

**LMIS report on
“Employment and
its projections in
Rwanda”**

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Different sources of data were used to get to the information contained in this document as indicated on each table.

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Acronyms

CPAF: Common Performance Assessment Framework

CSR: Caisse Social du Rwanda

EICV: Enquête Intégrale sur les Conditions de Vie des Ménages (Integrated Household Living Conditions Survey)

MDG: Millennium Development Goals

NISR: National Institute of Statistics of Rwanda

TVET: Technical and Vocational Education and Training

VAT: Value Added Tax

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Chapter 1: INTRODUCTION

Unemployment is one of the biggest problems in the world especially in developing countries, and has indeed been a fundamental cause of poverty but has also been a result of the structured poverty in African economies both rural and urban.

The unemployment rate of Rwanda (1.2%) is one of the least in the regions with a significantly high employment rate of approximately 85%.

Agriculture is the fundamental employer in Rwanda employing approximately 86% of the labour force, this is supported by manufacturing and the services sector although their contributions to the cause are still low despite the fact that their contribution towards the cause is highly increasing.

The purpose of the report is to give an insight on the empirical evidence pertaining to factors affecting and determining employment in Rwanda with special focus on the household survey that was conducted in 2005.

A binary logistic model has been used to establish the relationship between various factors and employment and these are reported in the following section.

The term employment has been used to refer to any labour unit that utilised factors of production in any way to produce output within one week prior to when the EICV 2005 was conducted.

The findings in this report are limited to persons between the age group 16 to 65 years inclusive respectively.

The choice of variables in the model was based on the stepwise selection using the backward Wald Methods in which the 5th step was where the critical relevant variables of the model were chosen and indeed identified.

A number of factors are responsible for the vast employment rates in the country, and these include demographic, economic, health and related socio-economic factors.

The model below is a binary logistic model examining the growth in employment in Rwanda using the EICV 2005 with special focus on the factors that determine the employment rate.

$$P_1 = E(Y=1|X_i) = \frac{1}{1 + e^{-B_0 + B_1 \text{Gend} + B_2 \text{Age} + B_3 \text{Wages} + B_4 \text{Educ} + B_5 \text{Voc} + B_6 \text{Drop} + B_7 \text{Loc} + B_8 \text{Dis} + B_9 \text{Tont} + B_{10} \text{Univ} + B_{11} \text{Civil} + B_{12} \text{Nonfarm} + B_{13} \text{Agric} + B_{14} \text{NonComp} + B_{15} \text{Mig}}}$$

The selection of variables (see table 2) was based both on economic theory as well as the stepwise selection methodology in which all the reported variables were reported to be relevant at the first step.

Chapter 2: FINDINGS

2.1. Factors affecting employment

The goodness of fit was measured by the Pseudo R-Squared and as thus it can be summarized in the following table.

Table 1: Model Summary

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	6.99E+06	0.351	0.474

Whereas both the Cox (0.351) and Nagelkerke R-squared (0.474) appear low, most of the variables were reported to be statistically significant as can be seen in the table below.

The NISR collected information covering various variables, however this report is limited to the following variables and indeed the following section explains the above statistical findings between employment (worked for at least one hour in the last one week prior to the survey) and the respective variables.

NB: This is a logistic model which projects the probability relationship between employment and the respective factors, since its probability and probability can't be negative, all the negative values shall be looked at as Zero, but key to the interpretation in this section are the exponential findings under section Exp (B).

Table 2: Logistic model

	Explanatory Variable	B	S.E.	Wald	Freedom degrees	Sig.	Exp(B)
Step 1 ^a	Gender	-0.597	0.003	49451.811	1	0.000	0.551
	Migration	0.108	0.003	1390.763	1	0.000	1.114
	Disability	0.000	0.007	0.004	1	0.948	1.000
	School Dropout	0.140	0.003	2203.530	1	0.000	1.150
	Attended Vocational	-0.007	0.005	2.020	1	0.155	0.994
	Attended University	0.079	0.012	41.709	1	0.000	1.082
	Worked for Wages	1.833	0.004	254943.110	1	0.000	6.250
	Working in Nonfarm	1.765	0.006	101009.929	1	0.000	5.842
	Working in Agriculture	-9.262	131.976	0.005	1	0.944	0.000
	Doing Non compensated work	10.740	131.976	0.007	1	0.935	46153.726
	Attended School	-0.021	0.003	38.186	1	0.000	0.979
	Tontine (Belonged to Community saving club)	0.134	0.005	607.870	1	0.000	1.143
	Civil status (Married)	-0.030	0.003	89.218	1	0.000	0.971
	Location (Rural)	0.930	0.004	56427.668	1	0.000	2.535
	Age	0.017	0.000	20381.235	1	0.000	1.017
Constant	-0.670	0.006	12894.546	1	0.000	0.512	

Source: EICV 2005

2.1.1. Gender status and employment by percentage

The female dominate the employment levels with a proportion of 47% in comparison to the male whose proportion is 37.2%. However the male are experiencing higher unemployment levels with a proportion of 0.7% in comparison to 0.5% of the female. For more details see table below.

Table 3: Gender status and employment by percentage

Status	Male%	Female%
Employed	36.1	41.5
Unemployed	0.5	0.3
Looking for first employment	0.2	0.2
Household maintenance	1.1	5.5
Student	5.8	5.5
Retired	0.0	0.0
Pensioner	0.1	0.0
Disabled	0.4	0.3
Too young	0.1	0.1
Other	1.4	0.9
Total	45.7	54.3

Source: EICV 2005

Both genders at national level (15 years and above) participated in different economic activities in different regions ranging from professional, senior managers, office clerks, commercial and sales, skilled service sector, agricultural and fishery workers, semi skilled operatives to mention but a few. For more details see table below.

Table 4: Gender and economic activity

Occupation group	Kigali urban		Other urban		Rural		All	
	Male	Female	Male	Female	Male	Female	Male	Female
Professionals	8.4	6.3	4.7	4.2	1.8	0.8	2.6	1.4
Seniors officials and managers	1.2	0.5	0	0.2	0	0	0.1	0
Office clerks	3.1	5.4	1.3	1.6	0.3	0.1	0.6	0.5
Commeercial and sales	16.1	22.6	10	13	5	3.4	6.4	5.4
Skilled service sector	26.9	36.3	17.6	15.7	4.3	1	7.3	4.3
Agriculture & fishery workers	9	21.2	47.8	62.6	79.9	93	71.4	86.2
Semi-skilled operatives	25.3	7	12.5	2.7	6.4	1.4	8.4	1.9
Drivers and machine operators	7.6		2.6		0.4		1.2	
Unskilled labours	2.3	0.8	3.4	0.1	1.8	0.2	2	0.2
All	100	100	100	100	100	100	100	100

Source: EICV2 data: usual job of adults 15 years and over years

The coefficient between gender and employment was reported to be -0.597 (Table 2), but as already noted probability can't be negative, so this is rounded to Zero. However a significant number of wage employed persons are male which contradicts the above findings and thus calls for further investigation.

2.1.2. Age and employment

The age group is dominated by the young people (below 35 years) with the age group 16-20 years accounting for 24.3%, 21-25 years 19.7%, 26-30 years 13% and 31-35 years 9.3%, which sums up to 53.3%. This age description is limited to the findings of the survey and whereas they could reflect the national trend, they are not quoted from the population census and thus should not be interpreted as the actual national population figures.

Table 5: Age and employment

age group	age group%	employed%	never worked for one hour%
16-20yrs	24.3	15.0	9.3
21-25yrs	19.7	16.1	3.6
26-30yrs	13.0	11.4	1.6
31-35yrs	9.3	8.5	0.9
36-40yrs	8.3	7.5	0.9
41-45yrs	7.8	7.1	0.8
46-50yrs	7.0	6.2	0.8
51-55yrs	4.9	4.3	0.6
56-60yrs	3.4	2.9	0.5
61-65yrs	2.2	1.8	0.4
total	100.0	80.7	19.3

Source: EICV 2005

From the above table, the young persons in Rwanda have a higher employment level than the elderly, although from the logistic model, in Rwanda it's easier for the elders to get jobs than young people (EICV 2005), from the findings an increase in the age of an individual has a more likelihood of 1.017 (Table 2) of getting employed.

As the age group increases, the proportion that is employed is decreasing; this same pattern is experienced in the population that never worked for at least one hour in the week before the survey.

The above dilemma is explained by the higher magnitude in employment in comparison to the lower proportion of unemployed as age increases.

2.1.3. Civil status and employment

From the findings, 79.1% were reported to be unmarried i.e. living together (4.9%), divorced (1.5%), single (32.6%), widows or widowers (5.2%) and married 20.9% i.e. married monogamous (19.3) and married polygamous (1.6%), for more details see table below.

Table 6: Civil status and employment

Civil Status	Percent
Married monogamous	19.3
Married polygamous	1.6
Living together	4.9
Divorced or separated	1.5
Single	32.6
Widow or widower	5.2
Missing	34.9
Total	100.0

Source: EICV 2005

The married persons were 0.971 (Table 2) less likely to get employed than unmarried persons; this is explained by the significant number of married women who are non-employed.

2.1.4. Tontine and employment

Tontine are community saving societies in which different community members come up together to mobilize savings for a common cause, from the EICV 2005, 7.1% belonged to tontines and of these 5.1% were reported to be employed whereas 2% were not employed.

Table 7: Tontine and employment

Tontine	Percent	Employed	Never worked for one hr
Never belonged to a tontine	92.9	75.7	17.2
Belonged to a tontine	7.1	5.1	2.0
Total	100.0	80.7	19.3

Source: EICV 2005

Persons who belonged to the community tontines are 1.143 (Table 2) more likely to get employed than persons who never belonged to these tontines.

2.1.5. Working in nonfarm work

Approximately 86.4% of the labour force within the age group 16-65 years are employed in agriculture or farm work. The female have a higher proportion of 48.2% and male 38.2%. For more details see table below. 13.6% are not working in farm work with the male having a proportion of 7.6% whereas the female have a proportion of 6%.

Table 8: Working in nonfarm work

Nonfarm	Frequency	Percent
Farm	4185416	86.4
Nonfarm Work	660578	13.6
Total	4845994	100.0

Source: EICV 2005, age 16 and 65 years

Table 9: Working in nonfarm work per gender

Category	Male No	Male Percent	Female No	Female Percent
Farm	1850061	38.2%	2335355	48.2%
Non farm	369159	7.6%	291420	6.0%
Total	2219220	45.8%	2626774	54.2%

Source: EICV 2005, age 16 and 65 years

The persons who were seeking for employment in nonfarm work were 5.842 (Table 2) times more likely to get employed than those who sought for employment in agriculture. This simply reflects a continued growth in the service and manufacturing sector and the continued attraction of labour from agriculture to these two latter sectors.

2.1.6. Doing non compensated work

Table 10: Doing non compensated work

Non compensated work	Frequency	Percent
Missing	22741	0.5
Compensated work	2646668	54.6
Non compensated work	2176585	44.9
Total	4845994	100.0

Source: EICV 2005

Approximately 44.9% of the persons in this age group (16-65 yrs) are doing non compensated work with the male having a higher proportion of 23.8% than the female 21.1%.

Table 11: Doing non compensated work per gender

Gender		Count	Percent
Male	Missing	13525	0.3%
	Compensated	1050846	21.7%
	Non compensated	1154849	23.8%
Male subtotal		2219220	45.8%
Female	Missing	9217	0.2%
	Compensated	1595822	32.9%
	Non compensated	1021736	21.1%
Female subtotal		2626774	54.2%
Overall total		4845994	100.0%

Source: EICV 2005

The individuals who were seeking for non compensated work were 46153 (Table 2) times more likely to get employed than those who were seeking for employed work.

2.1.7. Wages and employment

Whereas a large number of persons are employed, a rather insignificant proportion is working for wages with approximately 36% estimated to have worked for wages in the last 12 months prior to the survey.

Table 12: Wages and employment

Wages	Percent	Employed	Never worked for at least 1 hr
Never worked for wages	66.1	49.2%	16.8%
Worked for wages	33.9	31.6%	2.4%
Total	100.0	80.7%	19.3%

Source: EICV 2005

The relationship between employment and wages is positive with a magnitude of 1.833 (Table 2). The findings indicate that wage employment is 6.25 (Table 2) more times likely to attract employees (workers) than non waged work.

The female are dominating the wage working proportions and unpaid working proportions at all levels of occupation status i.e. wage farm, wage non-farm, independent farm and independent non-farm, for more details see table below.

Table 13: Wages and employment per gender

Occupation Status	Male%	Female%	Total%
Wage farm	47.6	52.4	100
Wage non-farm	45.0	55.0	100
Independent farm	45.1	54.9	100
Independent non-farm	46.8	53.2	100
Unpaid (family enterprise, apprentice, volunteer etc.)	44.0	56.0	100
Total	45.3	54.7	100

Source: EICV 2005

2.1.8. Education and employment

Education is a key socio-economic service responsible for the sustainable development and growth of Rwanda and all developing countries at large.

From the findings, 78.6% of persons in the age group 16-65 years attended school whereas 21.4% never attended school.

- Attended school and Employment

Table 14: Education and employment

Ever attended school	Percent	Employed	Never worked at least 1 hr
Never attended school	21.4	17.3%	4.1%
Attended School	78.6	63.4%	15.2%
Total	100.0	80.7%	19.3%

Source: EICV 2005

Of those who attended school 10.1% had their first year primary education incomplete, 58.6% had only primary education, 6.9% secondary education, 2.2% vocational education and 1% university education, for details see table below.

Table 15: Education level of employed people

Highest class attained	Frequency	Percent
First year primary incomplete	489805	10.1
Primary	2841849	58.6
Secondary	332039	6.9
Vocational	107985	2.2
University	35343	1.0
Missing	1038563	21.4
Total	4845585	100

Source: EICV 2005

The individuals who attended school are 0.979 (Table 2) times less likely to get employed than those who never went to school, partly because they are easily attracted in the agricultural sector that mostly employs less educated people.

2.1.9. Vocational training and employment

8.6% of persons in the age group 16-65 years had vocational training; of these only 2.9% identified their level of vocational training attainment.

Table 16: Vocational training and employment

Classification	Percent	Employed	Never worked for at least 1 hr
Never had vocational training	91.4	73.9%	17.5%
Had vocational training	8.6	6.9%	1.8%
Total	100.0	80.7%	19.3%

Source: EICV 2005

The highest proportion 1.3% had vocational training up to 3 years, 0.5% second year and first year, 0.3% never completed first year whereas 0.2% had vocational training in 4th, 5th, 6th and 7th year. For more specific details see table below.

Table 17: Vocational level of employed people who said they attended vocational courses

Highest class attained in vocational	Frequency	Percent
1st year vocational-unfinished	14708	0.3
1st year of vocational	24311	0.5
2nd year of vocational	25285	0.5
3rd year of vocational	63007	1.3
4th year of vocational	4611	0.1
5th year of vocational	2513	0.1
6th or 7th year of vocational	4034	0.1
Total	138470	2.9

Source: EICV 2005

The relationship between vocational training and employment appears to be negative with a magnitude of 0.007; this means that a vocational trained graduate is 0.994 (Table 2) less likely to get a job than those never. This could be explained by the development stage of TVET in Rwanda (2005), however we recommend a CPAF study and re-assessment of this finding after EICV 3. However this figure is not statistically significant and thus should not cause alarm.

2.1.10. University training and employment

From the significant magnitude (approximately 79%) that has attended school, only 0.9% in this age group has had access to university education. Of those who had university education, 0.6% is employed whereas 0.3% did not work for at least one hour in the week prior to the survey.

Table 18: University training and employment

University attendance	Percent	Employed	Not worked for 1 hr
Never attended university	99.1	80.1%	19.0%
Attended University	0.9	0.6%	0.3%
Total	100.0	80.7%	19.3%

Source: EICV 2005

The persons who attended university education are 1.082 (Table 2) times more likely to get employed than those who never attended university.

2.1.11. Dropout of school and employment

The school dropout rate within this age group is 36%, the female have the highest school drop out rate of 20% compared to that of the male 16%.

Table 19: Dropout of school and employment

School drop out	Percent	Employed	Never worked for 1 hr
Never dropped out	64.0	51.2%	12.7%
Dropped out	36.0	29.5%	6.5%
Total	100.0	80.7%	19.3%

Source: EICV 2005

Of those who dropped out of school, 29.5% are employed whereas 6.5% are unemployed. For more details see the above table and the table below.

Table 20: Dropout of school and employment per gender

School drop out	Gender	Absolute No	Percent
Never dropped out	Male	1430526	30%
	Female	1670327	34%
Subtotal		3100853	64%
Dropped out	Male	788694	16%
	Female	956447	20%
Subtotal		1745141	36%
Total		4845994	100%

Source: EICV 2005

Individuals who dropped out of school are 1.15 (Table 2) times more likely to get employed than individuals who never dropped out of school.

The explanation for this lies in the fact that agriculture is the major employer in the society and education (advanced) is not key to this cause.

2.1.12. Health and employment

Whereas health has various variables and indicators that can and indeed represent it, in this report the term health is limited to the disability prevalence of the persons between the age group 16-65 years.

Table 21: Health and employment

Health	Percent	Employed	Never worked for 1 hr
Not disabled	96.3	77.7%	18.6%
Disabled	3.7	3.1%	0.7%
Total	100.0	80.7%	19.3%

Source: EICV 2005

Thus, the disability prevalence is approximately 3.7%, with most of the people suffering from psychological problems (0.9%), learning disability (0.6%), hearing disability (0.4%), visual disability (0.3%) to mention but a few, for more details see table below.

Table 22: Type of disability

Suffer from a major disability	Frequency	Percent
No disability	4652577	96
Visual disability	12271	0.3
Motion disability	11329	0.2
Hearing disability	18637	0.4
Psychological problems	45983	0.9
Learning disability	29978	0.6
Insanity	5011	0.1
Other disability	58065	1.2

Suffer from a major disability	Frequency	Percent
Missing	12144	0.3
Total	4845994	100

Source: EICV 2005

The major causes of the disabilities is sickness (1%), accidents (0.6%), war and genocide (0.3%), congenital (0.4%), for more details see table below.

Table 23: Causes of disability

Cause of disability	Frequency	Percent
Congenital	17762	0.4
Sickness	48580	1.0
Accident	28583	0.6
War	12084	0.2
Genocide	7252	0.1
Mine	1169	0.0
Other	15984	0.3
Don't know	45910	0.9
Total	177324	3.7

Source: EICV 2005

The relationship between employment and disability was reported to be Zero with a magnitude of 0.00; the level of disability in society does not affect the employment status of people.

2.1.13. Location and employment

Approximately 82% of persons in age group 16-65 years are located in rural areas whereas 18% are located in urban areas. Of those who are in rural areas, 68.2% are employed, and 13.8% are unemployed, whereas in urban areas, 12.5% are employed and 5.4% never worked for at least one hour in the week prior to the survey.

Table 24: Location and employment

Location	Employed	Never worked for 1 hour
Urban	12.5%	5.4%
Rural	68.2%	13.8%
Total	80.7%	19.3%

Source: EICV 2005

The persons located in rural areas are 2.535 (Table 2) times more likely to get employed than those persons in urban areas with a p-value of 0.000, thus making it statistically significant.

2.1.14. Migration and employment

The migration rate (both from within and outside Rwanda) is approximately 32.9%, those that migrated, 26.3% are employed whereas 6.7% are unemployed.

Table 25: Migration and employment

Migration	Percent	Employed	Never worked for 1 hr
Never migrated	67.1	54.4%	12.6%
Migrated	32.9	26.3%	6.7%
Total	100.0	80.7%	19.3%

Source: EICV 2005

Table 26: Migration and employment per age group and province

Province	1-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	TOTAL
Kigali city	1.10%	18.70%	20.30%	19.10%	11.20%	8.70%	8.70%	5.50%	3.60%	1.50%	1.50%	100.00%
Southern	2.40%	16.70%	17.70%	11.90%	11.10%	10.60%	10.60%	7.80%	4.80%	3.60%	2.80%	100.00%
Western	3.70%	19.60%	20.80%	11.30%	10.70%	6.60%	8.30%	8.60%	5.00%	3.30%	2.20%	100.00%
Northern	2.60%	14.50%	21.90%	16.10%	12.50%	10.30%	9.50%	3.90%	5.00%	0.30%	3.40%	100.00%
Eastern	1.50%	14.60%	23.10%	13.40%	11.90%	12.80%	4.80%	4.20%	5.30%	6.40%	2.00%	100.00%
TOTAL	2.40%	17.80%	20.10%	14.00%	11.20%	9.00%	8.80%	6.90%	4.60%	3.00%	2.20%	100.00%

Source: EICV 2005

At national level (15 years and above); distribution of migrants varies in different regions within the respective age groups with 21-25 age group recording the highest migration rates at 20.1% in the nation, this is followed by 17.8% of the 16-20 age group while the lowest migration rate is shown in the 61-65 age groups recording 2.2% of the total migration rate.

In the provinces where they migrated to , Western region dominates the migration rates in the age groups 1-20 years with 3.7% (1-15 years), 19.6% (16-20 years) as well as 46-50 years (8.6%), Northern province dominates 21-25 years (21.9%), 31-35 years (12.5%) as well as 61-65 years (3.4%), Kigali city dominates in the 26-30 years (19.1%), Eastern province dominates 36-40 years (12.8), 51-60 years with 5.3% for 51-55 age groups and 6.4% for 56-60 age group and Southern region only dominates in the 41-45 age group with 10.6%.

The relationship between migration and employment is such that the individuals who migrated are 1.144 (Table 2) times more likely to get employed than those individuals who never migrated. And this is statistically significant since the p-value 0.000 is below 0.05.

2.2. Formal and informal sector employment

The terms formal and informal have generated a lot of debate within the academic and practical world with one specific aim though, to get a comprehensive definition of formal employment. It is ranged from covering all productive taxpaying enterprises, to all those viable for tax payers, all registered social security enterprises and any business entity that is at least registered by local administrative units and are indeed viable for taxpaying.

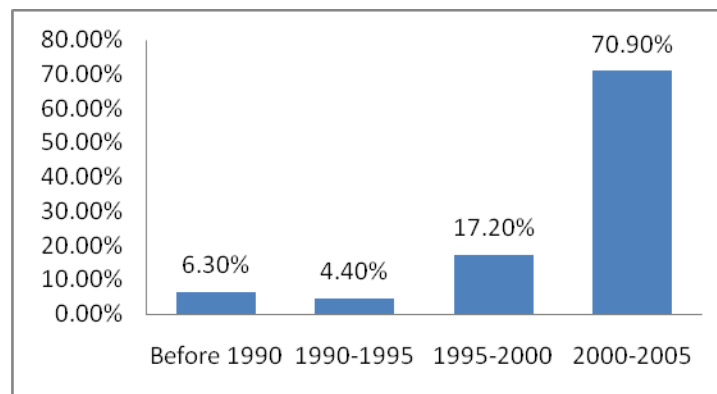
One thing is clear; any productive entity that has the ability to pay taxes within specified geographical limits should belong to the formal sector whereas any productive entity that is not registered by any authority (Social Security, Revenue Authority and Local Government) is deemed to belong to the informal sector.

The following section gives an insight into the numbers of CSR, which are deemed suitable (though not comprehensive because the companies are not recorded as a result of a census) to give an insight on the actual numbers of the productive enterprises (employers) in the formal sector in Rwanda and the respective employees.

Informal sector

By large this is the major employing sector in Rwanda just like in many developing countries, despite the employed being the largest, it is equally been steadily growing over the years, a reflection of high subsistence productivity and local at least very small productive units that generate income but can not be tracked by government. The following figure is generated by the NISR and gives an insight on the actual informal sector magnitude and proportion.

Figure 1: Evolution of informal sector



Source: bisRapport_informelbi_final.pdf, Graphic 3.6.1

Formal sector

Those productive entities that pay taxes (VAT) are considered to be in the formal sector according to EICV2 while those not registered and does not pay taxes (V.A.T) are considered to be informal sector entities

2.2.1. Employers

The current (June 2010) records figures indicate that CSR has a registered number of employers ranging between 3,476 in 2002 and 6,295 in 2010. The private sector has most

employers within the same time frame with 2,742 in 2002 and 5,078 in 2010 in comparison to the public sector which has a magnitude of 734 in 2002 and 1,217 in 2010. For more details see table below.

2.2.1.1. Employment in the formal sector

Table 27: Employment in the formal sector

Year	Public		Private		TOTAL	
	Employers	Employees	Employers	Employees	Employers	Employees
2002	734	108697	2742	41047	3476	149744
2003	759	101928	3011	46234	3770	148163
2004	709	70393	3363	54291	4072	124684
2005	719	72317	3637	58162	4357	130479
2006	711	92214	3883	62398	4594	154612
2007	751	95228	4334	67727	5085	162955
2008	1241	69577	5180	74482	6421	144059
2009	1389	83382	5685	80992	7074	164374

Source: CSR, public, private and total employers and employees average per year,

There are more employers in the private sector (ranging from 2742 in 2002 to 5685 in 2009) than the public sector (ranging from 734 in 2000 to 1389 in 2009). For more details see table 27

2.2.1.2. Distribution of enterprise size by province and year

Kigali is the capital city of Rwanda with predominately the best infrastructure ranging from roads, energy, water to mention but a few, in the country thus making it the most suitable centre for non agricultural economic productivity due to its extensive economies of scale.

Large scale firms (employing over 30 persons), middle income firms (employing between 3 -30 persons) and small scale firms (employing between 1-2 persons) are mainly located in Kigali city. Whereas the magnitude difference between other provinces is not significantly large, Southern province, Western Province, Eastern and Western Province have more slightly more numbers of the firms within their respective categories respectively. For more details see table below.

Table 28: Distribution of enterprise size by province and year

	Employees	2002	2003	2004	2005	2006	2007	2008	2009	2010
Eastern	1 to 2	408	429	454	448	438	490	777	970	216
	3 to 30	948	1067	1250	1376	1420	1615	2000	1869	395
	> 30	183	198	136	141	117	143	189	220	57
Kigali city	1 to 2	1529	1671	1935	2200	2618	3377	4672	5643	1204
	3 to 30	3380	3567	3893	4164	4354	4622	5246	6032	1450
	> 30	1118	1208	1263	1273	1319	1384	1418	1591	385
Northern	1 to 2	551	620	694	743	757	819	1483	1596	310
	3 to 30	1277	1362	1564	1758	1819	1770	2056	2110	461
	> 30	361	389	273	237	211	257	318	344	78

	Employees	2002	2003	2004	2005	2006	2007	2008	2009	2010
Southern	1 to 2	687	744	815	835	857	1101	1603	1846	379
	3 to 30	1599	1733	1856	2043	2133	2162	2416	2502	566
	> 30	424	426	343	283	266	272	296	343	80
Western	1 to 2	308	393	429	457	510	574	1054	1102	290
	3 to 30	933	1072	1239	1348	1439	1616	1948	1889	374
	> 30	197	199	144	120	117	139	207	237	50
TOTAL		13903	15078	16288	17426	18375	20341	25683	28294	6295

Source: CSR

2.2.1.4. Formal sector companies by economic sector

The service and manufacturing sectors dominate the formal sector records of the Rwanda Social Security Fund, with the “suppliers, collection, social and human resource services” having a magnitude of 3,652 in 2009, “construction and public work” (406) “industrial manufacturing” (214), “extracting industries” 77 to mention but a few. The agricultural sector has a current number of 182 companies which have steadily increased from 79 in 2002. Despite its being a major employer in the country, most of its employees are in the informal sector or at least are not captured within the scope of the social security body

Table 29: Formal sector companies by economic sector

	2002	2003	2004	2005	2006	2007	2008	2009
Suppliers, collection & social and human ressource services	2166	2325	2400	2528	2586	2748	3415	3652
Agriculture, hunting, forestry & fishing	79	92	94	97	108	123	153	182
Banking, assurances, real estate, financial services	255	254	276	307	328	375	480	421
Construction and public work	175	222	282	349	403	435	450	406
Industrial manufacturing	123	132	151	153	154	178	210	214
Extracting industries	125	126	138	134	128	83	94	77
Wholesale and retail trade, restaurants & hotels	452	505	601	641	683	772	931	1130
Transport, storage and communications	60	68	75	75	82	110	147	158
Electricity, gas and water	32	34	36	43	44	34	44	41
Unspecified	9	14	21	30	80	229	498	795
TOTAL	3476	3770	4072	4356	4594	5085	6421	7074

Source: CSR

2.2.2. Employees

The pattern within employers is not portrayed in employees with the private sector companies registering an approximate magnitude of 41,047 in 2002 and 77,112 in 2010 whereas the public sector registered a magnitude of 108,697 in 2002 and 43,538 in 2010. The public sector is the major employer in Rwanda; however the numbers being employed by the public sector are steadily and significantly falling over the respective years a fact that explained by government's intent to leave a significant proportion of the utilization of the factors of production to the private sector; for more details see the above table.

2.2.2.1. Formal sector new registrations by gender

Whereas in Rwanda, the female are the majority and have a higher employment level in the country, the newly registered employees by the social security body are dominated by the male over the years since 2002 up to 2009 with a double proportion between the two genders in favor of the male.

Table 30: Formal sector new registrations by gender

Year	Male	Female
2002	9452	4115
2003	8535	3750
2004	8781	3583
2005	9451	4134
2006	12212	5651
2007	16973	7085
2008	25156	8954
2009	25435	9277

SOURCE: CSR

A key finding here is the significant disparity between male and female employment in favor of the male, this is contrary to the MDG targets which call for equal opportunities for the two gender.

2.2.2.2. Formal sector new registration of employees by age group

Table 31: Formal sector new registration of employees by age group

Year of registration	Under 18	18 to 25	26 to 35	36 and older
2002	52	7064	4679	1772
2003	63	6248	4297	1677
2004	46	6318	4274	1726
2005	35	6819	5153	1578
2006	36	8015	7809	2003
2007	36	10557	10452	3013
2008	120	14902	14111	4977
2009	109	14195	14700	5723

Source: CSR

In the table above, 18 to 25 age bracket registers the highest number at CSR compared to other age groups from 2002 to 2008. Those people under 18 are the lowest with only 109 registered at CSR in 2009.

2.2.2.3. Formal sector new registrations by nationality

The records of formal sectors are a combination of persons of different nationalities ever registered to CSR, whereas Rwandese are the majority with a magnitude of 300284, there are other persons from the region (Burundi (8312), Uganda (11161), Kenya (835) and Tanzania (1898)) and beyond the region who are registered with CCSR, for more details see table below

Table 32: Formal sector new registration by gender and nationality

Country	Male	Female	Total
Burundian	5073	3239	8312
Kenyan	607	228	835
Rwandan	225194	75076	300284
Tanzanian	1358	540	1898
Uganda	7619	3540	11161
Other	15928	4391	20319
Grand Total	255779	87014	342809

Source: CSR

2.2.2.4. Registered employees from 2002 to today by economic sector and nationality

Table 33: Registered employees from 2002 to today by economic sector and nationality

	Burundian	Kenyan	Rwandan	Tanzanian	Uganda	Other	TOTAL
Suppliers, collection & social and human resource services	2685	347	79902	765	4595	7605	95899
Agriculture, hunting, forestry & fishing	68	6	3992	11	85	100	4262
Banking, assurances, real estate, financial services	521	99	5264	42	686	739	7351
Construction and public work	246	70	18599	88	348	666	20017
Industrial manufacturing	182	23	8278	46	270	353	9152
Extracting industries	16	1	5679	3	26	93	5818
Wholesale and retail trade, restaurants & hotels	557	160	11923	105	853	1054	14652
Transport, storage and communications	306	65	2791	38	370	340	3910
Electricity, gas and water	67	6	1098	5	43	83	1302
Unspecified	117	24	7695	20	198	281	8335
TOTAL	4765	801	145221	1123	7474	11314	170698

Source: CSR

2.2.2.5. Employment by company size

The medium scale companies (employing 3-30 employees) are the majority throughout the years with a magnitude of 3,601 in 2009 compared to 2,034 in 2002. This is followed by the small scale enterprises (employing 1-2 employees) whose 2009 magnitude is currently reported to be 2,789 in comparison to the 871 in 2002. And the large scale companies which are employing over 30 employees are currently 684 and have increased from 571 in 2002. For more specific details see table below which describes the employers' total, employees total, number of employees per company size.

Table 34: Employment by company size

Year	Employers	Employees	1-2 Employees	3-30 Employees	> 30 Employees
2002	3476	149744	871	2034	571
2003	3770	148163	964	2200	605
2004	4072	124684	1082	2451	540
2005	4357	130479	1171	2672	514
2006	4594	154612	1295	2791	508
2007	5085	162955	1590	2946	549
2008	6421	144059	2397	3417	607
2009	7074	164374	2789	3601	684

Source: CSR

2.2.2.6. Migration matrix**Table 35: Migration matrix**

Working province	Provinces of birth						Total
	Eastern	Kigali city	Northern	Outside Rwanda	Southern	Western	
Eastern	8455	1422	1513	2185	1210	671	15456
Kigali city	9258	24420	13362	18996	21783	13252	101071
Northern	367	1296	14566	1279	521	1569	19598
Southern	389	726	569	1111	15535	807	19137
Unknown	0	0	3	1	1	2	7
Western	115	391	1458	729	611	12125	15429
TOTAL	18584	28255	31471	24301	39661	28426	170698

Source: CSR

From the above tables, it shown that out of 18584 people who were born in eastern province registered with CSR, a higher number is employed in Kigali city with 9258 being employed in Kigali city while eastern province coming at the second place with 8455 and western province employs the lowest people who were born in eastern province that is 115 people, Kigali city employs more of its people, that is those that were born in Kigali city with 24420 people being employed in Kigali out of 28255 registered at CSR, it also employees lowest number of people in western province, northern province employees most of its people who were born in that region with 14566 people being employed in northern province out of 31471. It is also shown that Northern Province has the second largest number of people registered under CSR after southern province.

Southern province has the largest number of people who were born in that region being in CSR and out of 39661 people, 21783 are employed in Kigali city followed by 15535 in that same region, western region also employees more of its people in Kigali city with 13252 out of 28426 being employed in Kigali city. Of all those people who were born outside Rwanda, Kigali employees the biggest number with 18996 out of 24301, while western employees the lowest

number at 729. Overall Kigali employees the largest number while western employ the lowest number according to CSR statistics.

2.2.2.7. Employees declared by employers per economic sector and year

Table 36: Employees declared by employers per economic sector and year

Economic sector	2002	2003	2004	2005	2006	2007	2008	2009
Suppliers, collection & social and human ressource services	124587	120195	91151	95887	117793	123156	98948	110824
Agriculture, hunting, forestry & fishing	2370	2539	2694	2955	2948	2650	2854	3326
Banking, assurances, real estate, financial services	4492	4456	5099	6308	6556	7078	7767	9038
Construction and public work	3434	4892	7858	6929	7188	7827	6186	6170
Industrial manufacturing	5191	5597	6186	6181	6343	6315	6951	6672
Extracting industries	1808	1976	2088	2111	2253	2039	2874	3211
Wholesale and retail trade, restaurants & hotels	4930	5412	6092	6747	7475	8305	9353	10603
Transport, storage and communications	1814	1989	2213	2237	2135	2317	2811	2695
Electricity, gas and water	1072	1054	1240	1018	1323	1875	2017	1306
Unspecified	46	55	64	106	601	1393	4299	10532

2.2.2.8. Distribution of newly registered employees by province of work and year

Table 37: Distribution of newly registered employees by province of work and year

Registration year	Northern	Kigali city	Eastern	Southern	Western	Unknown	Total
2002	1453	7633	1142	2163	1171	0	13562
2003	1172	7891	885	1328	1007	0	12283
2004	1090	8273	890	1171	940	0	12364
2005	1208	8739	1094	1479	1061	3	13584
2006	1893	10792	1721	1810	1643	1	17860
2007	2613	14775	2157	2537	1975	1	24058
2008	4284	19522	3673	3324	3305	2	34110
2009	5023	18777	2994	4246	3687	0	34727
Total	18736	96402	14556	18058	14789	7	162548

2.2.2.9. Newly registered employees by economic sector and year

Table 38: Newly registered employees by economic sector and year

Economic sector	2002	2003	2004	2005	2006	2007	2008	2009
suppliers, collection & social and human resource services	9448	7788	7245	9092	12910	15078	18523	19500
Industrial manufacturing	573	647	602	584	553	1325	1976	2193
Agriculture, hunting, forestry & fishing	133	292	303	289	311	349	780	1651
Banking, assurances, real estate, financial services	464	401	677	809	763	1144	1408	1344
Construction and public work	1692	1809	1898	1109	1356	2908	4828	3860
Extracting industries	274	286	310	229	274	690	2021	1482
Wholesale and retail trade, restaurants & hotels	748	803	890	935	1261	1999	3513	3631
Transport, storage and communications	194	211	293	283	352	383	742	865
Electricity, gas and water	36	46	146	251	78	180	313	197
unspecified	0	0	0	3	2	2	6	4
TOTAL	13562	12283	12364	13584	17860	24058	34110	34727

In the table above, it is evident that suppliers, collection and social and human resource services, registers the highest number at CSR compared to other sectors of the economy, of the sectors, its only electricity, gas and water that registers the lowest number. Out of the total registered, 2009 has the highest number at 34727 compared to other previous years.

2.2.2.10. Distribution of newly registered employees per nationalities and registration year

Table 39: Distribution of newly registered employees per nationalities and registration year

	2002	2003	2004	2005	2006	2007	2008	2009	Total
Rwandan	11334	10093	10104	11617	14746	20793	29365	30184	138236
Burundian	458	467	507	393	590	570	860	730	4575
Ugandan	546	635	696	529	801	950	1476	1412	7045
Tanzanian	73	104	143	80	205	151	166	165	1087
Kenyan	18	22	33	45	49	95	199	268	729
Other	1138	964	881	921	1472	1499	2044	1968	10887
Total	13567	12285	12364	13585	17863	24058	34110	34727	162559

Source: CSR

2.2.2.11. Nationalities of people ever registered 2002 and later per working province

Table 40: Nationalities of people ever registered 2002 and later per province

	Kigali city	Eastern	Southern	Northern	Western	Unknown	Total
Rwandan	81243	13099	17999	18281	14593	1	145216
Burundian	3877	437	311	98	42	1	4766
Ugandan	6104	980	147	187	56	1	7475
Tanzanian	833	238	21	28	3	1	1124
Kenyan	757	14	11	17	2	1	802
Other	8257	688	648	987	733	134	11447
Total	101071	15456	19137	19598	15429	139	170830

Source: CSR

From the above tables, it is indicated that after Rwandese, Ugandans take the lead in the employment aspect in four provinces of Kigali city, eastern province, Northern Province and western province. Its only southern province that Burundians come in the second place after Rwandese otherwise they occupy the third position after Rwandese and Ugandans. Kenyans come last in the employment in Rwanda as they record the lowest number in CSR compared to other countries while Tanzanians come second last compared to other countries.

Chapter 3: Recommendations and conclusion

- Massive secondary training
- The government needs to establish why many students cant join secondary schools despite a large influx in primary school
- The dropout rate especially in primary schools has to be examined and indeed addressed
- Massive University training
- Take children to school at all levels
- Micro finances and loans to increase productivity of work and wage employment
- Increase vocational training

Annexes

Table 41: Distribution of enterprises by region

		2002	2003	2004	2005	2006	2007	2008	2009
Kigali city	suppliers, collection & social and human resource services	753	790	822	855	877	935	1076	1318
	Agriculture, hunting, forestry & fishing	21	26	26	29	34	40	48	51
	Banking, assurances, real estate, financial services	110	109	124	140	156	198	289	278
	Construction and public work	115	131	159	200	249	278	305	290
	Industrial manufacturing	79	88	102	104	106	121	140	141
	Extracting industries	36	32	32	32	31	30	28	29
	Wholesale and retail trade, restaurants & hotels	321	354	417	453	498	574	727	922
	Transport, storage and communications	59	67	71	70	77	104	138	148
	Electricity, gas and water	11	14	15	19	20	22	34	32
	Unspecified	3	4	5	9	26	45	49	109
Eastern	suppliers, collection & social and human ressource services	296	330	350	374	372	403	516	515
	Agriculture, hunting, forestry & fishing	11	11	9	7	10	18	25	29
	Banking, assurances, real estate, financial services	35	34	36	39	39	36	37	26
	Construction and public work	9	12	14	20	21	20	20	18
	Industrial manufacturing	3	3	5	5	3	6	7	10
	Extracting industries	3	4	5	5	4	4	6	7
	Wholesale and retail trade, restaurants & hotels	22	24	34	34	30	32	33	33
	Transport, storage and communications	0	0	1	1	1	1	3	2
	Electricity, gas and water	5	5	6	7	7	6	4	3
	Unspecified	1	1	1	1	8	37	91	123
Southern	suppliers, collection & social and human ressource services	523	557	562	583	591	607	734	764

	Agriculture, hunting, forestry & fishing	20	20	21	23	25	25	34	40
	Banking, assurances, real estate, financial services	45	45	45	49	48	46	47	33
	Construction and public work	23	29	38	46	48	50	47	39
	Industrial manufacturing	23	23	25	25	26	27	26	24
	Extracting industries	1	1	0	1	1	0	1	1
	Wholesale and retail trade, restaurants & hotels	35	43	50	46	45	52	54	59
	Transport, storage and communications	0	0	2	1	1	1	2	2
	Electricity, gas and water	7	7	6	7	7	3	3	2
	Unspecified	1	4	6	9	23	72	132	209
Northern	suppliers, collection & social and human ressource services	344	369	371	398	395	406	540	537
	Agriculture, hunting, forestry & fishing	12	15	15	17	19	20	26	32
	Banking, assurances, real estate, financial services	35	35	39	44	47	50	59	45
	Construction and public work	18	26	41	52	54	56	53	39
	Industrial manufacturing	11	10	10	11	11	13	26	27
	Extracting industries	70	70	73	72	68	28	27	22
	Wholesale and retail trade, restaurants & hotels	51	61	73	78	79	80	82	82
	Transport, storage and communications	1	1	2	3	3	3	2	4
	Electricity, gas and water	4	4	4	5	6	2	3	3
	Unspecified	2	3	5	6	16	55	149	222
Western	suppliers, collection & social and human ressource services	251	279	295	319	351	397	549	519
	Agriculture, hunting, forestry & fishing	16	20	22	21	20	20	21	31
	Banking, assurances, real estate, financial services	30	31	32	36	38	46	49	40
	Construction and public work	11	25	31	31	31	31	25	20
	Industrial manufacturing	7	9	9	8	9	11	11	12

	Extracting industries	16	21	27	25	25	21	33	18
	Wholesale and retail trade, restaurants & hotels	23	24	27	31	32	35	35	34
	Transport, storage and communications	0	0	0	0	0	1	2	3
	Electricity, gas and water	5	5	6	6	5	1	1	1
	Unspecified	2	2	4	5	7	20	77	133

Source: CSR

From the table above, it is indicated that suppliers, collection and social and human resource services dominate in all provinces of the nation; with Kigali city recording the highest number of 1318 in 2009 compared to eastern which has the lowest at 515 in 2009 respectively.