1	40.5	17.5	63.3	5,292,875
No level completed	48.5	40.4	16.7	65.2	2,912,222
Completed general	46.8	37.9	19.2	62.6	1,991,435
Completed TVET	66.1	55.4	16.1	54.4	389,218
Male	62.5	53	15.2	49.9	3,188,634
No level completed	60.5	52	14.2	55.6	1,429,404
Completed general	59.8	50.1	16.2	46.8	1,426,007
Completed TVET	82.5	69.8	15.3	40	333,223
Female	44.4	35	21	66	3,624,343
No level completed	41.9	33.8	19.2	69.7	1,828,239
Completed general	45.2	34.7	23.3	62.8	1,521,775
Completed TVET	56.1	45.2	19.4	61.1	274,329

Table 67: Labour market indicators by attained level of education by those who completed TVET

Attainment status of vocation and general trainings	LFPR	Empl/pop ratio	Unemployment rate	Labour underutilisation rate	Working age population
Rwanda	70.6	58.7	16.8	49	607,552
None	66.5	56.6	14.8	51.1	126,248
Primary	69.1	59.9	13.3	49.4	297,318
Lower secondary	69.6	55.6	20.1	50.1	85,365
Upper secondary	80.9	59.6	26.3	46.6	82,495
University	82.8	64.9	21.6	32.3	16,126
Urban	78.6	64.5	17.8	39.7	218,334
None	72.7	63.2	13.1	44	126,248
Primary	78.2	68.1	13	36.1	297,318
Lower secondary	76.7	63.3	17.4	40	85,365
Upper secondary	82.2	58.8	28.5	45.2	82,495
University	85.4	67.1	21.5	34.7	16,126
Rural	66.1	55.4	16.1	54.4	389,218
None	64.8	54.8	15.4	53.3	99,278
Primary	64.9	56.2	13.4	55.4	204,962
Lower secondary	63.7	49.2	22.8	58.4	46,772
Upper secondary	79.2	60.8	23.2	48.6	34,510
University	74.1	57.8	22	22	3,695
Male	82.5	69.8	15.3	40	333,223
None	77.1	64.4	11.7	47.6	72,021
Primary	82.4	73.5	16.9	37.3	149,427
Lower secondary	87.6	74.6	28.4	35.8	41,319
Upper secondary	84.7	63.9	31.4	43.4	58,633

Attainemnt status of vocation and general trainings	LFPR	Empl/pop ratio	Unemployment rate	Labour underutilisation rate	Working age population
University	87.7	69.4	24.2	28.8	11,823
Female	56.1	45.2	19.4	61.1	274,329
None	52.3	46.2	11.7	56.3	54,228
Primary	55.6	46.2	16.9	62.9	147,891
Lower secondary	52.7	37.7	28.4	65.8	44,046
Upper secondary	71.6	49.1	31.4	55.2	23,862
University	69.5	52.7	24.2	42.1	4,302

Table 68: Main Labour market indicators by District

District	UR	EPR	LFPR	LU2	LU3	LU4
Nyarugenge	22.6	51.6	66.6	34.7	36.7	46.7
Gasabo	19.8	52.5	65.5	34.9	35.2	47.4
Kicukiro	17.5	55.7	67.5	28.9	32.2	41.5
Nyanza	6.7	46.9	50.3	22.8	40.0	50.3
Gisagara	8.9	47.3	52.0	27.9	37.4	50.4
Nyaruguru	8.4	28.0	30.5	39.8	59.9	73.6
Huye	12.6	42.6	48.7	19.4	40.9	45.5
Nyamagabe	12.5	47.9	54.8	56.6	35.3	67.9
Ruhango	19.1	44.5	55.0	39.8	40.3	55.6
Muhanga	19.9	33.2	41.5	47.0	54.6	70.0
Kamonyi	24.4	41.3	54.6	41.2	45.1	57.3
Karongi	25.3	41.8	55.9	49.0	40.4	59.3
Rutsiro	26.1	40.5	54.7	65.2	49.8	76.4
Rubavu	17.5	51.1	62.0	41.8	34.0	53.5
Nyabihu	18.2	50.6	61.9	39.7	30.6	48.8
Ngororero	23.6	30.3	39.6	43.4	56.7	67.9
Rusizi	21.5	39.1	49.8	51.9	43.9	65.7
Nyamasheke	37.3	28.3	45.1	63.2	57.8	75.3
Rulindo	14.4	41.9	49.0	42.3	40.7	60.0
Gakenke	13.6	39.3	45.5	47.0	43.8	65.5
Musanze	15.5	44.2	52.3	37.9	39.3	55.3
Burera	22.9	29.5	38.3	52.3	56.2	72.9
Gicumbi	14.0	41.6	48.3	43.7	43.7	63.2
Rwamagana	9.1	48.5	53.4	39.7	37.0	58.2
Nyagatare	24.4	44.8	59.3	43.3	41.4	56.0
Gatsibo	8.4	45.5	49.7	47.8	40.1	65.9

District	UR	EPR	LFPR	LU2	LU3	LU4
Kayonza	7.7	50.0	54.2	28.8	28.7	45.0
Kirehe	10.7	47.7	53.4	41.9	35.1	57.8
Ngoma	12.6	42.3	48.4	45.6	42.1	63.9
Bugesera	8.9	54.0	59.3	28.9	32.9	47.6
Total	17.4	44.3	53.6	40.8	40.8	57.6

Source: RLFS Feb 2017 and RLFS August 2017

UR: Unemployment rate; **EPR:** employment to population Ratio, **LFPR:** Labour Force Participation rate, **LU2:** Combined rate of unemployment and time-related underemployment, **LU3:** Combined rate of unemployment and potential labour force, **LU4:** Composite measure of Labour underutilization

Annex D: Questionnaire

NATIONAL INSTITUTE OF STATISTICS OF RWANDA

QUESTIONNAIRE

RWANDA LABOUR FORCE SURVEY (RLFS)

IDENTIFICATION OF THE HOUSEHOLD																
PROVINCE <input style="width:90%;" type="text"/>	DISTRICT <input style="width:90%;" type="text"/>	SECTOR <input style="width:90%;" type="text"/>	CELL <input style="width:90%;" type="text"/>	VILLAGE <input style="width:90%;" type="text"/>												
NAME OF THE HEAD OF HOUSEHOLD _____			<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr> <tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr> <tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr> </table>													
PRIMARY SAMPLING UNIT NUMBER (PSU)																
STRUCTURE NUMBER																
HOUSEHOLD NUMBER																
ROTATION																
NUMBER OF GROUP APPEARANCE																
NUMBER OF GROUP ACCEPTANCE																
DATE (Month and Year)																
<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr> </table>						<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr> <tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr> </table>										
VISITS																
1	2	3	D: Reason for non-interview													
DATE _____ 1. Fully completed 2. Partially completed 3. Non-interview 4. Postponed 5. Other (specify)	_____ 1. Fully completed 2. Partially completed 3. Non-interview 4. Postponed 5. Other (specify)	_____ 1. Fully completed 2. Partially completed 3. Non-interview 4. Postponed 5. Other (specify)	1. Temporarily absent 2. Refused 3. Unable to locate 4. Vacant 5. Converted to business, etc 6. Demolished 7. Other non-Interview													
END INTRVIEW <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	REASON <input type="checkbox"/>													
NEXT VISIT DATE _____ HOUR _____																
TEAM LEADER/CHEF D'EQUIPE NAME _____ <input style="width:40px;" type="text"/>		FIELD EDITOR/CONTROLER NAME _____ <input style="width:40px;" type="text"/>		CODE OF OFFICE EDITOR/CODER <input style="width:20px;" type="text"/>												
				CODE OF DATA ENTRY CLERK <input style="width:20px;" type="text"/>												

CODES

THOSE WHO ANSWERED "6MONTHS" OR LESS ON QUESTION A22 OF SECTION A ARE HOUSEHOLD MEMBERS.

THE FOLLOWING ARE ALSO CONSIDERED AS HOUSEHOLD MEMBERS:

- . Children less than 6 months
- . People who recently joined the household and will reside there permanently
- . New husbands or wives

IF THE ANSWER ON QUESTION A22 OF SECTION A IS "MORE THAN 6 MONTHS" ONLY THE FOLLOWING INDIVIDUALS ARE HOUSEHOLD MEMBERS:

- . The head of the household (dejure)
- . Those who answered 'no' on question A23 of section A
- . Persons who are absent but not living in another household

District codes. Question A14 and A17

- | | |
|----------------|----------------|
| 11. Nyarugenge | 35. Ngororero |
| 12. Gasabo | 36. Rusizi |
| 13. Kicukiro | 37. Nyamasheke |
| 21. Nyanza | 41. Rulindo |
| 22. Gisagara | 42. Gakenke |
| 23. Nyaruguru | 43. Musanze |
| 24. Huye | 44. Burera |
| 25. Nyamagabe | 45. Gicumbi |
| 26. Ruhango | 51. Rwamagana |
| 27. Muhanga | 52. Nyagatare |
| 28. Kamonyi | 53. Gatsibo |
| 31. Karongi | 54. Kayonza |
| 32. Rutsiro | 55. Kirehe |
| 33. Rubavu | 56. Ngoma |
| 34. Nyabihu | 57. Bugesera |

TECHNICAL SKILLS CODE FOR B10

- | | |
|-----------------------------|---|
| 01. Masonry | 24. Milk processing |
| 02. Carpentry | 25. Livestock |
| 03. Automotive technology. | 26. Horticulture production |
| 04. Culinary arts | 27. Food & Beverage services |
| 05. Domestic Electricity | 28. Front office |
| 06. Welding | 29. House keeping |
| 07. Plumbing | 30. Concrete masonry |
| 08. Food processing | 31. Leather craft |
| 09. Animal health | 32. Hairdressing |
| 10. Auto- Electricity | 33. Biding and Jewelries |
| 11. Automotive body repair | 34. Software Development |
| 12. Computer maintenance | 35. NCDs and Palliative Care Community Health |
| 13. Crop production | 36. Agriculture Mechanization |
| 14. Engine mechanics | 37. Agri-Business |
| 15. Forestry | 38. Bee Keeping |
| 16. Music | 39. Manicure and Pedicure |
| 17. Painting and decoration | 40. Beauty therapy |
| 18. Multimedia | 41. Screen printing |
| 19. Networking | 42. Sport and Medical Massage |
| 20. Tailoring | 43. Crochet embroidery |
| 21. Industrial electricity | 44. Pottery |
| 22. Civil construction | 45. Motor vehicle engine mechanics |
| 23. nursery growing | 46. Film making |

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with National Institute of Statistics of Rwanda. We are conducting the labour force survey in all districts. The information we collect will help the government to plan for employment in the country. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 25 to 35 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. I hope you will accept to cooperate as your answers are very important for this reaserch

May I begin the interview now?

1. RESPONDENT AGREES TO BE INTERVIEWED	→ Continue the interview
2. RESPONDENT DOES NOT AGREE TO BE INTERVIEWED	→ END

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT: Preferably every member aged 14 year and above should respond on his/her behalf. If unavailable the head of household should respond. In the case of the absence of head of household: the wife, or any other knowledgeable adult member of the household can provide information on other members.

Name of the respondent: _____

Tel: _____

SECTION A: HOUSEHOLD ROSTER

All household members

PID		01	02	03	04
NAMES					
List the usual Household members starting from the Household head, followed by his wife and children from the eldest to the youngest. Include other relatives and domestic servants if they are considered as household members. Do not forget babies.					
A01	Sex 1 Male 2 Female				
A02	What is the relationship of (NAME) to head of household? 01 Head 07 Brother or Sister/In law 02 Spouse (Wife/Husband) 08 Son/Daughter-in-law 03 Child (Son/daughter) 09 Other relative 04 Adopted/Foster/step child 10 Domestic helper 05 Grandchild 11 Non-relative 06 Parent/Parent-in-law				
A03	What is (NAME)'s date of birth? MONTHS YEAR	M Y			
A04	What was (NAME)'s age at last birthday?				
A05	What is (NAME'S) present marital status? (Ask all age 12 and above) 1 Married monogamously 5 Separated 2 Married polygamously 6 Single 3 Living together 7 Widow/Widower 4 Divorced				
QUESTIONS FROM A06 TO A11 ARE ASKED TO THOSE AGED 5 YEARS AND ABOVE					
A06	Do you have difficulty seeing, even if wearing glasses? 1 No - no difficulty 3 Yes - a lot of difficulty 2 Yes - some difficulty 4 Cannot do at all				
A07	Do you have difficulty hearing, even if using a hearing aid? 1 No - no difficulty 3 Yes - a lot of difficulty 2 Yes - some difficulty 4 Cannot do at all				
A08	Do you have difficulty walking or climbing steps? 1 No - no difficulty 3 Yes - a lot of difficulty 2 Yes - some difficulty 4 Cannot do at all				
A09	Do you have difficulty remembering or concentrating? 1 No - no difficulty 3 Yes - a lot of difficulty 2 Yes - some difficulty 4 Cannot do at all				
A10	Do you have difficulty (with self-care such as) washing all over or dressing? 1 No - no difficulty 3 Yes - a lot of difficulty 2 Yes - some difficulty 4 Cannot do at all				
A11	Using your usual language, do you have difficulty communicating, for example understanding or being understood? 1 No - no difficulty 3 Yes - a lot of difficulty 2 Yes - some difficulty 4 Cannot do at all				
A12	What is (NAME'S) nationality? 1 Rwanda 5 Tanzania 2 Burundi 6 Uganda 3 Congo-Kinshasa DRC 7 Rest of Africa 4 Kenya 8 Other country				
A13	What is (NAME'S) Residential Status in Rwanda? 1 Permanent Resident 2 Temporary Resident				
A14	What is (NAME'S) Country/Area of birth? IF (1) in A, WRITE CODE OF DISTRICT IN B 1 Rwanda 5 Tanzania A 2 Burundi 6 Uganda B 3 Congo-Kinshasa DRC 7 Rest of Africa 4 Kenya 8 Other country				
A15	Has the usual place of residence of (NAME) always been in this district? 1 Yes →A2I 2 No				
A16	For how long (NAME)'s usual place of residence has been here since the last move? REGISTER 0 IF LESS THAN 1 YEAR YEARS	Y			
A17	In which district or foreign country did (NAME) live in prior to arrival here? IF (1) in A, WRITE CODE OF DISTRICT IN B 1 Rwanda 5 Tanzania A 2 Burundi 6 Uganda B 3 Congo-Kinshasa DRC 7 Rest of Africa 4 Kenya 8 Other country				

A18	In Which place did (NAME) live prior to arriving here? READ ANSWER 1 Capital City 2 District City 3 Country Side 4 Other (Specify)					
A19	How long did (Name) live in the previous location prior to arriving here? REGISTER 0 IF LESS THAN 1 YEAR					
A20	What is the main reason Why did (NAME) move away from previous location? 01 Parents moved 02 To live with relatives 03 To attend school 04 Marriage 05 Family quarrel 06 Divorce 07 Found job 08 Job transfer 09 To look for work 10 Looking for land to farm 11 Loss of employment 12 Employment of spouse 13 Coming back in country 14 Other					
A21	Has (NAME) been away from home for more than one month last 12 months? 1 Yes 2 No → A24					
A22	For how many months during the past 12 months has (NAME) been away from this household? (IF LESS THAN 6 MONTHS → A24)					
A23	While absent, is/was (NAME) a member of another household? (Including single person household) 1 Yes 2 No					
A24	HOUSEHOLD MEMBER (Check instruction) 1 Yes 2 No					

0-4 years old → NEXT PERSON
5-13 years old → A25
14 years old and above → NEXT PERSON

ACTIVITIES OF CHILDREN AGED 5 TO 13 YEARS OLD

A25	Is (NAME) currently studying or working? 1 Studying only → A29 2 Studying and working 3 Working only 4 Not studying, nor working → A29					
A26	What type of work does (NAME) do? 1 Work for pay. 2 Work without pay in non-agriculture family/ household enterprise 3 Work without pay in family farm or fishing 4 Self-employed 5 Other					
A27	How many days per week did [NAME] usually work in these activities?	days				
A28	How many hours per day did [NAME] usually work in these activities?	hours				
A29	In the last 7 days, how many hours did [NAME] spend collecting firewood for the household, including travel time?	hours				
A30	In the last 7 days, how many hours did [NAME] spend fetching water for the household, including travel time?	hours				
A31	In the last 7 days, how many hours did [NAME] spend searching for fodder or grazing for the household's animals?	hours				
A32	In the last 7 days, how many hours did [NAME] spend constructing your dwelling, making major repairs on it, farm buildings and private roads?	hours				
A33	In the last 7 days, how many hours did [NAME] spend doing household chores including shopping, preparing meals?	hours				
A34	In the last 7 days, how many hours did [NAME] spend looking after children and elderly?	hours				
→NEXT PERSON						

Names		_____ _____	
SECTION B. EDUCATION			
For household members 14 yrs old and above s			
B01	IS [NAME] currently studying?	1 Yes 2 No	1 Yes 2 No
B02	A. What is the Highest educational level is/ has [NAME] attending / attended? B. How many years have you completed in that level of education?	1 None 2 Pre-primary → B06 3 Primary education 4 Lower secondary education → B07 5 Upper secondary education 6 Tertiary education	A. B.
B03	What is the highest certificate [NAME] obtained	01 A3 02 D4 03 D5 04 A2/D6/D7 05 A1 06 A0 07 Post graduate diploma 08 Masters 09 PHD 10 Other	01 A3 02 D4 03 D5 04 A2/D6/D7 05 A1 06 A0 07 Post graduate diploma 08 Masters 09 PHD 10 Other
B04	In which country (place) was [NAME]'S highest qualification obtained?	01 Rwanda Public school 02 Rwanda Private school 03 Rwanda Parastatal school 04 Burundi 05 Congo-Kinshasa DRC 06 Kenya 07 Tanzania 08 Uganda 09 Rest of Africa 10 Europe 11 Asia 12 America 13 Australia	01 Rwanda Public school 02 Rwanda Private school 03 Rwanda Parastatal school 04 Burundi 05 Congo-Kinshasa DRC 06 Kenya 07 Tanzania 08 Uganda 09 Rest of Africa 10 Europe 11 Asia 12 America 13 Australia
B05	In which area did/is [NAME] specialize? Write the area of specialization in detail Code (ESCED 4 Digit)	_____ ISCED _____ NISR Fill → B07	_____ ISCED _____ NISR Fill → B07
B06	Is [NAME] able to read and write?	1 Yes 2 No	1 Yes 2 No
B07	Is [NAME] currently attending any trade or technical vocational course?	1 Yes → B9 2 No	1 Yes → B9 2 No
B08	Did [NAME] learn any trade or technical vocational course?	1 Yes 2 No → B15	1 Yes 2 No → B15
B09	How long will/did this course take?	1 Less than one month 2 1-3 Months 3 3-6 Months 4 One year 5 Two years 6 Three years or more	1 Less than one month 2 1-3 Months 3 3-6 Months 4 One year 5 Two years 6 Three years or more
B10	What type of technical skills did [NAME] learn?	_____ Check List of Training Courses	_____ Check List of Training Courses
B11	Where did (NAME) acquire these skills	1 Vocational School Course 2 Apprenticeship or on job Training 3 Learned from a friend or family 4 NGO 5 Community organization 6 Other (Specify): _____	1 Vocational School Course 2 Apprenticeship or on job Training 3 Learned from a friend or family 4 NGO 5 Community organization 6 Other (Specify): _____
B12	Who was the main sponsor for this course?	1 Government 2 Employer 3 Self-financing 4 Private institutions/agencies/persons 5 Non-profit organization/charity 6 International organization 7 Other*	1 Government 2 Employer 3 Self-financing 4 Private institutions/agencies/persons 5 Non-profit organization/charity 6 International organization 7 Other*
B13	Did [NAME] complete the course?	1 Yes with certificate 2 Yes without certificate 3 No → B15	1 Yes with certificate 2 Yes without certificate 3 No → B15
B13A	In which year did (Name) complete this course?	Year	Year
B14	What happened after you completed the course?	1 Nothing 2 I was able to get a job 3 My salary increased 4 I was promoted at work 5 My job skills have improved 6 I got internship/traineeship with a company 7 Starting own business 8 Other specify _____	1 Nothing 2 I was able to get a job 3 My salary increased 4 I was promoted at work 5 My job skills have improved 6 I got internship/traineeship with a company 7 Starting own business 8 Other specify _____
B15	At what level, Could [NAME] use a computer?	1 Very well 2 Well 3 Less 4 Don't know	1 Very well 2 Well 3 Less 4 Don't know
B16	At what level could (Name) speak these languages?	A English B French C Swahili 1. Good 2. Fair 3. Don't know	A English B French C Swahili 1. Good 2. Fair 3. Don't know

SECTION C. IDENTIFICATION OF EMPLOYED, TIME-RELATED UNDEREMPLOYED, UNEMPLOYED, AND PERSONS IN POTENTIAL LABOUR FORCE					
C01	During the last 7 days, did (NAME) do any work for wage, salary, commissions, tips or any other pay, in cash or in kind, even if only for one hour? (including paid internees)	1 Yes → C10 2 No	<input type="checkbox"/>	1 Yes → C10 2 No	<input type="checkbox"/>
C02	During the past 7 days, did (NAME) run or do any kind of business, farming or other activity to generate income, if only for one hour?	1 Yes → C04 2 No	<input type="checkbox"/>	1 Yes → C04 2 No	<input type="checkbox"/>
C03	During the past 7 days, did (NAME) help unpaid in a business owned by a household or family member, or help a member of household or family in his/her paid job, even if only for one hour?	1 Yes 2 No → C06	<input type="checkbox"/>	1 Yes 2 No → C06	<input type="checkbox"/>
C04	Was this work in agriculture, farming or fishing?	1 Yes 2 No 3 Don't know } → C10	<input type="checkbox"/>	1 Yes 2 No 3 Don't know } → C10	<input type="checkbox"/>
C05	In general, are the products obtained from this activity for sale or for family use?	1 Only for sale/barter } → C11 2 Mainly for sale/barter } 3 Mainly for family use } 4 Only for family use }	<input type="checkbox"/>	1 Only for sale/barter } → C11 2 Mainly for sale/barter } 3 Mainly for family use } 4 Only for family use }	<input type="checkbox"/>
C06	During the last 7 days, did (NAME) have a paid job or a business from which he/she was temporarily absent and for which he/she expect to return?	1 Yes 2 No → C19	<input type="checkbox"/>	1 Yes 2 No → C19	<input type="checkbox"/>
C07	What was the main reason (NAME) was absent from work during the last 7 days? [Interviewer not to read answer categories]	Check list and enter code Codes 1 to 3 → C10 Code 7 → C19 Other codes continue	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Check list and enter code Codes 1 to 3 → C10 Code 7 → C19 Other codes continue	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
C08	What is the expected total absence from work for (NAME)?	1 Less than 3 months → C10 2 3 months or more 3 Not sure to return to work	<input type="checkbox"/>	1 Less than 3 months → C10 2 3 months or more 3 Not sure to return to work	<input type="checkbox"/>
C09	Does (NAME) continue receiving an income from his/her job during absence?	1 Yes 2 No → C19	<input type="checkbox"/>	1 Yes 2 No → C19	<input type="checkbox"/>
C10	Did [NAME] have any other paid job or business or any secondary activity to generate an income, during the last 7 days?	1 Yes 2 No	<input type="checkbox"/>	1 Yes 2 No	<input type="checkbox"/>
C11	How many hours does [NAME] usually work per week?	A Main job/Activity B Secondary jobs/Activity	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A Main job/Activity B Secondary jobs/Activity	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
C12	During the past 7 days, how many days did (NAME) actually work?	A Main job/activity B Secondary jobs/activity	<input type="checkbox"/> <input type="checkbox"/>	A Main job/activity B Secondary jobs/activity	<input type="checkbox"/> <input type="checkbox"/>
C13	During the past 7 days, how many hours per day (NAME) has actually worked?	A Main job/Activity B Secondary jobs/Activity	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A Main job/Activity B Secondary jobs/Activity	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
C14	Interviewer. How many hours has [NAME] usually worked at all jobs combined during the last 7 days?	1 Less than 35 hrs → C16 2 35 hrs - 48hrs → SECTION D 3 49 hrs or more	<input type="checkbox"/>	1 Less than 35 hrs → C16 2 35 hrs - 48hrs → SECTION D 3 49 hrs or more	<input type="checkbox"/>
CODES FOR QUESTION C07 1. Sick leave due to own illness or injury → C10 2. Public holidays, vacation or annual leave → C10 3. Maternity or paternity leave as specified by legislation → C10 4. Parental leave 5. Educational leave 6. Care for others and other personal absences 7. Seasonal work → C19 8. Strikes or lockouts 9. Reduction in economic activity (e.g. temporary lay-off, slack work) 10. Disorganization or suspension of work (e.g. due to bad weather, mechanical, electrical or communication breakdown) 11. Other Specify					

C15	What was the main reason (NAME) usually worked long hours per week?	1 Nature of work 2 To earn more money 3 Lack of employees 4 Meet deadlines 5 Other specify } Section D	<input type="checkbox"/>	1 Nature of work 2 To earn more money 3 Lack of employees 4 Meet deadlines 5 Other specify } Section D	<input type="checkbox"/>
C16	During the last 4 weeks, did (NAME) look for additional or other work?	1 Yes → C18 2 No	<input type="checkbox"/>	1 Yes → C18 2 No	<input type="checkbox"/>
C17	Would (NAME) want to work more hours per week than usually worked provided the extra hours are paid or profitable?	1 Yes 2 No → SECTION D	<input type="checkbox"/>	1 Yes 2 No → SECTION D	<input type="checkbox"/>
C18	If an opportunity for additional work became available, could (NAME) start working more hours within the next two weeks?	1 Yes } SECTION D 2 No	<input type="checkbox"/>	1 Yes } SECTION D 2 No	<input type="checkbox"/>
C19	During the last 4 weeks, did [NAME] look for any kind of paid job or try to start any kind of business?	1 Yes → C21 2 No	<input type="checkbox"/>	1 Yes → C21 2 No	<input type="checkbox"/>
C20	Has [NAME] already found a job or arranged to start a business in the next 4 weeks?	1 Yes → C25 2 No → C23	<input type="checkbox"/>	1 Yes → C25 2 No → C23	<input type="checkbox"/>
C21	What did [NAME] do in the last 4 weeks to find a paid job or start a business?	Check list and mark up to four codes If "No method" (code 8) → C23	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Check list and mark up to four codes If "No method" (code 8) → C23	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
C22	For how long has [NAME] been without work and trying to find a paid job or start a business?	1 Less than 1 month 2 1 – less than 3 months 3 3 – less than 6 months 4 6 – less than 12 months 5 1 – less than 2 years 6 2 years or more } C25	<input type="checkbox"/>	1 Less than 1 month 2 1 – less than 3 months 3 3 – less than 6 months 4 6 – less than 12 months 5 1 – less than 2 years 6 2 years or more } C25	<input type="checkbox"/>
C23	Would [NAME] want to work if a paid job or business opportunity became available?	1 Yes 2 No → SECTION F	<input type="checkbox"/>	1 Yes 2 No → SECTION F	<input type="checkbox"/>
C24	What was the main reason (NAME) did not try to find a paid job or start a business in the last 4 weeks?	Check list and enter code _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Check list and enter code _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
C25	If a paid job or business opportunity became available, could [NAME] have started work during the last 7 days or within the next two weeks?	1 Yes → SECTION F 2 No	<input type="checkbox"/>	1 Yes → SECTION F 2 No	<input type="checkbox"/>
C26	What is the main reason why (NAME) could not start working in the last 7 days or next two weeks?	1 In Study, training 2 Maternity leave, child care 3 Injury, illness 4 Family member(s) consider that (NAME) should stay home 5 Other } SECTION F	<input type="checkbox"/>	1 In Study, training 2 Maternity leave, child care 3 Injury, illness 4 Family member(s) consider that (NAME) should stay home 5 Other } SECTION F	<input type="checkbox"/>

CODES FOR QUESTION C 21

1. Arranging for financial resources, applying for permits, licenses
2. Looking for land, premises, machinery, supplies, farming inputs
3. Seeking the assistance of friends, relatives or other types of intermediaries
4. Registering with or contacting public or private employment services
5. Applying to employers directly, checking at worksites, farms, factory gates, markets or other assembly places
6. Placing or answering newspaper or online job advertisements

7. Placing or updating resumes on professional or social networking sites online
8. No method → C23
9. Other, specify _____

CODES FOR QUESTION C24

1. Own illness
2. Disability
3. Studies
4. Pregnancy
5. Presence of small children/ elders / sick people
6. Refusal by family
7. Past failure to find suitable job

8. Lack of experience, qualification or jobs matching skills
9. Lack of jobs in the area
10. Considered too young or too old by prospective employers
11. Lack of infrastructure (assets, roads, transportation, employment services)
12. Other sources of income (pension, rent)
13. Estrangement
14. Others specify

D. CHARACTERISTICS OF EMPLOYMENT

FOR HOUSEHOLD MEMBERS, AGED 14 YEARS OLD AND ABOVE

CHARACTERISTICS OF THE MAIN JOB/BUSINESS ACTIVITY

D01	A. In the main job/business that (NAME) had during the last 7 days, what was his/her occupational position? (Example: policeman, primary school teacher, vegetable vendor, domestic worker, truck driver, registered nurse)	_____		_____	
		(Occupational title)		(Occupational title)	
D02	B. What were (NAME)'s main tasks and duties?	_____	ISCO _ _ _ _ _	_____	ISCO _ _ _ _ _
D03	A. What is the name of (NAME)'s workplace?	1 _____ (Name) 2 Domestic workers 3 No name	_ _	1 _____ (Name) 2 Domestic workers 3 No name	_ _
	B. What are the main goods or services produced at (NAME)'s place of work or its main function?	_____	ISIC _ _ _ _ _	_____	ISIC _ _ _ _ _
D04	Does (NAME) work in...?	READ 1 Public institution/enterprise 2 Mixed public and private enterprise 3 Private 4 International NGO/International organisation 5 Local NGO/Religious organisation 6 Cooperative 7 Household 8 Others. Specify _____	_ _	READ 1 Public institution/enterprise 2 Mixed public and private enterprise 3 Private 4 International NGO/International organisation 5 Local NGO/Religious organisation 6 Cooperative 7 Household 8 Others. Specify _____	_ _
	READ ANSWER FOR RESPONDENT				
D05	In this job, is [NAME] working as...?	1 Employee 2 Paid apprentice/Internee 3 Employer (with regular employees) 4 Own account worker(without regular employees) } → D18 5 Member of cooperative 6 Contributing family worker → D23 7 Other (please specify) _____	_ _	1 Employee 2 Paid apprentice/Internee 3 Employer (with regular employees) 4 Own account worker(without regular employees) } → D18 5 Member of cooperative 6 Contributing family worker → D23 7 Other (please specify) _____	_ _
	READ ANSWER FOR RESPONDENT				
D06	Have [NAME] been employed on the basis of....?	1 Written contract 2 Oral agreement	_ _	1 Written contract 2 Oral agreement	_ _
D07	Is [NAME]'s contract or agreement,....?	1 Permanent (without a known limited duration) → D09 2 Temporary contract	_ _	1 Permanent (without a known limited duration) → D09 2 Temporary contract	_ _
D08	What is the duration of the contract or agreement?	1 Day 2 Week 3 Month 4 Less than one year 5 One year or more	_ _	1 Day 2 Week 3 Month 4 Less than one year 5 One year or more	_ _
D09	Does [NAME]'s employer pay contributions on [NAME]'s behalf to..	A Social security fund B Health insurance fund	A. _ _ B. _ _	A Social security fund B Health insurance fund	A. _ _ B. _ _
	READ ANSWER FOR RESPONDENT	1. Yes, 2. No, 3. Don't know		1. Yes, 2. No, 3. Don't know	
D10	Is (NAME) entitled to the following benefits from employer?	A Paid annual leave B Paid sick leave C Paid maternity/paternity leave? 1. Yes, 2. No, 3. Don't know	A. _ _ B. _ _ C. _ _	A Paid annual leave B Paid sick leave C Paid maternity/paternity leave? 1. Yes, 2. No, 3. Don't know	A. _ _ B. _ _ C. _ _
	READ ANSWER FOR RESPONDENT				
D10D	Is (Name)'s salary subjected to deduction of tax (PAYE)	1 Yes 2 No 3 Don't know	_ _	1 Yes 2 No 3 Don't know	_ _
D11	Is [NAME] member of any trade union or syndicate ?	1 Yes 2 No	_ _	1 Yes 2 No	_ _
D12	How much did (Name) earn at main job last time (Name) was paid in cash?	1 Enter amount FRW _____ 2 Refusal 3 don't know } → D17	_ _	1 Enter amount FRW _____ 2 Refusal 3 don't know } → D17	_ _
	READ ANSWER FOR RESPONDENT				
D13	How long did it cover?	1 Month 2 Two weeks 3 One week 4 One day 5 Other, specify _____	_ _	1 Month 2 Two weeks 3 One week 4 One day 5 Other, specify _____	_ _
	READ ANSWER FOR RESPONDENT				

D14	Does [NAME] receive in-kind payments in main job such as food, agricultural products, livestock ?	1 Yes 2 No → D20	<input type="checkbox"/>	1 Yes 2 No → D20	<input type="checkbox"/>
D15	What is the value of these in-kind payments?	1 Enter amount FRw _____ 2 Refusal } → D17 3 Don't know }	<input type="checkbox"/>	1 Enter amount FRw _____ 2 Refusal } → D17 3 Don't know }	<input type="checkbox"/>
D16	What period did it cover?	1 Month 2 Two weeks 3 One week } → D20 4 One day 5 Other, specify _____	<input type="checkbox"/>	1 Month 2 Two weeks 3 One week } → D20 4 One day 5 Other, specify _____	<input type="checkbox"/>
D17	Taking into account both cash and in kind payments, Would you say the monthly amount of (NAME)'s earnings was in the range ...?	1 Less than 20,000 RWF 2 20,000 – 29,999 RWF 3 30,000 – 49,999 RWF 4 50,000 – 99,999 RWF 5 100,000 RWF and above 6 Refusal 7 Don't know } → D20	<input type="checkbox"/>	1 Less than 20,000 RWF 2 20,000 – 29,999 RWF 3 30,000 – 49,999 RWF 4 50,000 – 99,999 RWF 5 100,000 RWF and above 6 Refusal 7 Don't know } → D20	<input type="checkbox"/>
D18	What is the net monthly earnings of (NAME) from his/her business or activity? (Note: Net monthly earnings should be gross income minus associated total expenditures. This should include payments to contributing family workers, as well as off-take by the individual and contributing family members.)	A. Enter amount FRw 1 _____ → D19 2 Refusal 3 Don't know B. 1 Less than 20,000 RWF 2 20,000 – 29,999 RWF 3 30,000 – 49,999 RWF 4 50,000 – 99,999 RWF 5 100,000 RWF and above 6 Refusal } → D20 7 Don't know }	A. <input type="checkbox"/>	A. Enter amount FRw 1 _____ → D19 2 Refusal 3 Don't know B. 1 Less than 20,000 RWF 2 20,000 – 29,999 RWF 3 30,000 – 49,999 RWF 4 50,000 – 99,999 RWF 5 100,000 RWF and above 6 Refusal } → D20 7 Don't know }	A. <input type="checkbox"/>
D19	Was this below average, above average, or average of monthly earnings during last year?	1 Below average 2 Average 3 Above average	<input type="checkbox"/>	1 Below average 2 Average 3 Above average	<input type="checkbox"/>
D20	Is the business/establishment where [NAME] works registered with the Rwanda Revenue Authority or pay PAYE/TPR?	1 Yes 2 No 3 Don't know	<input type="checkbox"/>	1 Yes 2 No 3 Don't know	<input type="checkbox"/>
D21	In order to report to an authority, does the business/establishment where (NAME) works keep written records of accounts?	1 Yes 2 No 3 Don't know	<input type="checkbox"/>	1 Yes 2 No 3 Don't know	<input type="checkbox"/>
D22	Including (NAME), how many regular paid or unpaid workers worked at (NAME)'s place of work/ Establishment?	A. Less than 10 give exact number. Otherwise mark 0 B. Ten or more 1 10-30 workers 2 31-50 workers 3 51-100 workers 4 101 workers or more	A. <input type="checkbox"/>	A. Less than 10 give exact number. Otherwise mark 0 B. Ten or more 1 10-30 workers 2 31-50 workers 3 51-100 workers 4 101 workers or more	A. <input type="checkbox"/>
D23	In what type of place does [NAME] usually work?	01 At home 02 Structure attached to the home 03 At the client/employer's home 04 At an office, shop, factory, or other fixed workplace 05 Fixed stall in market 06 Non-fixed stall/stand in market 07 Street 08 Land, forest, sea, mining site. 09 Verranda of commercial house 10 Construction site 11 Other (specify): _____	<input type="checkbox"/>	01 At home 02 Structure attached to the home 03 At the client/employer's home 04 At an office, shop, factory, or other fixed workplace 05 Fixed stall in market 06 Non-fixed stall/stand in market 07 Street 08 Land, forest, sea, mining site. 09 Verranda of commercial house 10 Construction site 11 Other (specify): _____	<input type="checkbox"/>
D24	For how long has [NAME] been working (total experience)?	1 Less than 3 months 2 3-less than 6 months 3 6- less than 12 months 4 1 year - Less than 2years 5 2 years - Less than 5years 6 5 years or more	<input type="checkbox"/>	1 Less than 3 months 2 3-less than 6 months 3 6- less than 12 months 4 1 year - Less than 2years 5 2 years - Less than 5years 6 5 years or more	<input type="checkbox"/>
D25	In day to day work does [NAME] need the computer to perform his/her duties?	1 Yes 2 No → D27	<input type="checkbox"/>	1 Yes 2 No → D27	<input type="checkbox"/>
D26	Does (NAME) use computer in his/her day-to-day work?	1 Yes 2 No	<input type="checkbox"/>	1 Yes 2 No	<input type="checkbox"/>
D27	INTERVIEWER: Check on question C10 whether a secondary paid job or business/activity is reported	1 Yes → SECTION E 2 No → SECTION G	<input type="checkbox"/>	1 Yes → SECTION E 2 No → SECTION G	<input type="checkbox"/>

E. CHARACTERISTICS OF SECONDARY ACTIVITY

E01	A. What was (NAME)'s occupational position in his/her secondary job/activity?	_____	_____	_____	_____
		(Occupational title)	ISCO	(Occupational title)	NISR
E02	B. What were (NAME)'s main tasks and duties?	_____	_____	_____	_____
		(Name)	ISIC	(Name)	NISR
E03	A. What is the name of (NAME)'s workplace at his/her secondary job/activity?	1 _____ (Name) 2 Domestic worker 3 No name	_____	1 _____ (Name) 2 Domestic worker 3 No name	_____
	B. What are the main goods or services produced at (NAME)'s workplace in his/her secondary job/activity?	_____	ISIC	_____	NISR
E04		(Description)	_____	(Description)	_____
		READ	_____	READ	_____
E05	In his/her secondary job/activity, does (NAME) work in ...?	1 Public institution/enterprise 2 Mixed public and private enterprise 3 Private 4 International NGO/International organisation 5 Local NGO/Religious organisation 6 Cooperative 7 Household 8 Others. Specify _____	_____	1 Public institution/enterprise 2 Mixed public and private enterprise 3 Private 4 International NGO/International organisation 5 Local NGO/Religious organisation 6 Cooperative 7 Household 8 Others. Specify _____	_____
	READ ANSWER FOR RESPONDENT				
E06	In his/her secondary job/business, does (NAME) work as ...?	1 Employee 2 Paid apprentice/Intern 3 Employer (with regular employees) 4 Own account worker(without regular employees) } → E07 5 Member of cooperative 6 Contributing family worker → E10 7 Other (please specify) _____	_____	1 Employee 2 Paid apprentice/Intern 3 Employer (with regular employees) 4 Own account worker(without regular employees) } → E07 5 Member of cooperative 6 Contributing family worker → E10 7 Other (please specify) _____	_____
	READ ANSWER FOR RESPONDENT				
E07	Does [NAME]'s employer pay contributions on [NAME]'s behalf to..	A. Social security fund B. Health insurance fund 1.Yes, 2. No, 3. Don't know	A. <input type="checkbox"/> B. <input type="checkbox"/>	A. Social security fund B. Health insurance fund 1.Yes, 2. No, 3. Don't know	A. <input type="checkbox"/> B. <input type="checkbox"/>
	Is (NAME) entitled to the following benefits from employer?	A. Paid annual leave B. Paid sick leave C. Paid maternity/paternity leave? 1.Yes, 2. No, 3. Don't know	A. <input type="checkbox"/> B. <input type="checkbox"/> C. <input type="checkbox"/>	A. Paid annual leave B. Paid sick leave C. Paid maternity/paternity leave? 1.Yes, 2. No, 3. Don't know	A. <input type="checkbox"/> B. <input type="checkbox"/> C. <input type="checkbox"/>
E08	Is the business/establishment where [NAME] works for registered with the Rwanda Revenue Authority or pay PAYE/TPR?	1 Yes 2 No 3 Don't know	_____	1 Yes 2 No 3 Don't know	_____
	In order to report to an authority, does the business/establishment where (NAME) works keep written records or accounts?	1 Yes 2 No 3 Don't know	_____	1 Yes 2 No 3 Don't know	_____
E09	Including (NAME), how many regular paid or unpaid workers worked at (NAME)'s place of work?	A. Less than 10 give exact number. Otherwise mark 0 B. Ten or more 1 10-30 workers 2 31-50 workers 3 51-100 workers 4 101 workers or more	A. <input type="checkbox"/> B. <input type="checkbox"/>	A. Less than 10 give exact number. Otherwise mark 0 B. Ten or more 1 10-30 workers 2 31-50 workers 3 51-100 workers 4 101 workers or more	A. <input type="checkbox"/> B. <input type="checkbox"/>
	In what type of place does [NAME] usually work?	01 At home 02 Structure attached to the home 03 At the client/employer's home 04 At an office, shop factory, or other fixed workplace 05 Fixed stall in market 06 Non-fixed stall/stand in market 07 Street 08 Land, forest, sea, mining site. 09 Verranda of commercial house 10 Construction site 11 Other (specify): _____	_____	01 At home 02 Structure attached to the home 03 At the client/employer's home 04 At an office, shop factory, or other fixed workplace 05 Fixed stall in market 06 Non-fixed stall/stand in market 07 Street 08 Land, forest, sea, mining site. 09 Verranda of commercial house 10 Construction site 11 Other (specify): _____	_____

F. PAST EMPLOYMENT

FOR PERSONS NOT IN EMPLOYMENT, AGED 14 YEARS OLD AND OVER

F01.	Has [NAME]ever worked previously for a wage, salary or for other income in cash or in kind, including in his/her own business or in a family business?	1 Yes 2 No → F05	<input type="checkbox"/>	1 Yes 2 No → F05	<input type="checkbox"/>
F02.	What was the main reason why [NAME] stopped working in his/her last paid job / business?	01 Dismissal or staff reduction. 02 Breakup of the enterprise, bankruptcy 03 Place of work closed down 04 Retirement 05 Illness, injury or disability 06 Beginning of studies or preparing for studies 07 Pregnancy, family responsibilities 08 Family member(s) consider that s/he should stay at home 09 To look for better job 10 Working conditions (low pay, late Payment, far location, difficult work.) 11 Temporary/seasonal job/project ended 12 Physical/ social harassment 13 Other (Please specify)_____	<input type="checkbox"/>	01 Dismissal or staff reduction. 02 Breakup of the enterprise, bankruptcy 03 Place of work closed down 04 Retirement 05 Illness, injury or disability 06 Beginning of studies or preparing for studies 07 Pregnancy, family responsibilities 08 Family member(s) consider that s/he should stay at home 09 To look for better job 10 Working conditions (low pay, late Payment, far location, difficult work.) 11 Temporary/seasonal job/project ended 12 Physical/ social harassment 13 Other (Please specify)_____	<input type="checkbox"/>
F03	A. What was (NAME)'s occupational position ?	_____		_____	
	B. What were (NAME)'s main tasks and duties?	_____	ISCO	_____	ISCO
F04	A. What was the name of (NAME)'s workplace at his/her job/activity?	1 _____ (Name) 2 Domestic worker 3 No name	<input type="checkbox"/>	1 _____ (Name) 2 Domestic worker 3 No name	<input type="checkbox"/>
	B. What were the main goods or services produced at (NAME)'s workplace in his/her job/activity?	_____	ISIC	_____	ISIC
F05	What is [NAME] main source of income at present?	01 Parents 02 Husband/Wife 03 Child 04 Other family members 05 Pension 06 Own production 07 Assistance received [VUP] 08 Assistance received [FARG] 09 Assistance received [Church, Other NGO] 10 Assistance from friends 11 Revenue from own property/Savings 12 Past work 13 Scholarship 14 Others (Please specify)	<input type="checkbox"/>	01 Parents 02 Husband/Wife 03 Child 04 Other family members 05 Pension 06 Own production 07 Assistance received [VUP] 08 Assistance received [FARG] 09 Assistance received [Church, Other NGO] 10 Assistance from friends 11 Revenue from own property/Savings 12 Past work 13 Scholarship 14 Others (Please specify)	<input type="checkbox"/>
F06	In your opinion, which of the following best describes your main status at present?	1 Unemployed 2 Performing job such as unpaid work in a family business or apprenticeship or Traineeship 3 Pupil, student, post graduate 4 Retirement or early retirement or given up business activity → G01 5 Permanently unable to work due to longstanding health problems 6 In compulsory military or civilian service 7 Person fulfilling domestic task in own household 8 Other status, specify -----	<input type="checkbox"/>	1 Unemployed 2 Performing job such as unpaid work in a family business or apprenticeship or Traineeship 3 Pupil, student, post graduate 4 Retirement or early retirement or given up business activity → G01 5 Permanently unable to work due to longstanding health problems 6 In compulsory military or civilian service 7 Person fulfilling domestic task in own household 8 Other status, specify -----	<input type="checkbox"/>
F07	What Competencies do [NAME] need to increase employment opportunities?	1 Technical skills 2 Soft Skills 3 Industrial attachment (practical skills) 4 Other (Please specify)_____	<input type="checkbox"/>	1 Technical skills 2 Soft Skills 3 Industrial attachment (practical skills) 4 Other (Please specify)_____	<input type="checkbox"/>
		5 None		5 None	

G. UN PAID HOME PRODUCTION GOODS AND SERVICES IN LAST 7 DAYS

Not to be asked to domestic workers who are paid)

G01	In the last 7 days, how many hours did [NAME] spend collecting firewood for the household, including travel time?	Hours		Hours	
G02	In the last 7 days, how many hours did [NAME] spend fetching water for the household, including travel time?	Hours		Hours	
G03	In the last 7 days, how many hours did [NAME] spend searching for fodder or grazing for the household's animals?	Hours		Hours	
G04	In the last 7 days, how many hours did [NAME] spend constructing your dwelling, making major repairs on it, farm buildings, private roads, or wells?	Hours		Hours	
G05	In the last 7 days, how many hours did [NAME] spend manufacturing household goods for own or family use (such as furniture, textiles, clothing, footwear, pottery, crafts or other durables, excluding foodstuff)?	Hours		Hours	
G06	In the last 7 days, how many hours did [NAME] spend doing household chores including shopping, preparing meals?	Hours		Hours	
G07	In the last 7 days, how many hours did [NAME] spend looking after children and elderly?	Hours		Hours	

H. CHARACTERISTICS OF SUBSISTENCE AGRICULTURE WORK LAST MONTH

H01	During the last four weeks did [NAME] do any of the following work mainly for own consumption such as farm work, growing fodder, raising or tending animals Fishing, storage such flour, dry fish or other food and drink hunting, or gathering foodstuff, Preparing foodstuff for storage such flour and drinks	1 Yes 2 No → Next person If last one go to H04		1 Yes 2 No → Next person If last one go to H04	
H02	How many days per week has [NAME] usually worked in these activities?	Days		Days	
H03	How many hours per day has [NAME] usually worked in these activities?	Hours		Hours	
H04	INTERVIEWER: CHECK H01 IF NO ONE HAS DONE ANY AGRICULTURAL ACTIVITY			1 Yes → H05 2 No → Section I	

INFORMATION ON SUBSISTENCE AGRICULTURE INCOME			
H05	In general, did the household sell or barter any part of the goods obtained from this work?	1 No, never sell → H07 2 Sell excess from time to time → H07 3 Yes, regularly	<input type="checkbox"/>
H06	About how much does the household regularly sell?	1 ¼ or less 2 More than ¼ but less than half 3 More than half (>50%)	<input type="checkbox"/>
H07	What was the net Value in FRW the household get from agricultural activities during the last season? <i>(Include both agricultural items sold for cash and own consumption from all crop, livestock, hunting, and fishing activities in the last four months, net of associated costs.)</i>	1 0- 9,999 RWF 2 10,000 - 39,999 3 40,000 - 89,999 4 90,000 - 179,999 5 180,000 - 239,999 6 240,000 and above	<input type="checkbox"/>
H08	Was the previous season below/above average or an average season for your household?	1 Above average 2 Average 3 Below average	<input type="checkbox"/>
H09	Do you regularly or sometimes engage paid employee in the farming activity?	1 Yes regularly 2 Yes sometimes 3 No, never → H11	<input type="checkbox"/>
H10	Excluding family members, how many paid employees do you usually engage in these agricultural activities?	1 1 - 3 2 4 - 5 3 More than 5	<input type="checkbox"/>
H11	How did you get access to the land for the agricultural work? (More than one answer is acceptable) Read modalities and give answer for each	a leasing (have land title)/own/Household land b Renting (share-cropping) c Renting (fixed rent) d Renting (free of charge) e Communal rights/public 1. Yes, 2. No	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

SECTION I: HOUSING AND HOUSEHOLD ASSETS

To be Responded by the Head of Household

I01			I02	I03
What is the main material used in building this house? (For roof, exterior walls, and floor)			How many rooms in your household are used for sleeping? (excluding rooms extensively occupied by other HH)	What type of toilet does your household have?
Roof	Exterior walls	Floor	Rooms _ _ _	1. Flush toilet 2. Pit Latrine with constructed floor slab 3. Pit latrine without constructed floor slab 4. floor slab 5. No toilet (bush, channeled water, river, etc.) 6. Other (specify) _ _
1. Metal sheets/corrugated iron 2. Tiles clay 3. Concrete 4. Bamboo 5. Plastic/plywood/ impermanent material 6. Other (specify) _ _	01. Mud bricks 02. Mud bricks with cement (stucco) 03. Oven fired bricks 04. Cement blocks 05. Wooden planks 06. Stones 07. Tree trunks with mud 08. Tree trunks with mud and cement 09. Plastic Sheeting 10. Other (specify) _ _ _	1. Beaten earth 2. Dung hardened 3. Wooden floor 4. Clay tiles 5. Cement 6. Bricks 7. Other (specify) _ _		

I04	I05	I06		I07
What is the main source of energy in your household for lighting?	What is the main source of energy in your household for cooking?	What is the main source of water in your household for drinking and other uses?		Does this household own the following assets? (More than one answer is acceptable) The assets should be functional
01. Electricity 02. Biogas 03. Generator 04. Oil lamp/ Candle 05. Firewood 06. Telephone/ Torche 07. Lantern 08. Solar Panel 09. Batteries+Bulb 10. Other, Specify _ _ _	01. Firewood 02. Charcoal 03. Gas 04. Biogas 05. Solar power 06. Electricity 07. Oil/Kerosene 08. Crop waste 09. Animal dung 10. Other, Specify _ _ _	01. Piped Into Dwelling 02. Piped To Yard/Plot 03. Public Tap/Standpipe 04. Tube Well Or Borehole 05. Protected Well 06. Unprotected Well 07. Protected Spring 08. Unprotected Spring 09. Rainwater 10. Tanker Truck 11. Surface Water (River/Lake/Pond/Stream/ Irrigation Channel) 12. Bottled water 13. Other (Specify) Drinking Water I06a _	Other Uses I06b _	Yes=1/ No =2 Refrigerator/Freezer..... A. _ _ Radio..... B. _ _ TV set..... C. _ _ Satellite..... D. _ _ Video/DVD player..... E. _ _ Computer and accessories..... F. _ _ Music system..... G. _ _ Cooker..... H. _ _ Sewing machine..... I. _ _ Laundry machine..... J. _ _ Electric fan..... K. _ _ Camera..... L. _ _ Mobile phone..... M. _ _ Car (for home use only)..... N. _ _ Bicycle (for home use only)..... O. _ _ Motorcycle (for home use only)..... P. _ _

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

Jonathan DUSABE

James BYIRINGIRO

Survey Supervisors

Jean Marc MUKUNDABANTU

Evelyne KANYONGA INGABIRE

Nicolas MWIZERWA

Gilbert MUGENZI

Martin UWITONZE

Madeleine MUKAZITONI

IMANISHIMWE VALENTINE

UWAMAHORO Pacifique

NKURUNZIZA Venuste

Data analysis & Report writing

Farhad MEHRAN

James BYIRINGIRO

Jean Marc MUKUNDABANTU

Evelyne KANYONGA INGABIRE

Nicolas MWIZERWA

UWAMAHORO Pacifique

Report Editing & Design

Jean Claude NYIRIMANZI

Report Editing & Design

Jean Claude NYIRIMANZI

