## **REPUBLIC OF RWANDA**



# MINISTRY OF FINANCE AND ECONOMIC PLANNING NATIONAL CENSUS SERVICE

P.O.Box. 6139 KIGALI ; Phone : +250-519562/64/66 - 514931/519258 Fax : +250-519114 ; E-mail : snr@rwanda1.com

3<sup>rd</sup> CENSUS OF POPULATION AND HOUSING OF RWANDA ON AUGUST 15<sup>th</sup> 2002

## A SYNTHESIS OF THE ANALYSES OF THE 2002 CENSUS OF RWANDA

## This report has been prepared by:

MUGABO Damien , Demographer, Coordinator of 3<sup>rd</sup> Census of Population and Housing

MUTIJIMA NKAKA Prosper, Demographer, Chief of Technical Operations Service

Dr. LAMLENN B. Samson ,Demographer, International Expert in Census

#### **PREFACE**

A Population and Housing Census is usually a huge complex operation designed to gather and analyse socio-demographic and socio-economic data needed for the planning of the development of a country.

The information gathered during this exercise ranges from essentially demographic details (relating to fertility, mortality and migration), to those relating to economic activity and household living conditions, as well as those concerning the social and cultural aspects of the population such as level of education and literacy. Details on the size, situation and characteristics of vulnerable persons are equally gathered in the process.

In view of the fact that the data from the second census of Rwanda of 1991 had become outdated on account of both the time that had elapsed since then and due to the disruptive effects of the war and the genocide of the early 1990s which entailed considerable damage of life, property and basic socio-economic infrastructure, the new Government of Rwanda felt the necessity for another General Census way back in 1999. This desire became a reality with the conduct of the 3<sup>rd</sup> General Census of Population and Housing in 2002. This unavoidable delay was due to the need to ensure that the population had properly settled down within the entire national territory after the massive displacements of the 1990s.

The main objective of this 3<sup>rd</sup> census was to gather up-to-date and reliable data that could be immediately utilisable for the reconstruction of the country and for the more consistent planning towards a sustainable socio-economic development of the country.

It is thus with much pleasure and satisfaction that the government of Rwanda is officially making available to various users, the detailed results obtained from this census, whether they be in the form of raw statistical data or of in-depth analyses conducted by our national experts under the supervision of the National Census Service.

I wish to use the occasion of this official publication of the census results, to express the gratitude of the Government of Rwanda, to all those who directly or indirectly contributed, in one way or the other, to the success of the various phases of this complex exercise.

Our sincere thanks must go primarily to the entire population of Rwanda for its massive, active and enthusiastic participation, both before and during the field data collection phase of the census. Its generally hospitable disposition played a very crucial role in the success of the entire census exercise.

We are also grateful to acknowledge the active collaboration of all the state institutions at various levels, as well as that of the Civil Society, which never hesitated to provide the much needed assistance to the various technical services of the census, particularly, by sensitizing the population to ensure its full participation during this all-important and evidently enriching national exercise.

The conduct of the 3<sup>rd</sup> General Census also benefited from various forms of assistance from our external development partners and friends. Among these, we are pleased to mention the Commission of the European Union, the Kingdoms of Great Britain and of the Netherlands, the United Nations Population Fund (UNFPA) as well as the Institute for Demographic Training and Research (IFORD) of Yaounde. The timely and usually spontaneous material, technical and financial assistance which they offered contributed tremendously to the success of this exercise which should be the source of legitimate satisfaction for the Governments of these countries and for these individual institutions.

The Government of Rwanda, once more, wishes to use the occasion of the publication of this report to express its sincere gratitude to them for their collaboration.

Last but not least, I wish to hereby express my satisfaction and to congratulate the technical team of the National Census Service, as well as those who participated during the field data collection, processing and analyses phases, for their diligence and hard work in order to ensure this resounding success of the 3<sup>rd</sup> census of our country.

Done in Kigali, on the 10<sup>th</sup> of February 2005.

Dr Donald KABERUKA

Minister of Finance and Economic Planning

#### **FOREWORD**

The field data collection for the 3rd Census of Population and Housing, sanctioned by Presidential decree N° 43/01 of the 26/12/1999 later modified by the Presidential decree N° 28/01 of the 10/11/2000 was carried out all over the entire national territory from the 16<sup>th</sup> to the 30<sup>th</sup> of August 2002. It required the mobilisation of major sectors of the nation such as national and local authorities, teachers, the national police and security services, etc... In all, some 12000 field staff were deployed as enumerators, team leaders, controllers and supervisors to ensure the success of this crucial phase of the project.

The organisation and the technical and administrative supervision of all the phases of this project was entrusted on the National Census Service as the technical executing body being directly supervised in turn, by the National Census Commission presided over by the Ministry of Finance and Economic Planning. The National Census Service, in addition to the actual execution of all the phases of this project had the responsibility of initially conceiving its overall design and the calendar of each of its main activities and ensuring that they were scrupulously respected.

This complex exercise involved many phases, including the following main ones in chronological order:

- Census mapping which enabled the clear identification of all administrative boundaries of the country which were mapped. The entire territory was subsequently divided into enumeration areas;
- The census questionnaire design done after extensive consultations with future potential users of information to be collected
- The Pilot Census whose main purpose was to pretest the questionnaire and the feasibility of major field procedures;
- The sensitisation of all local authorities and of the population as a whole followed by the training of the enumerators, team leaders and field controllers of the census:
- The actual field data collection;
- Data processing coding, data entry and data file cleaning;
- The tabulation, in-depth analyses, publication and dissemination of the results of the census.

This synthesis report which has been produced at the tail end of the in-depth analyses exercise attempts a summary of the major findings (though not all of them) from the various thematic reports such as to provide an overview of the overall socio-economic situation of the country.

The themes chosen for in-depth analyses took into consideration the major areas of national life where data needs and information had been deficient. National expertise in the various domains was then recruited to carry out the analyses. The following 16 themes have been covered by the in-depth analyses:

- 1) Population Size and Distribution
- 2) Socio-cultural Characteristics of the population
- 3) Marital Status and Nuptiality
- 4) Fertility
- 5) Mortality
- 6) Migration and urbanisation
- 7) Characteristics of ordinary households
- 8) Housing and its environment
- 9) Educational characteristics of the population
- 10) Economic Activity
- 11) The situation of women in Rwanda
- 12) The situation of elderly persons in Rwanda
- 13) The situation of handicapped persons
- 14) The situation of children in Rwanda
- 15) Projections of the Population of Rwanda 2002-2022
- 16) The standard of living of households in Rwanda

The successful completion of the analyses of each theme required the production of theme-specific tabulations, the calculation of basic indicators and the interpretation of the findings backed by appropriate documentation and under the diligent supervision of both national and international expertise. In this direction a number of workshops were organized to ensure consistency in the approaches in the analyses and interpretation of the results, sharing of findings across related themes and harmonization of the pattern of reporting. After almost a year of intensive work, these analyses have been finalized and this synthesis report bears provides a brief summary of the major findings. The public is invited to consult the individual thematic reports which shall soon be published by the National Census Service, for more details on these results and for more exciting information.

The present synthesis report provides a summary of the major findings from the 3<sup>rd</sup> census of all the reports in some 12 main sections which do not necessarily follow the order presented above but rather follow a logical chronology of aspects of the country's demography and socio-economic life. It is thus that it begins with an overview of a number of key methodological and technical issues, followed by a presentation of the size, structure, spatial distribution and the dynamics of the population in its 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> sections. The 5<sup>th</sup> to the 7<sup>th</sup> sections focus on the socio-cultural and socio-economic aspects of the population while the 8<sup>th</sup> and 9<sup>th</sup> sections highlight main findings relating to characteristics of households and housing in Rwanda. While the 10<sup>th</sup> section provides details on the household standards of living, the 11<sup>th</sup> focuses mainly of the characteristics of vulnerable subpopulations such as elderly persons, children, women and handicapped persons. The report ends with a presentation of summaries of the projections of the population of Rwanda for the next 20 years (2002-2022).

## **TABLE OF CONTENTS**

Prefa	ce	i
	word	
	e of Contents	
	of Tables	
List o	of figures	xii
	COME METHODOL COLONI DETAIL CON THE COCO CENCHO	
1.	SOME METHODOLOGICAL DETAILS ON THE 2002 CENSUS	4
	OF RWANDA	1
11.	Overview of data collection and processing aspects	1
	Overview of data collection and processing aspects  Evaluation of Census coverage and of the quality of data	
1.4 .	Evaluation of ochsus coverage and of the quality of data	_
2.	SPATIAL DISTRIBUTION OF THE POPULATION	3
	: Resident Population by Province	
	1:The distribution of the population by province	
	: Evolution of population in the provinces	
2.2	: Population Density: Population densities in Rwanda in 2002	. 5
	<ul><li>: Evolution in population densities by province between 1978 and 2002</li><li>: Resident Population according to place of residence</li></ul>	
	: Overall situation	
	: Urban population growth	
2.0.2	. Croair population growth	. 0
3. T	HE SEX AND AGE STRUCTURE OF THE POPULATION	. 10
3 1	: The Sex and Age Structure – Analysis of Sex Ratios	10
	: The Age Structure of the population.	
	: Population Age Pyramids : In Five-Year Age Groups	
	: Population structure according to conventional broad age groups	
	: Mean and Median Ages of the Population	
4 <b>T</b> II	E DYNAMICS OF THE DODIN ATION OF DWANDA.	47
4. IH	E DYNAMICS OF THE POPULATION OF RWANDA:	. 17
4.1	: The evolution of the population of Rwanda	17
	: Marital Status and Nuptiality	
	: The Marital Status distribution of the Population	
	: Nuptiality of never married persons	
	: Levels and Trends of Fertility	
	: Cumulated Fertility – Children ever born (Mean Parities)	
	: Crude Birth Rate and Current Fertility	
	: Levels and Trends of Mortality	
	: Levels of Infant and Child mortality	
4.4.Z	: Levels of overall mortality	. 20
	2 : Crude Death Rates for Rwanda	
	: Migration Trends in Rwanda	
	: Resident population by migratory status (lifetime migration)	
	tostastic population by migratory otation (motimo migration)	50

4.5.3	: Resident population by migratory status (recent migration) : Origin of migrants a. Origin if lifetime migrants b. Origin of recent migrants : Place of Destination of Migrants a. Place of Destination of lifetime migrants b. Place of destination of recent migrants in Rwanda	30 30 32 34 34
5.	SOCIOCULTURAL CHARACTERISTICS OF THE POPULATION	37
5.2 : 5.3 :	Introduction Religious Affiliation of the Population Languages Spoken by the Population Population Structure by Nationality	39 41
6.	LITERACY AND EDUCATIONAL ATTAINMENT CHARACTERISTICS OF THE POPULATION	45
6.2 6.3 6.3.1 6.3.2	: Introduction : Level of literacy : School Attendance : The population which has ever attended/is attending school : Schooling rates : Highest Level of Education Attained	46 47 47 49
7.	ECONOMIC ACTIVITY CHARACTERISTICS OF THE POPULATION OF RWANDA	51
7.2 7.2.1 7.3 7.3.1	: Introduction : Characteristics of the Active and Inactive Population : Economic dependency ratios : Characteristics of the Economically Active and Employed population : The Type of Employment : Economic Activity Status	51 53 54 55.
8.	CHARACTERISTICS OF ORDINAIRY HOUSEHOLDS IN RWANDA	58
8.2 : 8.3 :	Introduction The total number of ordinary households and the population living in them The Size of Ordinary Households	59 59
	The composition of ordinary households	62

9. CHARACTERISTICS OF HOUSING IN RWANDA AND LIVING CONDITIONS	66
9.1 : The Distribution of Housing Units by the type of Housing	. 66
9.2 : The distribution of housing units by type of housing Structure	67
9.3 : The distribution of households by type of roof	. 67
9.4 : The distribution of households by type of materials for the outside walls	68
9.5 : Materials for the Floor	
9.6 : The Size of housing units	
9.7 : Main Source of Water Supply	
9.8 : The Main Source of Energy for Lighting	
9.9 : Main source of energy for cooking	
9.10 : The type of Toilet Facilities	
9.11: The mode of occupancy of the housing units	
9.12 : Availability of equipment for receiving information	
9.14 : Availability of a means of transport (vehicle, motorcycle, bicycle)	75 76
5.14 . Availability of a means of transport (veriole, motorcycle, bloycle)	. 70
10. THE STANDARD OF LVING OF THE POPULATION	. 78
10.1 : The Standard of Living by province and by rural/urban residence	78
10.1.1 : The variation in the standard of living of households by province	
10.1.2: Variation of the Household Standards of Living by Place of Residence	. 78
10.2 : Characteristics of household heads by standard of living	
category of their households	79
10.2.1 : Standard of living by level of education of household head	79
10.2.2 : The impact of the standard of living of the household on	
primary school attendance	
10.2.3 : Household Living Standards and Economic Activity	
10.2.4 : Standard of Living by Sector of Activity of the Household Head	83
11. CHARACTERISTICS OF VULNERABLE PERSONS IN RWANDA	84
11.1 : The Population of Handicapped Persons	84
11.1.1 : The Size and Distribution of Handicapped Persons	
11.1.2 : The level of incapacitation among the population	
11.1.3 : Variation in the Rates of incapacitation by certain	
characteristics of the Population	. 87
11.1.4 : Characteristics of Handicapped persons	89
11.1.5 : Types and Causes of incapacitation	
11.1.6 : Living Conditions of Handicapped persons	. 91
11.2. : The Population of Elderly Persons	
11.2.1 : Demographic characteristics of elderly persons in Rwanda	
11.2.2 : Sociocultural Characteristics of elderly persons	
11.2.3 : Socio-economic Characteristics of elderly persons in Rwanda	
11.2.4 : Living Conditions in Households headed by Elderly Persons	. 95
11.3. :The Population of Children in Rwanda in 2002	
11.3.1 :The size and structure of the population of children	97

11.3.1.1.: The size of the population	97
11.3.1.2 : The relationship of children to the heads of households	97
11.3.1.3. : Structure by functional age groups	98
11.3.2. : The dynamics of the child population in Rwanda	99
11.3.2.1.: Marriage among adolescents	100
11.3.2.2. : Fertility among adolescents	100
11.3.2.4. : Mortality and survival of children	100
	100
	100
11.3.4. : Children and participation in economic activity	101
	101
11.4. : The Population of Women in Rwanda in 2002	103
11.4.1. The Size and Distribution of the female population	103
	103
	103
11.4.2.2 : Mortality levels among women	104
	105
	106
	107
	107
	108
	108
• •	108
	108
	109
11.4.7. : Living Conditions in housing units headed by women	110
12. POPULATION PROJECTIONS	111
12.1. : Introduction	111
12.2. : Assumptions underlying the projections	111
	111
	112
	113
12.3. : Summary of the expected population up to the year 2022	114
	114
· ·	114
• •	115
, , , , , , , , , , , , , , , , , , , ,	116
· ·	116
· · · · · · · · · · · · · · · · · · ·	117
•	117
·	117
, , , , , , , , , , , , , , , , , , , ,	117
·	117
	118
12.4.5. : Tackling the problem of underemployment and of the quality	. 3
	118

## **LIST OF TABLES**

Table 2.1 : Distribution of the population by province/City and by sex	3
Table 2.2 : Distribution of the population by province in 1978, 1991 and in 2002	. 4
Table 2.3: Population densities in Rwanda in 2002	
Table 2.5 : Distribution of the population by province according to place of residence	. 7
Table 2.6: Evolution of the urban population from 1978 to 2002	. 8
Table 3.1 : Sex ratios of the population by age group according to place of residence	10
Table 3.2 : Sex ratio of population by province/City according to place of residence	. 11
Table 3.3 : Population distribution by five-year age groups according to sex	12
Table 3.4: Proportions (in%) of the population by broad conventional age groups according to place of residence and by sex	14
Table 3.5 : Dependency ratios by place of residence and by sex	15
Table 3.6: Mean and Median Ages of the Population by place of residence and Province/City of residence according to sex.	15
Table 4.1 : The Population of Rwanda from 1936 to 1952	
Table 4.3 : Proportions (in %) of the resident population aged 12 years and above by age group according to current marital status and by sex.	
Table 4.4: Indicators of the timing of entry into marriage by never married persons aged 15 years and above by place of residence and by sex	
Table 4.5 : Mean parities among women by age group according to place of residence	
Table 4.6: Probabilities of the enlargement of family size in Rwanda in 1991 and in 2002 women aged 45-49 years)	21
Table 4.7: Crude birth rates by place of residence and by Province / City of residence	22
among Rwandan women by place of residence	. 23
Rwandan women by Province/City of residence	. 24
Table 4.10 : Computed indices (1q0, 4q, 5q0) for Rwanda by place of residence in 2002.  Table 4.11 : Indicators of infant, child and under-five mortality by province/City and by sex	25
Table 4.12 : Male Life Table in 2002	
Table 4.13 : Female Life Table in 2002	27
Table 4.14 : Life Table for both sexes in 2002	
Table 4.15 : Summary of some basic mortality indicators ( $_1q_0$ , $e_0$ , $e_1$ )	
by sex and by place of residence.	28
Table 4.16: Crude Death rates for Rwanda in 2002	
Table 4.17: Estimated crude death rates by urban/rural residence	
Table 4.18: Main provinces of origin of lifetime	
Table 4.19: Main provinces of origin of recent migrants in Rwanda	SS
by place of present residence	34

Table 4.21: Place of Destination of recent migrants by Province/Country of	
previous residence and province of destination	36
Table 5.1 : Distribution of the population in ordinary households by Province/City	
of residence and by religious affiliation.	40
Table 5.3: Proportions (en%) of the resident population speaking each of the	
languages according to place of residence and by sex.	42
Table 5.4 : Resident population by nationality according to urban/rural place of residence and by sex	13
of residence and by sex	40
Table 6.1 : Literacy Status of the Resident population in ordinary households aged	
15 years and above by province/City of residence and sex	46
Table 6.2: School attendance (in %) among the resident population aged	40
6 years and above by Province/City of residence	40
to economic activity status, place of resident and by sex	52
Table 8.1: Distribution of households by province according to the sex of the	
Head of Household	59
residence and the sex of the household head	60
Table 8.3 : The Distribution of the population in ordinary households by relationship	
to the head of household according to place of residence and sex	
of household members.	63
Table 8.4: The Distribution of households by type according to place of residence and sex of head of household.	C 4
and sex of flead of flousefloid.	64
Table 9.1: Proportions (in %) of housing units and of the corresponding resident	
population by type of housing and place of residence.	66
Table 9.2: Proportions (in %) of housing units and of the corresponding resident	
population by type of housing structures and place of residence.	67
Table 9.3: Proportions (in %) of housing units and of the corresponding resident	00
population by type of roofing material and place of residence	68
population by type of material for the floor and place of residence	69
Table 9.5: Proportions (in %) of housing units by number of rooms according to	
the place of residence and the sex of the head of household	70
Table 9.6: Proportions (in %) of housing units and of the corresponding resident	74
population by main source of water supply and place of residence	71
population by main source of energy for lighting and place of residence	72
Table 9.8: Proportions (in %) of housing units and of the corresponding resident	
population by type of toilet facility used and place of residence.	74
Table 9.9: Proportions (in %) of housing units and of the corresponding resident	7.4
population by mode of occupancy and place of residence	74
population by availability of gadgets for receiving information and	
place of residence.	75
Table 9.11: Proportions (in %) of housing units and of the corresponding resident	
population by availability of a telephone set and place of residence.	75
Table 9.12: Proportions (in %) of housing units and of the corresponding resident population by availability of a computer/internet connection and	
place of residence.	76
Table 9.13 : Proportions (in %) of housing units and of the corresponding resident	70
population by availability of a motor vehicle and place of residence	76
Table 9.14: Proportions (in %) of housing units and of the corresponding resident	_
population by availability of a motorcycle and place of residence.	77
Table 9.15: Proportions (in %) of housing units and of the corresponding resident population by availability of a bicycle and place of residence.	77
population by availability of a bioyole and place of rediaction	/

Table 10.1 : Proportions of ordinary households by province according to	
standard of living category	78
Table 10.2 : Columnwise distribution of ordinary households by province	
according to standard of living category	79
Table 10.3: Proportion of ordinary households and corresponding proportions of the	
resident population by sex of the household head and the standard of	
living category according to Urban/Rural place of residence.	79
Table 10.4: Proportion of ordinary households and corresponding proportions	
of the resident population by level of education attained by the	
household head and the standard of living category according to	
Urban/Rural place of residence.	80
Table 10.5 : Rates of primary school attendance among the resident population in	00
ordinary households aged 8-13 years by standard of living category	
and sex of the household head.	82
Table 10.6 : Proportion of ordinary households by the employment status of the	02
	00
heads of households	. 02
Table 10.7: Proportion of household heads by sex and sector of activity of the	00
head of household according to standard of living category	83
Table 11.1.: The Distribution of Handicapped persons by Province according	
to Place of Residence and Sex	85
Table 11.2: The distribution of handicapped persons by province/city according	
to the type of handicap	. 86
Table 11.3. : Rate of incapacitation (in %) by place of residence and by sex	86
Table 11.4.: Type of handicap	90
Table 11.5. : Causes de handicap	90
Table 11.6: The distribution of the resident population and of elderly persons	
aged 60 years and above by province and by sex	92
Table 11.7 : The distribution of elderly persons and sex ratios by age groups	
	02
Table 11.8 : Proportions (in %) of migrant elderly persons by province of origin	
and province of destination (recent migration)	. 94
Table 11.9 : The distribution of children aged less than 18 years by single years	
according to urban/rural residence.	98
Table 11.10: The distribution of the children aged 12-17 years by province of	
residence according to their marital status	99
Table 11.11: The distribution of the population in ordinary households according	
to urban/rural residence and by sex	. 103
Table 11.12: Age-specific fertility rates and the Total fertility rates (TFR) by	
place of residence.	104
Table 11.13: Proportional distribution of women by migration status and by	
province of residence at the time of the census	106
Table 12.1 : The trends in growth of the total population between 2002-2022	
according to various assumptions	114
Table 12.2 : Trends in the growth of the urban and rural populations of Rwanda	
according to various variants of projections: 2002-2022	115
Table 12.3 : Trends in the evolution of the population of Rwanda by province	113
	115
from 2002 to 2022	115
Table 12.4 : Derived projections of the expected population of school children in	
Rwanda by sex : 2002-2022	116
Table 12.5 : Trends in the evolution of the economically active and employed	
population and in the number of jobs to be created during each	
intercensal period depending of the projection variant	
considered : 2002-2022	116
Table 12.6 : Trends in the evolution of the volume of ordinary households and in	
the number of new households to be created during each intercensal	
period by projection variant between 2002-2022	117
· · · · · · · · · · · · · · · · · · ·	

## **LIST OF FIGURES**

Figure 2.2:	Population densities by Province in 2002	
Figure 3.2:	Population Pyramid in 5-year Age Groups – 2002  Age Pyramid of the rural population – 2002  Age Pyramid of the urban population – 2002	12 13 13
Figure 4.1:	Patterns of Age-specific fertility rates (per ‰) by place of residence	23
Figure 5.1 :	Proportions (in %) of the resident population aged 6 years and above and which ever attended school by level of education attained according to the languages spoken	42
Figure 6.1 :	Literacy rates among the resident population aged 15 years and above by District	
Figure 6.2 :	Schooling rates by age and by sex	
Figure 6.3 :	Educational level attained by male and female residents aged 6 years and above by place of residence	50
	Age Pyramid of the economically active and employed population	
Figure 8.1 :	The Distribution (in %) of households by size according to urban/rural residence and the sex of the household head.	60
Figure 8.2 :	Patterns of Headship rates by age according to the sex and place of residence of the Heads of Households	
Figure 8.3 :	Household headship rates by marital status and sex of the head of household (population aged 15 years and above)	
_	Proportions (in %) of housing units by type of material for outside walls and place of residence.	.68
Figure 9.2 :	Proportions ( in %) of housing units by main source of energy for cooking according to urban/rural place of residence.	.73
Figure 11.2	I.: Rates (%) of incapacitation by age group and by sex 2.: Rate (%) of incapacitation by Place of Residence 3.: Proportional distribution of handicapped persons by age group and sex	.87 88 89
Figure 11.4 Figure 11.5	: Age-specific fertility rates by place of residence	104
-	their mothers	.105

#### 1. SOME METHODOLOGICAL DETAILS ON THE 2002 CENSUS OF RWANDA.

## 1.1: Overview of data collection and processing aspects

The 2002 census of Rwanda was sanctioned by the Presidential Decree n° 43/01 of the 26<sup>th</sup> December 1999, as modified by the Presidential Decree n°28/01 of the 10<sup>th</sup> November 2000. The third general census of population and housing in Rwanda, was conducted over the entire national territory, from the 16<sup>th</sup> to the 30<sup>th</sup> of August 2002 exactly eleven years after the second census which was organised in 1991. Its main objective was to update knowledge on the population of the country especially after the difficult times it had gone through during the war and the genocide of the 1990s.

The census operation entailed an exhaustive count of the resident population in each Cellule, Secteur, District and Province in Rwanda as at the date of the 15<sup>th</sup> of August 2002. This involved the enumeration without omission or double-counting of every resident and household which had earlier been identified during the census mapping phase.

The Census of August 2002 mobilised some 12000 field enumerators 2500 team leaders and controllers,12 provincial supervisors, 4 regional coordinator, to gather information on every member of each household along with their housing conditions, using a questionnaire which was far more detailed than those of the censuses of 1978 and 1991. The National Census Service is the technical institution which was created to organise the preparation and conduct of the 3<sup>rd</sup> census and the processing and analyses of the data so collected.

The approaches employed for the conduct of the 3<sup>rd</sup> Census of Rwanda complied with the norms and procedures internationally prescribed for the 1980-2000 round of censuses. The main field count involved a direct interview between the field enumerator and the respondent, who was usually the head of the household.

The census household questionnaire carried more than 50 questions or variables and on the average, each enumerator completed some 16 of them per day.

Thanks to the size and geographical configuration of the country, its use of one main language and its high population densities, it was relatively easier to carry through the field operations without any major difficulties. The field methods and data collection instruments to be used were first subjected to a pretest through a pilot census which was organised covering a nationally representative sample of the population, exactly one year before the Census count itself – that is from the 16<sup>th</sup> to the 30<sup>th</sup> of August 2001.

The lessons learned from this pilot operation enabled the subsequent judicious partitioning of the entire national territory into Enumeration Areas (Eas), thanks to the maps that had been produced during the earlier census mapping phase.

During the field census count, each Enumeration Area was assigned to a field enumerator. Each Team Leader had the task of supervising the daily work of some 5

field enumerators. In turn, he was under the supervision of a census controller at the District level.

The data so collected was properly checked on the field by the supervisors at various levels and then forwarded to the Census Office where it was again submitted to further detailed scrutiny before being classified and then stocked or archived by administrative unit.

The coding, data entry and tabulation phases of data processing entailed prior special training of coders, data entry staff and computer analysts and programmers whom the Census Office had identified using specific criteria and testing.

The role of this staff was to participate in the various stages of processing of the data contained in the household questionnaires using adapted and the most recent computer equipment and applications which subsequently rendered data tabulations and analyses much easier.

#### 1.2: Evaluation of Census coverage and of the quality of data.

Experience has shown that various errors can be committed during the conduct of a population census operation. These count be as a result of double counting and/or of the omission of individuals or of entire households

In order to ascertain the quality and reliability of the data collected during the 3rd Census in terms of coverage and content, a special quality-check field operation was organised three weeks after the field census count. This Post-enumeration Survey (PES) was conducted from the 23rd of September to the 2<sup>nd</sup> of October 2002 in strict conformity with the norms relating to sampling (using the updated national sampling frame, drawing a nationally representative sample, selecting a set of variables to be tested for coverage and content errors, etc...). A total of 120 EAs was sampled from 82 Districts. The procedure employed involved a one-stage stratified sample with three main strata: Kigali City, other urban areas and rural areas.

The PES revealed that the overall level of coverage of the 3rd Census was 97% and confirmed the consistency between the approaches and conditions under which the both field operations had been conducted.

Apart from the coverage errors mentioned above, other material or technical errors may come up during the various data collection, handling and processing phases and which need to be identified and corrected. This was done through the use of a computer program specially designed to detect coherence and consistency flaws in the data and to correct them. This process of data file cleaning and of imputation lasted for 3 months during which the staff of the computing unit worked in close collaboration with the Demographers and Statisticians of the Census Office

It is worthy to note that the use of one main language (Kinyarwanda) for the design of most of the household questionnaires and for over 99% of the interviews (except for those of foreigners), made it possible to ensure a high amount of consistency in terms of the concepts and terms used either in administering the questionnaires or in recording the responses.

#### 2. SPATIAL DISTRIBUTION OF THE POPULATION

## 2.1: Resident Population by Province

#### 2.1.1: The distribution of the population by province

The distribution of the population by province (table 2.1) reveals that there exists major disparities in the population sizes of the various provinces of the country.

Table 2.1 : Distribution of the population by province/City and by sex

Drovingo/City	Male	е	Fema	ale	Tot	Dank	
Province/City	Figures	%	Figures	%	Figures	%	Rank
Rwanda	3 879 448	100,0	4 249 105	100,0	8 128 553	100, 0	
Ruhengeri	416 074	10,7	475 424	11,2	891 498	11, 0	1
Gisenyi	403 276	10,4	461 101	10,9	864 377	10, 6	2
Gitarama	404 737	10,4	451 751	10,6	856 488	10, 5	3
Kigali Ngari	370 910	9,6	418 420	9,8	789 330	9, 7	4
Butare	340 020	8,8	385 894	9,1	725 914	8, 9	5
Byumba	337 481	8,7	370 305	8,7	707 786	8, 7	6
Kibungo	334 886	8,6	367 362	8,6	702 248		
Cyangugu	291 017	7,5	316 478	7,4	607 495	7, 5	8
Kigali City	325 778	8,4	277 271	6,5	603 049	7, 4	9
Gikongoro	233 454	6,0	256 275	6,0	489 729	6, 0	10
Kibuye	218 301	5,6	250 715	5,6	469 016	5, 8	11
Umutara	203 514	5,2	218 109	5,1	421 623	5, 2	12

Provinces with the largest proportion of the population include: Ruhengeri (11,0%), Gisenyi (10,6%) and Gitarama (10,5%) and those with the smallest population sizes are: Umutara (5,2%), Kibuye (5,8%) and Gikongoro (6,0%). This unequal distribution can be partly attributed to the impact of the war and genocide of the 1990s which brought about considerable loss of human life and affected some provinces more than others.

Women outnumber men in almost all the provinces but more especially in the provinces of Ruhengeri and Gisenyi than in the others.

#### 2.1.2: Evolution of population in the provinces

A comparison of the size of the population in each of the provinces in 1978, 1991 and 2002 provides an idea of the evolution of the population in the provinces during the various intercensal periods. In effect, the rhythm of population growth in the various provinces has been quite unequal. Between 1991 and 2002, the provinces of Kigali Ngari, Byumba and of Butare have rather been experiencing declines in their population growth rates of -1,3%, -0,9% and of -0,5% respectively. In terms of numbers, these various provinces have experienced a loss of 124,704, 74,641 and of 38,534 inhabitants respectively. This corresponds to an average annual loss of 11,337, 6,786 and of 3,503 persons respectively. In the case of Kigali Ngari and

Byumba, this decline is mainly attributed to administrative restructuring during which the former lost much of its population and territory to the enlarged City of Kigali and the latter, to the newly created Province of Umutara.

Table 2.2: Distribution of the population by province in 1978, 1991 and in 2002

Province/ City	1978	1991	2002	Rank			Intercensal change in figures		Mean annual growth rate	
				1978	1991	2002	1978-1991	1991-2002	1978-1991	1991-2002
RWANDA	4 831 527	7 157 551	8 128 553				178 925	88 273	3,1	1,2
Kigali City		235 664	603 049		11	9		33 399		8,9
Kigali Ngari	698442	914 034	789 330	1	1	4		-11 337		-1,3
Gitarama	606 212	851 451	856 488	2	2	3	18 865	458	2,6	0,1
Butare	602 550	764 448	725 914	3	5	5	12 454	-3 503	1,8	-0,5
Gikongoro	370 596	467 332	489 729	7	10	10	7 441	2 036	1,8	0,4
Cyangugu	333 187	514 656	607 495	10	8	8	13 959	8 440	3,4	1,5
Kibuye	336 588	470 643	469 016	9	9	11	10 312	-148	2,5	0,0
Gisenyi	468 882	734 658	864 377	6	6	2	20 444	11 793	3,5	1,5
Ruhengeri	531 927	769 297	891 498	4	4	1	18 259	11 109	2,9	1,3
Byumba	521 894	782 427	707 786	5	3	6	20 041	-6 786	3,2	-0,9
Umutara			421 623			12		38 329		
Kibungo	361 249	652 941	702 248	8	7	7	22 438	4 482	4,6	0,7

The Province of Kibungo has experienced a slackening in its growth rate from 4.6% per year between 1978 and 1991 to 0.7% between 1991 and 2002 because, among other reasons, it lost part of its territory and population to the newly created Province of Umutara. In the Case of the Kibuye Province, its size has remained almost the same during the past two censuses.

Kigali City, on its part recorded a very high intercensal growth rate of 9% per year between 1991 and 2002. If such a rhythm persists, the population of this city shall double in by the year 2010. This spectacular growth is partly explained by the redefinition of the boundaries of this city as a result of a series of administrative reforms made between 1978 and 2002, but also largely due to the massive influx of in-migrants during and after the genocide of 1994. In effect, Kigali City which had been merged with the former Prefecture of Kigali Ngari again regained its autonomy in 1979. In the year 2000, the boundaries of two administrative units were redefined with the Kigali Ngari Province losing much of its territory to the City of Kigali and to the Kibungo Province.

Between the three censuses of 1978, 1991 and of 2002, the ranking of the provinces in terms of their demographic weight has thus undergone significant changes due, in part, to the administrative restructuring of the national territory in the late 1990s.

## 2.2: Population Density

The distribution of population by province does not fully give an insight into the degree of concentration of the population over the national territory. An examination of the population size in relation to the land area using population densities is more edifying.

#### 2.2.1: Population densities in Rwanda in 2002

The population density for an administrative unit expresses the number of inhabitants per square kilometre of its territory. In other words, the total number of inhabitants in each administrative unit is divided by the total area of that unit expressed in square kilometres. This total area may represent the entire surface area of the administrative unit or only the habitable or arable portions of it (excluding lakes, forest reserves, etc...). In technical terms we talk of physical density, when the entire surface area is considered and of physiological density when only the habitable portions are considered. In this report, more emphasis shall be laid on physical than on physiological densities.

Table 2.3: Population densities in Rwanda in 2002

Province/City	Population	Total land area	Area of habitable land	Physical density (persons/km²)	Physiological density (persons/km²)
RWANDA	8 128 553	25 311,5	21 502,4	321	378
Kigali City	603 049	313,4	313,4	1 924	1924
Kigali Ngari	789 330	2 753,3	2 575,2	287	307
Gitarama	856 488	2 109,0	2 109,0	406	406
Butare	725 914	1 879,8	1 879,8	386	386
Gikongoro	489 729	1 999,4	1 539,4	245	318
Cyangugu	607 495	1 897,3	1 150,2	320	528
Kibuye	469 016	1 747,6	1 340,2	268	350
Gisenyi	864 377	2 056,4	1 455,2	420	594
Ruhengeri	891 498	1 651,2	1 439,2	540	619
Byumba	707 786	1 704,0	1 699,5	415	416
Umutara	421 623	4 224,6	3 154,1	100	134
Kibungo	702 248	2 975,5	2 847,2	236	247

With a total population of 8,128,553 inhabitants living on a total surface area of 25,312 km², Rwanda had an overall population density of 321 persons per km² in 2002 (table 2.3), which is among the highest in the continent. In effect, of this total surface area, only 21,502 km² are available or habitable, that is when the areas occupied by water and by forest reserves and parks have been excluded. Thus the density per habitable surface area becomes 378 inhabitants per km².

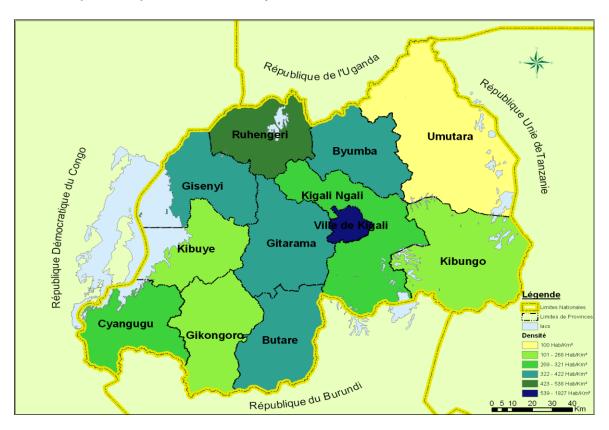
#### 2.2.2 : Evolution in population densities by province between 1978 and 2002

A comparison of the densities for the main administrative units reveals that there has been quite significant changes in density over time as a result of both changes in population growth and the administrative reforms of the late 1990s.

Table 2.4: Densities by province between 1978 and 2002

Province/City	1978	1991	2002
Rwanda	191	283	321
Kigali City	224	2032	1 924
Kigali Ngari	224	304	287
Gitarama	277	389	406
Butare	329	416	386
Gikongoro	180	227	245
Cyangugu	181	279	320
Kibuye	197	276	268
Gisenyi	229	358	420
Ruhengeri	320	463	540
Byumba	110	164	415
Umutara	-	-	100
Kibungo	89	161	236

Map 2.1 : Population densities by Province in 2002



## 2.3: Resident Population according to place of residence

#### 2.3.1: Overall situation

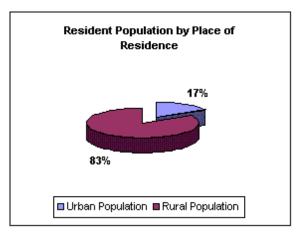
During the 3rd Census of Rwanda, an urban population is that which is resident within the limits of the urban administrative units recognised as such by law. Besides the City of Kigali, the capital town of Rwanda, the country has 11 other provinces whose headquarters enjoy the status of urban areas. Three other agglomerations have been recognised this status of urban area also. They include: the towns of Nyanza in the Province of Butare, Ruhango in the Province of Gitarama and of Rwamagana in Province of Kibungo. In all, there are therefore 15 towns in Rwanda.

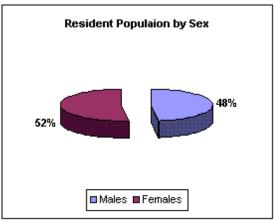
Table 2.5 : Distribution of the popul	lation by province accord	ling to place of residence
---------------------------------------	---------------------------	----------------------------

Province/City	Urban area	Rural area	Total	Rate of urbanisation (%)
Rwanda	1 372 604	6 755 949	8 128 553	16,9
Kigali City	603 049	-	603 049	100,0
Kigali Ngari	51 693	737 637	789 330	6,5
Gitarama	137 995	718 493	856 488	16,1
Butare	137 334	588 580	725 914	18,9
Gikongoro	32 427	457 302	489 729	6,6
Cyangugu	59 070	548 425	607 495	9,7
Kibuye	46 640	422 376	469 016	9,9
Gisenyi	67 766	796 611	864 377	7,8
Ruhengeri	71 511	819 987	891 498	8,0
Byumba	66 268	641 518	707 786	9,4
Umutara	8 437	413 186	421 623	2,0
Kibungo	90 414	611 834	702 248	12,9

With an overall proportion of 17% of the population in urban areas, including some largely rural populations which were only recently incorporated into adjacent urban agglomerations, and considering the fact that the population of the city of Kigali alone constitutes some 44% of the entire urban population of the country, it can be concluded that Rwanda has a very low urbanisation rate. In terms of figures, there were 1,372,604 persons living in urban areas in 2002, of which 603,049 were resident in the City of Kigali.

Figure 2.2: Resident population by place of residence and by sex





#### 2.3.2 : Urban population growth

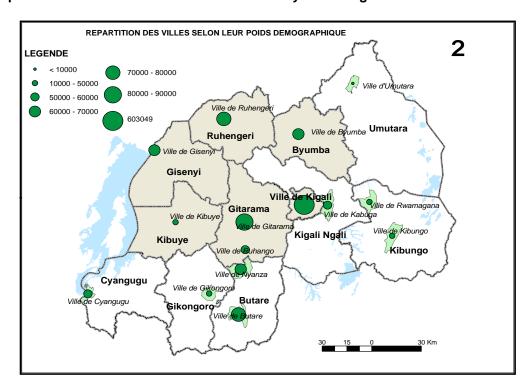
Data from the three last censuses of Rwanda as shown on table 2.6, provide an idea of the rhythm of evolution of the urban population between 1978 and 2002 through a comparison of the mean intercensal annual rates of growth.

Table 2.6: Evolution of the urban population from 1978 to 2002

Drovingo/City	1079	1001	2002	Growth rate		
Province/City	1978	1991	2002	1978-1991	1991-2002	
Rwanda	222 727	391194	1 372 604	4,4	12,1	
Kigali City	115 990	235 664	603 049	5,6	8,9	
Kigali Ngari	-	-	51 693	-	-	
Gitarama	8 531	17 490	137 995	5,7	20,7	
Butare	33 752	38 442	137 334	1,0	12,3	
Gikongoro	5 637	8 506	32 427	3,2	12,9	
Cyangugu	7 201	9 693	59 070	2,3	17,9	
Kibuye	3 045	4 393	46 640	2,9	24,0	
Gisenyi	12 655	22 156	67 766	4,4	10,7	
Ruhengeri	18 942	29 286	71 511	3,4	8,5	
Byumba	7 702	11 947	66 268	3,4	16,9	
Umutara	-	-	8 437	-	-	
Kibungo	9 272	13 617	90 414	3,0	18,8	

Compared with the 1991 census, the urban population of Rwanda increased from 391,194 inhabitants to 1,372,604 inhabitants in 2002, representing a mean annual growth rate of more than 12% during the 11-year interval. The growth rate during this intercensal period was three times more rapid than that of the preceding period. It was 4.4% during the 1978-1991 period. The observed disparity in growth rates is attributed mainly to recent administrative reforms creating new administrative units and redefining the limits of others, to the preferential settlement of repatriated nationals within urban areas and to massive rural exodus prompted not only by search for employment but also by the search for security during the turbulent years of the last decade.

Map 2.3: Distribution of the towns of the country according to their sizes



#### 3: THE SEX AND AGE STRUCTURE OF THE POPULATION

#### 3.1: The Structure by Sex – Analysis of Sex Ratios

Sex ratios generally demonstrate the balance between the sexes within a given population. A sex ratio expresses the percentage of men to women or rather, the number of males to 100 females within a given population.

Table 3.1 : Sex ratios of the population by age group according to place of residence

Age Groups	Sex Ratios					
Age Gloups	Urban	Rural	Total			
Total	112,7	87,5	91,3			
00-04	100,2	98,2	98,5			
05-09	97,8	97,5	97,5			
10-14	92,4	96,8				
15-19	94,0	95,6	95,3			
20-24	124,2	81,5	89,4			
25-29	132,1	72,7	83,7			
30-34	146,1	74,9	87,1			
35-39	152,1	75,5	86,8			
40-44	155,6	76,9	87,0			
45-49	149,1	75,4	84,2			
50-54	134,2	74,2	81,7			
55-59	103,7	63,8	68,8			
60-64	89,0	64,9	67,9			
65-69	83,8	68,9				
70-74	84,5	76,4	77,3			
75-79	76,1	74,6				
80-84	71,9					
85 et +	65,1	83,1	80,3			

Table 3.1 above indicates that the overall sex ratio for the country is 91.3. This implies a deficit of males as compared to females (91 males to 100 females) within the population of Rwanda in 2002. This excess of females is observed in every age group.

According to place of residence, males predominate in the urban areas with 112.7 males to 100 females overall, but more especially within the economically active age groups (20 to 60 years). The opposite is true in the rural areas where the sex ratio is as low as 87.5 males to 100 females. This is largely the result of sex-selective urbanward migration in favour of males in search for jobs and better conditions of living and who go to swell urban sex ratios but also to consistently higher male mortality in Rwanda and to outmigration.

Compared with data from previous periods, sex ratios in Rwanda rose from 92 in 1978 to 95.1 in 1991 before dropping again to 91.3 in 2002. The observed drop can be partly attributable to the excess male mortality during the time of the war and genocide of the early 1990s.

Table 3.2 : Sex ratio of population by province/City according to place of residence

Province/City	Urban	Rural	Total	
Rwanda	112,7	87,5	91,3	
Kigali City	117,5	-	117,5	
Kigali Ngari	92,2	88,4	88,6	
Gitarama	107,1	86,6	89,6	
Butare	106,8	84,2	88,1	
Gikongoro	113,0	89,7	91,1	
Cyangugu	139,7	87,9	92,0	
Kibuye	100,5	85,7	87,1	
Gisenyi	111,6	85,7	87,5	
Ruhengeri	90,5	87,3	87,5	
Byumba	108,2	89,5	91,1	
Umutara	109,3	93,0	93,3	
Kibungo	127,9	86,7	91,2	

As shown on table 3.2, there is an acute deficit of males in most of the provinces of the country. On the other hand, Kigali City has an excess of males over females within its population (117.5). At the level of the other provinces, the sex ratios vary from as low as 87.1 (Kibuye) to 93.3 (Umutara).

There is an excess of females in the rural population both at the national and at the provincial levels. Inversely, males predominate in the urban populations of almost all the provinces except those of the provinces of Kigali Ngari and of Ruhengeri where women are in excess even in the urban areas.

#### 3.2: The Age Structure of the population.

Table 3.3 gives testimony of the youthful nature of the population of Rwanda, where 67% of the population are aged less than 25 years and up to 44% are aged below 15 years while 30% have not yet reached the age of 10 years. Old persons aged 65 years and over constitute less than 3% of the total population.

Table 3.3: Population distribution by five-year age groups according to sex

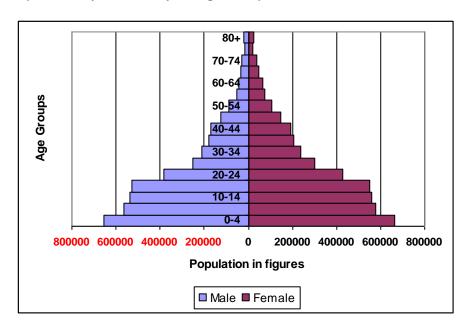
Age	Pop	ulation by S	Sex	F	Sex Ratios		
Groups	Male	Female	Total	Male	Female	Total	Sex Ratios
Rwanda	3 879 448	4 249 105	8 128 553	47,7	52,3	100,0	91,3
00-04	655 090	665 141	1 320 231	8,1	8,2	16,2	98,5
05-09	563 351	577 688	1 141 039	6,9	7,1	14,0	97,5
10-14	536 876	558 349	1 095 225	6,6	6,9	13,5	96,2
15-19	526 563	552 276	1 078 839	6,5	6,8	13,3	95,3
20-24	382 561	428 120	810 681	4,7	5,3	10,0	89,4
25-29	253 180	302 329	555 509	3,1	3,7	6,8	83,7
30-34	208 742	239 697	448 439	2,6	2,9	5,5	87,1
35-39	177 816	204 820	382 636	2,2	2,5	4,7	86,8
40-44	168 934	194 133	363 067	2,1	2,4	4,5	87,0
45-49	122 615	145 647	268 262	1,5	1,8	3,3	84,2
50-54	86 925	106 457	193 382	1,1	1,3	2,4	81,7
55-59	50 480	73 388	123 868	0,6	0,9	1,5	68,8
60-64	45 221	66 588	111 809	0,6	0,8	1,4	67,9
65-69	35 178	49 750	84 928	0,4	0,6	1,0	70,7
70-74	30 970	40 050	71 020	0,4	0,5	0,9	77,3
75-79	16 255	21 734	37 989	0,2	0,3	0,5	74,8
80-84	12 081	14 707	26 788	0,1	0,2	0,3	82,1
85 et +	6 610	8 231	14 841	0,1	0,1	0,2	80,3

#### 3.2.1 Population Age Pyramids : In five-year age groups

#### a) Total Population

The age pyramid by sex of the total population (figure 3.1) has a large base, implying that the majority of the population of Rwanda is young and that the dynamics of the population are dominated by relatively high fertility. As from age 25 years the population size diminishes rapidly and this trend accelerates at older ages. This is an indication of higher adult mortality which is higher among males than among females.

Figure 3.1 : Population Pyramid in 5-year Age Groups - 2002



#### b) Urban and Rural population pyramids

Figure 3.2 : Age Pyramid of the rural population – 2002

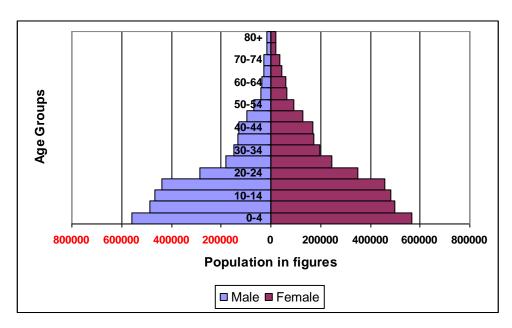
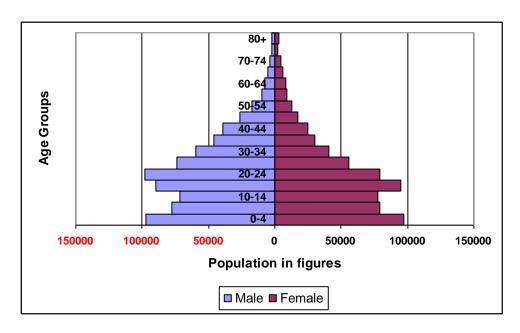


Figure 3.2 demonstrates that the age and sex structure of the rural population are quite similar to those of the total population with a broad base which rapidly tapers at the older ages. This is not surprising since the rural population represents 83% of the total population of Rwanda.

Figure 3.3: Age Pyramid of the urban population - 2002



In the case of the age pyramid of the urban population (figure 3.3), it equally has a relatively broad base, indicating that high fertility also contributes to its dynamics. The pyramid becomes narrow between the ages 5 and 15 years, which is evidence of either relatively lower fertility over the past decade or of higher infant and child mortality during the same period as a result of poorer health conditions during the

turbulent years of the 1990s. As from 15 years, the population size is inflated with maximum sizes within the 15-19 age groups for females and within the 20-24 age group for males. The increase in the population of these age groups can be attributed to massive urbanward outflow from rural areas either for purposes of schooling or in search for jobs. Apparently, female urbanward migration is earlier that that of males. This tells very much on the motivation for such migration.

#### 3.2.2 : Population structure according to conventional broad age groups

The population belonging to the economically active age groups is that aged between 15-64 years while that aged below 15 years and 65 years and above belongs to the economically inactive age category. These broad categories make it possible to assess the youthfulness or the degree of ageing of the population on the one hand and also to measure the level of age dependency within the population, on the other. This dependency ratio expresses the gross burden of the population in the economically inactive age groups on that in the economically active age categories. Furthermore, it enables the distinction between the proportion of the burden that is imposed by the 'youth' and that which is contributed by the 'elderly' population.

Table 3.4 : Proportions (in%) of the population by broad conventional age groups according to place of residence and by sex

		Urban			Rural			Ensemble		
Age Groups	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Rwanda	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	
0-14	33,9	39,4	36,5	47,9	42,9	45,2	45,2	42,4	43,8	
15-64	64,2	58,0	61,3	49,4	53,8	51,7	52,2	54,4	53,3	
65 + years	1,8	2,6	2,2	2,8	3,3	3,0	2,6	3,2	2,9	

The potentially active population (15 to 64 years), constitutes the largest proportion of the population irrespective of the sex category or of the place of residence of the population. Overall, it constitutes 53% of the total population but in the urban areas, this sub-population comprises as much as 61% of the population as against barely 52% in the rural area. As opposed to the deficit of males observed among those aged less than 15 years, men predominate in the active age category in the urban areas as a result of the sex selective nature of rural-urban migration in Rwanda. This amply translates the acute problem of access to paid employment in the country.

The proportion of elderly persons is still rather small in Rwanda. They represent barely 3% of the total population, evidence that adult mortality levels are rather high and that fertility too is high. As expected, the elderly population is relatively more important in the rural areas than in the towns.

Table 3.5 : Dependency ratios by place of residence and by sex

	Dependency Ratios						
Place of residence/Sex	Overall	Youth dependency	Elderly dependency				
Rwanda	87,4	82,0	5,4				
Male	91,8	86,8	5,0				
Female	83,7	77,9	5,8				
Urban	63,1	59,5	3,6				
Male	55,7	52,8	2,9				
Female	72,3	67,8	4,5				
Rural	93,3	87,4	5,9				
Male	102,6	97,0	5,6				
Female	85,9	79,8	6,1				

According to table 3.5 above, the overall dependency ratio is 87.4% of which 82% is contributed by the youth and just 5,4% by the elderly population. In other words, in Rwanda every 100 persons of economically active age are theoretically expected to take charge of 87 persons within the inactive age category comprising 82 youths and 5 elderly persons.

When the two places of residence are compared, dependency ratios are lower in the urban areas (63%) than in the rural areas (93%). The urban/rural disparity in dependency ratios is particularly more pronounced among the male (56% as against 103%) than among the female population. In other words, persons in the economically active age groups in the rural areas have a greater dependency burden than those in the towns.

#### 3.2.3 : Mean and Median Ages of the Population

Table 3.6 : Mean and Median Ages of the Population by place of residence and Province/City of residence according to sex.

Place/Province	Male Po	pulation	Female P	opulation	Total Population		
of residence	Mean Age	Median Age	Mean Age	Median Age	Mean Age	Median Age	
Urban	22,9	21,4	21,4	18,6	22,2	20,0	
Rural	20,0	15,8	21,4	18,6	21,0	16,8	
Rwanda	20,5	16,8	21,9	17,9	21,2	17,4	
Kigali City	22,3	21,9	20,3	18,9	21,4	20,6	
Kigali Ngari	20,3	16,7	22,2	18,5	21,3	17,3	
Gitarama	21,5	17,5	23,2	19,2	22,4	18,4	
Butare	21,3	17,3	23,4	19,3	22,4	18,3	
Gikongoro	21,4	16,5	22,0	17,7	22,0	17,1	
Cyangugu	20,6	16,5	22,0	17,7	21,3	17,1	
Kibuye	20,1	15,4	22,1	17,6	21,2	16,5	
Gisenyi	19,0	14,9	20,6	16,6	19,9	15,8	
Ruhengeri	19,3	14,9	21,3	16,7	20,3	15,8	
Byumba	20,3	16,1	21,5	17,2	20,9	16,7	
Umutara	20,0	16,0	21,3	17,4	20,7	16,7	
Kibungo	20,8	16,8	21,9	18,1	21,4	17,4	

A close look at the mean and median ages of the population of Rwanda (table 3.6) confirms the youthfulness of the population which was already evidence from the age distribution. The overall mean age of the population is 21.2 years. However, the mean age of the urban population is relatively older than that of the rural population (22.2 years as against 21 years). Median ages indicate that half the country's population is aged below 18 years with higher median ages in urban areas (20 years than in rural areas (16.8 years). Some disparities in these measures of central tendency exist between the sexes.

#### 4. THE DYNAMICS OF THE POPULATION OF RWANDA

#### 4.1: THE EVOLUTION OF THE POPULATION OF RWANDA

According to rough estimates made by the first European colonial masters, the population of Rwanda was possibly about 2,000,000 inhabitants in the beginning of the last century. Around the 1930s some more consistent estimates were made during the Belgian trusteeship based on rough administrative 'censuses' which were mere approximation based on the count of Able Bodied Adult men. Hereunder are presented some of these estimates up till 1952, when the first ever consistent statistical accounting was put in place in Rwanda under the supervision of the demographer-statistician, V. Neessen.

Table 4.1: The Population of Rwanda from 1936 to 1952

Year	Population
1936	1 762 600
1937	1 864 300
1938	1 888 900
1939	1 908 000
1940	1 913 000
1941	1 920 000
1942	1 930 000
1943	1 906 000
1944	1 524 000
1945	1 585 000
1946	1 686 000
1947	1 751 000
1948	1 806 000
1949	1 899 800
1950	2 000 000
1951	2 080 000
1952	2 144 000

The above figures, though not particularly accurate, somehow demonstrate the difficulties in growth encountered by Rwanda's population around the 1940s as a result of excessively high mortality and outmigration caused by severe famines during this period which coincided with the 2<sup>nd</sup> World War in Europe.

At the dawn of the independence of Rwanda on the 1st of July 1962, its population had reached 2.9 million inhabitants. According to a national sample survey conducted in 1970, the population of the country was estimated to be 3.6 million inhabitants and the birth and death rates were estimated to be 52 and 22 per 1000 respectively.

During the 1<sup>st</sup> Population and Housing Census conducted on the 16<sup>th</sup> to 30<sup>th</sup> August 1978, the population of Rwanda stood at 4.83 million inhabitants with an annual growth rate of 3.5%.

The second Census held from the 16<sup>th</sup> to 30<sup>th</sup> August 1991 revealed a population of 7,157,551 inhabitants while the third Census of August 2002 came up with a total population of 8,128,553 inhabitants.

According to projections made in 1978 on the basis of the most plausible assumptions, the population of Rwanda was expected to be around 7.3 million inhabitants in 1991 and should have been more than 10 million inhabitants in 2002.

#### 4.2: MARITAL STATUS AND NUPTIALITY

#### 4.2.1: The Marital Status distribution of the Population

Rwanda has a fairly high proportion of never-married persons (bachelors) aged 12 years and above. In most cases, this proportion is more than that of currently married persons. Among males, unmarried persons constitute 51.8% of the population at national level while those currently married represent 45.6%. Corresponding proportions among the females are : 42.1 % and 42.0 % respectively. Widowhood levels are much higher among women than among the men: 14% as against 2,0 %. At 60 one woman out of every two is widowed while at 80, four out of every five of them are widowed. On the other hand, the proportion of divorced/separated persons is generally very low: 0.6 % among the men and 1.9% among the women.

Common union marriages are very frequent in Rwanda since 30.2% of the currently married persons aged 12 years and above have such a status. This type of union is relatively more common among young persons (50 % among married persons aged 20-24 years) and it is as common in rural areas as in urban areas.

Some 9.4% of the women aged 12 years and above and 4.5% of the men are in polygamous unions in Rwanda. Compared to past periods, the levels of polygamy are on the decline in Rwanda since among the men equivalent proportions were 12.5% in 1978 and 6% in 1991. Polygamy is much more common in rural areas (5.1% among males) than in the urban areas (2%).

Table 4.2 : Proportions (in %) of the resident population aged 12 years and above by sex according to current marital status.

		Total				
Sex	Never married	In union	Divorced/ Separated Widowed		%	In Figures
Total	46,6	43,7	1,3	8,4	100,0	4 987 276
Male	51,8	45,6	0,6	2,0	100,0	2 666 155
Female	42,1	42,0	1,9	14,0	100,0	2 321 121

Table 4.3: Proportions (in %) of the resident population aged 12 years and above by age group according to current marital status and by sex.

	Male					Female				
Age Group	Never married	In union	Divorced/ Separated	Widowed	Total	Never married	In union	Divorced/ Separated	Widowed	Total
Total	51,2	45,6	0,6	2,0	100,0	42,1	42,0	1,94	14,0	100,0
12-14	99,3	0,5	0,0	0,1	100,0	99,4	0,5	0,0	0,1	100,0
15-19	97,4	2,4	0,0	0,1	100,0	91,9	7,7	0,3	0,2	100,0
20-24	73,4	26,2	0,2	0,1	100,0	50,6	46,8	1,6	1,1	100,0
25-29	39,2	59,9	0,5	0,4	100,0	21,8	70,3	3,1	4,9	100,0
30-34	20,3	77,8	0,9	1,0	100,0	12,5	72,1	3,6	11,8	100,0
35-39	10,1	86,7	1,2	2,1	100,0	7,4	69,2	3,6	19,8	100,0
40-44	5,8	89,5	1,4	3,3	100,0	4,6	65,7	3,4	26,2	100,0
45-49	3,8	90,1	1,4	4,8	100,0	3,0	61,4	3,3	32,3	100,0
50-54	3,2	89,2	1,6	5,9	100,0	2,1	56,6	2,9	38,3	100,0
55-59	2,7	88,1	1,7	7,6	100,0	1,6	50,7	2,6	45,2	100,0
60-64	2,1	87,5	1,7	8,7	100,0	1,3	45,2	2,3	51,2	100,0
65-69	1,6	86,4	1,6	10,4	100,0	1,2	39,5	1,8	57,5	100,0
70-74	1,5	84,6	1,4	12,5	100,0	1,2	32,2	1,5	65,1	100,0
75-79	1,6	80,9	1,4	16,1	100,0	1,7	25,0	1,1	72,2	100,0
80-84	2,0	77,0	1,5	19,5	100,0	2,0	19,0	1,0	78,1	100,0
85+	4,7	69,5	0,9	24,9	100,0	4,4	14,1	0,7	80,8	100,0

## 4.2.2 : Nuptiality of never married persons.

The rate of entry into union (nuptiality) of never married persons in any given population is measured in terms of its intensity and time of occurrence. Normally, the five indicators considered are: the proportion of persons who end up marrying and the proportion of those who reach old age without marrying as a measure of intensity, then the mean and median ages at entry into first marriage as measures of the timing of the occurrence of first marriage. The last of the indicators is the differences in the mean ages of males and females.

Table 4.4: Indicators of the timing of entry into marriage by never married persons aged 15 years and above by place of residence and by sex

Place of residence	Mean Age			Median Age		% elderly never married persons	
	Males	Females	Age difference	Males	Females	Males	Females
Total	26,8	24,0	2,8	25,7	22,4	3,5	2,6
Urban	30,1	25,5	4,6	29,4	24,1	5,5	4,1
Rural	25,6	23,7	1,9	24,7	22,2	3,0	2,4

Marriage is almost universal in Rwanda. Almost every body ends up getting married especially among the women. At age 50 when entry into first union is very rare, 96.5% of the men and 97.4% of the women have already been in marriage. In urban areas, the intensity of entry into first union is 94.5% among males and 95.9% among females. Corresponding proportions are 97.4% and 97.7% respectively in rural areas.

With regard to the proportion of elderly never married persons, they comprise 3.5% of the males aged 15 years and above and 2.6% of females at the national level. The proportion of such persons is higher in the urban areas (5.5% among males and 4.1% among females) than in the rural areas of the country (3% among males and 2.4% among females).

The mean age at first union which is the main indicator of the timing of entry into first union was estimated using the Hajnal method. On the average, men enter into first marriage at older ages (26.8 years) than the women (24 years).

#### 4.3: LEVELS AND TRENDS OF FERTILITY

#### 4.3.1 : Cumulated Fertility – Children ever born (Mean Parities)

Cumulated fertility refers to the total number of live births a woman has ever produced during her lifetime. This is usually captured using the mean parities and probabilities for extension of family size.

In Rwanda, mean parities increase with the age of the mother from 0.07 children per woman for those aged 15-19 years to 7.06 children per woman among those aged 45-49 years.

Table 4.5: Mean parities among women by age group according to place of residence.

	Mean Children Ever Born				
Age group of women	Rwanda	Urban	Rural		
All women	2,90	2,22	3,03		
15-19	0,07	0,07	0,07		
20-24	0,81	0,66	0,84		
25-29	2,25	1,86	2,34		
30-34	3,57	3,00	3,69		
35-39	5,00	4,27	5,13		
40-44	6,24	5,40	6,36		
45-49	7,06	6,25	7,17		
50-54	7,51	6,72	7,62		
55-59	7,83	7,06	7,93		
60-64	7,90	7,16	8,00		
65-69	8,00	7,36	8,09		

The proportion of children ever born remains relatively low in Rwanda irrespective of the place of residence. This implies that fertility performance begins at relatively later ages in Rwanda as a result of late entry into marriage. In effect, analyses of nuptiality data of the 2002 Census reveal that only 7% of women aged 15-19 years were already in marriage. In Rwanda, most births occur within recognised unions.

Table 4.6 presents the probabilities of enlargement of family size for 1991 and 2002 calculated for women aged 45-49 years according to the number of children ever born. It becomes clear from this table that the speed of extension of family size diminishes with the number of children ever born. All the same, this rhythm is still relatively high in Rwanda where even among women having already 10 children ever born, the probability of having an 11<sup>th</sup> child is still above 50% irrespective of the place of residence of the mother.

Table 4.6 : Probabilities of the enlargement of family size in Rwanda in 1991 and in 2002 (women aged 45-49 years)

		2002 Census		
Children ever born	1991 Census	Urban	Rural	Total
0	0,980	0,971	0,981	0,980
1	0,983	0,970	0,983	0,981
2	0,978	0,959	0,975	0,973
3	0,969	0,930	0,961	0,958
4	0,954	0,898	0,939	0,934
5	0,930	0,853	0,902	0,896
6	0,894	0,800	0,848	0,843
7	0,833	0,741	0,771	0,769
8	0,756	0,665	0,687	0,685
9	0,671	0,609	0,610	0,610
10	0,569	0,553	0,526	0,529

A comparison of the situations in 1991 and in 2002 reveals that there has been an apparent decrease in the probabilities of enlargement of families in Rwanda as from the third child. This is evidence of the onset of fertility decline between the two parities.

#### 4.3.2 : Crude Birth Rate and Current Fertility

The variables relating to births within the past 12 months were employed to obtain the crude birth rates and current fertility for Rwanda. The main indicators which have been computed include: the crude birth rate (CBR), The general fertility rate (GFR), the age-specific fertility rates (ASFR), the total fertility rate (TFR) and the main age at childbearing.

#### 4.3.2.1: The Crude Birth Rate

Table 4.7 presents the crude birth rates (CBR) for Rwanda calculated by place of residence and by province of residence. It is worthwhile to note here that this rate which relates the total number of births over the preceding year per 1000 inhabitants is usually very sensitive to the age and sex structure of individual populations.

Table 4.7: Crude birth rates by place of residence and by Province/City of residence

Place of Residence	CBR (in ‰)
RWANDA	41,2
Urban	34,7
Rural	43,1
PROVINCE/CITY	
Kigali City	34,5
Kigali Ngari	40,4
Gitarama	37,5
Butare	38,6
Gikongoro	37,4
Cyangugu	37,9
Kibuye	38,5
Gisenyi	45,7
Ruhengeri	43,1
Byumba	45,2
Umutara	47,2
Kibungo	46,9

#### 4.3.2.2 : Current Fertility

Current fertility among Rwandan women is measured here using the general fertility rate (GFR), the age specific fertility rates (ASFR) and the total fertility rate (TFR). The timing of childbearing is measured by the mean age at childbearing.

#### a. Situation at the national level and by place of residence

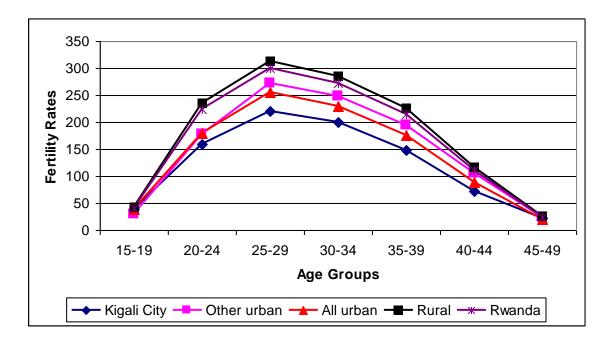
Table 4.8 and figure 4.1 present the age-specific fertility rates and the total fertility rate along with the general fertility rate by place of residence in Rwanda. An examination of the patterns of age-specific fertility rates demonstrates that fertility is spread throughout the entire childbearing period of the woman in Rwanda with maximum rates recorded during the 20-39 age segments but more especially within the 25-29 age group. This pattern obtains both among urban and rural women even though the age-specific rates and total fertility of urban women are much lower.

As was the case with cumulated fertility, current fertility performance is still relatively high in Rwanda. In 2002, the TFR was 5.9 children per woman and varied from 6.2 children in the rural areas to 4.9 children in all urban areas and to as low as 4.3 children in the City of Kigali.

Table 4.8: Age-specific fertility rates (per ‰), the TFR and the GFR among Rwandan women by place of residence

Ago groups	Rwanda		Urban area		Ural area
Age groups	Nwaliua	Kigali City	Other urban	All Urban	Oral alea
15-19	40	38	38	39	42
20-24	224	159	201	180	235
25-29	300	221	287	256	313
30-34	273	200	252	229	285
35-39	215	149	195	176	225
40-44	112	73	99	88	117
45-49	25	23	19	20	26
TFR	5,9	4,3	5,5	4,9	6,2
GFR	162	131	151	138	167

Figure 4.1: Patterns of Age-specific fertility rates (per ‰) by place of residence



## b. Variation by Province

Table 4.9 reveals that the age-specific fertility rates and the TFRs vary significantly from one province to the other in Rwanda. While the TFR is barely 4.3 children in the City of Kigali, it is around 6.8 children in the provinces of Ruhengeri and Byumba. In Rwanda, fertility is generally higher in the provinces situated to the north of the country (Byumba,Ruhengeri,Umutara, Gisenyi) as well as in the province of Gikongoro. It is lowest toward the centre of the country: in Kigali City, and in the provinces of Kigali Ngari and Gitarama. The regional variation of the GFR follows the same pattern as the TFRs.

Table 4.9 : Age-specific fertility rates (per ‰), the TFR and the GFR among Rwandan women by Province/City of residence

Age Groups	Kigali City	Kigali Ngari	Gitarama	Butare	Gikongoro	Cyangugu	Kibuye	Gisenyi	Ruhengeri	Byumba	Umutara	Kibungo
15-19	37,5	32,6	24,3	28,2	45,5	29,5	38,7	50,8	52,1	47,7	44,8	47,0
20-24	158, 9	198,3	169,1	198,5	249,5	196,3	228,8	265,9	268,0	262,5	249,8	242,7
25-29	220, 8	271,4	279,0	306,5	336,4	315,7	304,9	313,5	317,1	340,5	332,2	291,6
30-34	200, 4	241,6	262,4	273,9	305,2	302,1	269,9	283,7	292,9	302,6	315,8	262,8
35-39	148, 7	171,2	201,1	205,2	239,9	238,4	216,9	241,1	245,6	247,1	250,1	202,5
40-44	73,1	83,8	94,3	97,7	127,6	132,3	111,2	138,9	144,4	130,6	125,0	99,5
45-49	22,6	17,1	20,5	15,0	24,4	32,1	28,8	34,4	33,2	26,6	33,1	17,9
TFR	4,3	5,1	5,3	5,6	6,6	6,2	6,0	6,6	6,8	6,8	6,7	5,8
GFR	126	141	142	151	180	160	162	180	181	187	193	164

#### 4.3.2.2.2 : Adolescent Fertility and fertility of women aged 40 to 49 years.

In 2002, 3.6% of adolescent females aged 12-19 years had already experienced childbirth. This proportion was higher in urban areas (3.9%) than in rural areas (3.5%) An examination of the pattern of age-specific fertility rates reveals that adolescent fertility levels are relatively low in Rwanda and have been declining when compared with the situation during the 1991 census.

On the other hand, the fertility levels among women aged 40-49 years are still high in Rwanda. Age-specific rates for the 40-44 year group are as high as 112 ‰ and are 25 ‰ for the 45-49 year age group. The fertility levels for this age segment are higher in the rural areas than in the towns. Compared with the situation in 1991, the fertility performance of this age segment has also been declining since it contributed up to 15% of the fertility at the time.

#### 4.4: LEVELS AND TRENDS OF MORTALITY

# 4.4.1: Levels of Infant and Child mortality

Table 4.10 : Computed indices ( $_1q_0$ ,  $_4q$ ,  $_5q_0$ ) for Rwanda by place of residence in 2002

Place of Residence	<sub>1</sub> Q <sub>0</sub> (‰)	<sub>4</sub> Q <sub>1</sub> (‰)	<sub>5</sub> Q <sub>0</sub> (‰)
Rwanda - rural	144	109	230
Rwanda - urban	110	63	170
Kigali City	95	46	140
Rwanda	139	102	221

Infant mortality levels are still very high in Rwanda. At the national level, they stand at 139% for both sexes upwards from the 126% recorded in 1991. This implies that, on the average, one out of every 7 children dies in Rwanda before reaching his/her first birthday anniversary. Ceci signifie qu'en moyenne, 1 enfant sur 7 meurt avant d'atteindre 1 an exact. Infantile mortality levels ( $_{1}q_{0}$ ) are higher for male children (145%) than for female children (133%).

Child mortality levels ( $_4q_1$ ) are relatively lower than those for infant mortality ( $_1q_0$ ). They stand at 102% for both sexes - 111% among boys and 93% among the girls. In other words, out every 1000 children who survive the high probabilities of dying before age 1, some 102 die before they can celebrate their 5<sup>th</sup> birthday anniversary in Rwanda.

Infant and child mortality levels vary widely among the provinces of Rwanda and by urban/rural place of residence partly as a result of disparities in the availability of health infrastructure and services (personnel, equipment, material and financial resources) and partly as a result of disparities in the standards of living of the households in which the children are living (poverty, access to food and potable water, vaccination, etc.).

Table 4.11: Indicators of infant, child and under-five mortality by province/City and by sex

		<sub>1</sub> Q <sub>0</sub>			$_4$ Q $_1$		<sub>5</sub> <b>Q</b> <sub>0</sub>			
Province/City	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Rwanda	145	133	139	111	93	102	232	210	221	
Kigali City	108	88	95	60	38	46	133	129	140	
Kigali Ngari	152	139	145	120	101	110	241	213	228	
Gitarama	139	126	138	101	83	101	205	198	213	
Butare	158	147	153	129	113	122	273	248	262	
Gikongoro	136	120	128	98	75	85	217	189	203	
Cyangugu	139	127	132	101	85	92	210	188	198	
Kibuye	134	116	125	95	70	81	217	189	199	
Gisenyi	148	133	140	114	93	102	227	209	221	
Ruhengeri	140	127	134	102	85	94	210	188	210	
Byumba	153	139	145	122	101	110	243	223	232	
Umutara	161	143	151	134	107	120	251	231	241	
Kibungo	176	161	167	155	134	142	279	264	271	

The City of Kigali with an infant mortality level of 95% and a child mortality level of 46% has the lowest mortality levels in the country. It is followed by the provinces of Kibuye ( $_1q_0 = 125\%$  and  $_4q_1=81\%$ ), Gikongoro ( $_1q_0 = 128\%$  and  $_4q_1=85\%$ ), Cyangugu ( $_1q_0 = 132\%$  and  $_4q_1=92\%$ ), Ruhengeri ( $_1q_0 = 134\%$  and  $_4q_1=94\%$ ), Gitarama ( $_1q_0 = 138\%$  and  $_4q_1=101\%$ ). The highest infant and child mortality indices are recorded in the provinces of Kibungo ( $_1q_0 = 167\%$ ;  $_4q_1=142\%$ ), Butare ( $_1q_0 = 153\%$ ;  $_4q_1=122\%$ ), Umutara ( $_1q_0 = 152\%$ ;  $_4q_1=120\%$ ), Byumba ( $_1q_0 = 145\%$ ;  $_4q_1=110\%$ ) and Kigali Ngari ( $_1q_0 = 145\%$ ;  $_4q_1=110\%$ ).

## 4.4.2 : Levels of overall mortality.

#### 4.4.2.1: The Life Table of Rwanda in 2002

As a result of observed underreporting of deaths within the last 12 months for every age group during the last census which invariably led to the under-estimation of mortality levels in the country, indirect demographic techniques commonly used in such circumstances, were employed to arrive at indicators of overall mortality that are compatible with the situation in Rwanda especially after the war and genocide of the 1990s and their aftermath. The estimated age-specific mortality quotients rendered the generation of the life tables possible.

The life table for males indicates that their life expectancy at birth  $(e_0)$  is 48.4 years while their life expectancy at age 1  $(e_1)$  stands at 55.6 years implying a gain of some 7.2 years. In other words, in Rwanda, once a male child is able to survive infant mortality, and continues to live under the health conditions that prevailed in 2002, he should enjoy a higher probability of surviving for 55.6 more years. Male life expectancy at age 20 has been estimated at 45.6 years in Rwanda.

Table 4.12: Male Life Table in 2002

Age	lx	1000*Qx	D(x)	1000*Mx	E(x)
0	100 000	145	14 500	160,6	48,43
1	85 500	110,99	9 490	29,95	55,59
5	76 010	17,78	1 351	3,59	58,36
10	74 659	10,1	754	2,03	54,38
15	73 905	14,51	1 073	2,92	49,91
20	72 832	22,99	1 675	4,65	45,6
25	71 158	23,05	1 640	4,66	41,61
30	69 517	25,83	1 796	5,23	37,54
35	67 721	29,29	1 983	5,94	33,46
40	65 738	37,53	2 467	7,64	29,4
45	63 271	48,05	3 040	9,84	25,44
50	60 231	66,36	3 997	13,71	21,59
55	56 234	92,91	5 225	19,44	17,94
60	51 009	136,93	6 985	29,3	14,51
65	44 024	200,85	8 842	44,47	11,4
70	35 182	307,68	10 825	72,43	8,61
75	24 357	459,41	11 190	119,9	6,31
80	13 167	,	13 167	218,54	4,58

In the case of females, table 4.13 reveals a life expectancy at birth  $(e_0)$  of 53.8 years. The sex difference in life expectancy at birth is therefore 5.4 years in favour of females. At age 1  $(e_1)$  the female life expectancy stands at 60.9 years. This implies that, in Rwanda, every female child who survives the scourge of infant mortality up to her first birthday anniversary stands a higher probability of surviving for 60.9 more years, 7.1 years more than when she was born, everything being equal. Female life expectancy at 20 years was estimated to be 49.9 years.

Table 4.13: Female Life Table in 2002

Age	lx	1000*Qx	D(x)	1000*Mx	E(x)
0	100 000	133	13 300	145,59	53,75
1	86 700	93	8 063	24,77	60,94
5	78 637	12,79	1 006	2,58	63,05
10	77 631	8,27	642	1,66	58,84
15	76 989	12,11	932	2,44	54,31
20	76 057	15,35	1 167	3,09	49,94
25	74 890	17,35	1 299	3,5	45,68
30	73 590	18,65	1 372	3,76	41,44
35	72 218	20,99	1 516	4,24	37,18
40	70 702	2',60	1 739	4,98	32,92
45	68 962	29,47	2 032	5,98	28,69
50	66 930	41,08	2 750	8,38	24,48
55	64 181	57,93	3 718	11,91	20,42
60	60 462	93,39	5 647	19,53	16,51
65	54 816	150,15	8 231	32,31	12,93
70	46 585	249,76	11 635	56,71	9,75
75	34 950	394,32	11 782	97,97	7,13
80	21 168		21 168	195,25	

The combined life expectancy at birth for both sexes stands at 51.2 years while that at age 1 is estimated to be 58.4 years implying a net gain of some 7.3 years once a child reaches his/her first birthday anniversary in Rwanda. The life expectancy at age 20 is 47.6 years for both sexes in Rwanda.

Table 4.14: Life Table for both sexes in 2002

Age	lx	1000*Qx	D(x)	1000*Mx	E(x)
0	100000	139,00	13900	153,27	51,22
1	86100	101,97	8780	27,34	58,43
5	77320	12,65	978	2,55	60,91
10	76342	7,62	581	1,53	56,66
15	75760	10,52	797	2,12	52,08
20	74963	17,30	1297	3,49	47,6
25	73666	17,42	1283	3,51	43,39
30	72383	20,35	1473	4,11	39,12
35	70910	23,35	1656	4,72	34,88
40	69254	30,78	2131	6,25	30,65
45	67123	40,65	2729	8,29	26,54
50	64394	57,78	3721	11,88	22,55
55	60673	82,44	5002	17,16	18,78
60	55671	122,43	6816	26	15,23
65	48856	181,68	8876	39,79	11,98
70	39980	283,23	11324	65,66	
75	28656	432,70	12400	110,65	
80	16257	,,,,	16257	208,62	

A synthesis of the mortality indicators for Rwanda by place of residence (table 4.15) confirms that there are indeed wide disparities between the rural and urban areas of the country. In effect urban life expectancy is estimated at 55.1 years for both sexes while in the rural areas it is much lower (48.6 years) – a difference of some 6.5 years of life!

Table 4.15: Summary of some basic mortality indicators ( $_1q_0$ ,  $_0$ ,  $_0$ ,  $_0$ ) by sex and by place of residence.

Indicator		Sex		Place of r		
mulcator	Male	Female	Total	Rural	Urban	Total
1q0 (‰)	145,0	133,0	139,0	144,0	110,0	139,0
e <sub>0</sub> (years)	48,4	53,8	51,2	48,6	55,1	51,2
e <sub>1</sub> (years)	55,6	60,9	58,4	55,7	60,9	58,4

#### 4.4.2.2: Crude Death Rates for Rwanda.

On the basis of the structure of the mortality indices obtained from the life tables, it was then possible to estimate the expected deaths from the enumerated population. The crude death rate was then obtained from the relationship between the total deaths and the total population for the country and for each area of residence.

Table 4.16: Crude Death rates for Rwanda in 2002.

	Popu	lation in fig	gures	Estima	ted deatl	n rates	Ехр	ected dea	aths
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
0	161 653	163 568	325 221	160,60	145,59	153,27	25 961	23 814	49 847
1	493 437	501 573	995 010	29,95	24,77	27,34	14 778	12 424	27 204
5	563 351	577 688	1 141 039	3,59	2,58	2,55	2 022	1 490	2 910
10	536 876	558 349	1 095 225	2,03	1,66	1,53	1 090	927	1 676
15	526 563	552 276	1 078 839	2,92	2,44	2,12	1 538	1 348	2 287
20	382 561	428 120	810 681	4,65	3,09	3,49	1 779	1 323	2 829
25	253 180	302 329	555 509	4,66	3,50	3,51	1 180	1 058	1 950
30	208 742	239 697	448 439	5,23	3,76	4,11	1 092	901	1 843
35	177 816	204 820	382 636	5,94	4,24	4,72	1 056	868	1 806
40	168 934	194 133	363 067	7,64	4,98	6,25	1 291	967	2 269
45	122 615	145 647	268 262	9,84	5,98	8,29	1 207	871	2 224
50	86 925	106 457	193 382	13,71	8,38	11,88	1 192	892	2 297
55	50 480	73 388	123 868	19,44	11,91	17,16	981	874	2 126
60	45 221	66 588	111 809	29,30	19,53	26,00	1 325	1 300	2 907
65	35 178	49 750	84 928	44,47	32,31	39,79	1 564	1 607	3 379
70	30 970	40 050	71 020	72,43	56,71	65,66	2 243	2 271	4 663
75	16 255	21 734	37 989	119,90	97,97	110,65	1 949	2 129	4 203
80	18 691	22 938	41 629	218,54	195,27	208,63	4085	4 479	8 685
85+	6 610	8 231	14 841				62 657	59 544	125 105
Total	3 879 448	4 249 105	8 128 553			_	_		
						CDR	16,2	14,0	15,4

Table 4.16 indicates that the crude death rate for the Rwanda is 15.4%. It stands at 16.2% for males and at 14.0% for females. Once the crude birth rate for the country is known (41.2 %) along with the crude death rate, the rate of natural increase (r) of the population on Rwanda as at 2002 is computed as the difference between the two rates: 41.2% - 15.4% = 25.8%, which corresponds to a 2.6% annual natural growth rate. This implies that the population of Rwanda is likely to be doubled in the next 27 years if current mortality and fertility levels remain constant.

Table 4.17 :Estimated crude death rates by urban/rural residence

	ı	Population		Esti	mated ra	ates	Exp	ected de	aths
Age	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
0	46 968	278 253	325 221	118,74	159,38	153,27	5 577	44 348	49 847
1	147 083	847 927	995010	16,44	29,37	27,34	2 418	24 904	27 204
5	157 009	984 030	1 141 039	2,46	3,58	2,55	386	3 523	2 910
10	149 787	945 438	1 095 225	1,54	2,03	1,53	231	1 919	1 676
15	184 874	893 965	1 078 839	2,28	2,93	2,12	422	2 619	2 287
20	177 151	633 530	810 681	3,49	4,65	3,49	618	2 946	2 829
25	130 102	425 407	555 509	3,51	4,66	3,51	457	1 982	1 950
30	100 840	347 599	448 439	4,11	5,23	4,11	414	1 818	1 843
35	76 430	306 206	382 636	4,72	5,94	4,72	361	1 819	1 806
40	63 795	299 272	363 067	6,25	7,64	6,25	399	2 286	2 269
45	43 450	224 812	268 262	8,29	9,84	8,29	360	2 212	2 224
50	30 845	162 537	193 382	11,87	13,71	11,88	366	2 228	2 297
55	18 782	105 086	123 868	17,14	19,44	17,16	322	2 043	2 126
60	15 483	96 326	111 809	26,03	29,30	26,00	403	2 822	2 907
65	11 333	73 595	84 928	39,80	44,47	39,79	451	3 273	3 379
70	8 790	62 230	71 020	65,64	72,42	65,66	577	4 507	4 663
75	4 451	33 538	37 989	110,76	119,89	110,64	493	4 021	4 203
80	5 431	36 198	41 629	208,62	218,55	208,63	1 133	7 911	8 685
	1 372 604	6 755 949	8 128 553				15 388	117 182	125 105
			CDR				11,2	17.3	15,4

The derive crude death rate for the urban area is thus 11.2% as against 17.3% for the rural area. In 1991, the difference in CDRs for the two areas of residence was identical.

#### 4.5: MIGRATION TRENDS IN RWANDA

## 4.5.1: Resident population by migratory status (lifetime migration)

Overall, some 1,593,058 persons were found to be resident in districts which were different from their districts of birth. These included 745,816 men and 847,242 women. In other words, 6,385,018 persons in Rwanda, among which are 3,055,600 men and 3,329,418 women are being considered as lifetime non-migrants.

Most of the resident population of Rwanda is composed of non-migrants who make up 80% of the population. Such limited mobility of the population may be attributed to the size of the country, to physical constraints and to those related to access to land and to the traditional way of life of an average Rwandan (intensive agriculture along with sedentary animal breeding).

## 4.5.2: Resident population by migratory status (recent migration)

Recent migratory status as measured by those whose place of previous residence was found to be different from place (district) of residence at the time of the census revealed 1,663,615 migrants among which were 779,176 men and 884,439 women. There were thus 6,214,074 non-migrants in Rwanda (persons who never declared any other district of previous residence). These included 2,984,534 men and 3,229,540 women.

Overall, the migratory situation in Rwanda is quite similar for the two types of migration (lifetime and recent migration). Provinces with the largest number of lifetime migrants equally have a large number of recent migrants.

#### 4.5.3 : Origin of migrants

## a. Origin of lifetime migrants

An analysis of the origin of migrants who ever changed their province of origin since birth reveals a number of disparities. While some 10 -15% of persons born in the Gikongoro, Kigali Ngari, Gitarama, Butare, Byumba, Ruhengeri, Kibuye provinces and in Kigali City were found to be living elsewhere within Rwanda, this proportion is far smaller (5-7%) in the case of the other provinces.

Most of the lifetime migrants of Kigali City come from the provinces of Gitarama (18.8%), Kigali Ngari (13.7%) and of Butare (11.3%). Quite a sizeable proportion of the lifetime migrants of this city were found to have been born in foreign countries, particularly in the D.R. Congo, Burundi and in Uganda – all neighbouring countries.

Table 4.18: Main provinces of origin of lifetime migrants in Rwanda

				Pla	ce of C	urrent	resid	ence					
Place of Birth	Kigali City	Kigali Ngari	Gitarama	Butare	Gikongoro	Cyangugu	Kibuye	Gisenyi	Ruhengeri	Byumba	Umutara	Kibungo	Total number of migrants
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	
Kigali City	0,0	7,5	9,9	5,3	4,7	4,6	3,1	2,7	7,1	3,9	1,3	2,3	33 279
Kigali Ngari	13,7	0,0	7,7	5,0	6,9	2,4	4,2	1,5	8,9	14,9	10,2	12,8	108 385
Gitarama	18,8	8,6	0,0	19,8	6,8	2,9	5,8	3,9	3,5	2,4	2,5	7,2	112 650
Butare	11,3	14,3	21,2	0,0	29,9	5,9	1,6	1,5	2,8	1,4	1,5	10,5	98 530
Gikongoro	4,4	16,5	16,1	31,3	0,0	27,9	5,1	0,6	1,2	1,6	1,1	7,4	85 980
Cyangugu	5,5	1,0	2,0	1,7	4,5	0,0	5,5	0,8	1,2	0,7	0,2	1,0	28 021
Kibuye	4,7	3,1	12,4	1,6	29,4	13,7	0,0	9,1	1,5	1,2	0,6	4,6	54 047
Gisenyi	4,0	3,5	9,9	1,1	1,5	3,1	12,1	0,0	18,7	3,8	1,3	4,5	45 750
Ruhengeri	3,8	12,6	2,8	0,8	1,3	2,8	1,4	14,0	0,0	15,4	12,7	12,7	97 787
Byumba	3,9	9,1	1,2	0,8	0,8	2,4	0,6	1,1	6,3	0,0	25,7	2,3	82 984
Umutara	1,3	0,9	0,7	0,3	0,9	0,8	0,2	0,4	1,1	13,7	0,0	2,9	18 650
Kibungo	4,0	4,0	2,2	1,6	2,0	2,1	1,0	1,3	2,3	2,4	4,1	0,0	32 946
Burundi	6,4	9,3	2,4	17,0	5,1	5,1	0,5	0,5	1,2	0,6	0,4	7,1	60 670
D.R.Congo	9,9	5,3	7,8	7,8	4,6	24,1	58,0	61,4	37,5	33,6	1,8	4,8	166 081
Uganda	6,2	2,6	2,4	1,9	0,7	1,2	0,4	0,8	5,6	2,9	31,6	5,7	100 649
Tanzania	1,3	1,6	0,9	3,4	0,7	0,8	0,2	0,3	0,7	1,1		14,1	42 880
Others	0,9	0,1	0,3			0,4			0,3				

In the Kigali Ngari province, most lifetime migrant come from the provinces of Gikongoro (16.5%), Butare (14.3%) and of Ruhengeri. Most of its foreign lifetime migrants come from neighbouring Burundi.

The Province of Gitarama receives its lifetime migrants from the provinces of Butare (21.2%), Gikongoro and of Kibuye and its foreign lifetime migrants come essentially from the D.R. Congo. In the case of the Butare province, 31% of its migrants come from Gikongoro and 20% from Gitarama while 17% were born in Burundi. On the other hand, 30% of the lifetime migrants in the Gikongoro Province were born in the Province of Butrare and 29.4% in Kibuye with just a tiny proportion born outside the country.

Internal lifetime migrants in the Cyangugu province were born mainly in the neighbouring Gikongoro (28%) and Kibuye (13.7%) provinces. However, a quarter of the lifetime migrants of this province were found to have been born in the neighbouring D.R. Congo.

The situation is even more dramatic in the Kibuye Province where 58% of the lifetime migrants were born in the D.R. Congo while the few internal migrants were born mainly in the Province of Gisenyi (12.1%). The same applies too in the Gisenyi

Province where 61% of the lifetime migrants were born in the D.R. Congo while the few internal migrants were born in Ruhengeri (14%).

Over a third of the lifetime migrants (37.5%) in the Ruhengeri Province were born in the D.R. Congo. The others come essentially from neighbouring provinces, particularly from Gisenyi.(18.7%). The same applies to the Province of Byumba with a third of migrants born in the D.R. Congo, while the internal component comes from the provinces of Ruhengeri (15.4%), Kigali Ngari (14.9%) and of Umutara (13.7%).

On the other hand, a quarter of the migrants in the Province of Umutara were born in Byumba, 12.7% in Ruhengeri and 10.2% in Kigali Ngari while 31.6% of them were born in Uganda.

The Province of Kibungo appears to have been a land of immigration in the sense that it is found to be the destination of significant proportions of persons born in most of the provinces of the country (with the exception of Cyangugu Province) and in the neighbouring countries. Most of its internal lifetime migrants were born in the provinces Kigali Ngari, Ruhengeri and of Butare while the international migrants were born mainly in Tanzania.

The general conclusion that can be drawn from the preceding analyses of lifetime migration is that most migratory exchanges in Rwanda occur between neighbouring provinces or countries.

## b. Origin of recent migrants

Some nine out off every ten residents of the provinces of Gitarama, Gikongoro, Kibuye, Ruhengeri and of Byumba declared they had never stayed in any other province or country before (non-migrants). The same applies to 80% of the residents of the Butare and Gisenyi provinces. In other words, most of the residents of Rwanda are sedentary.

However, three provinces stand out on account of the large proportion of recent migrants among their resident populations. These include the provinces of Umutara (48%) and Kibungo (36%) and the City of Kigali (40%).

Generally the same provinces which were found to be the main suppliers of lifetime migrants are the same that have been supplying recent migrants. However, there is some disparity in the volume of the migratory flows. While barely 10% of the migrants in the Gitarama Province were born in Kigali City, some 14.5% of its recent migrants last resided in Kigali City. Also, while only 3.8% of the lifetime migrants of the Byumba Province were born in Gisenyi Provinces, 19.5% of its recent migrants came from Gisenyi. On the other hand 12.7% of the migrants of the Kibungo Province were born in the Ruhengeri Province but only 5.7% declared this Province as their place of previous residence.

Table 4.19: Main provinces of origin of recent migrants in Rwanda

				Р	lace o	f curre	ent res	idence	9				
Place of previous residence	Kigali City	Ngali Kigari	Gitarama	Butare	Gikongoro	Cyangugu	Kibuye	Gisenyi	Ruhengeri	Byumba	Umutara	Kibungo	Number of Migrants
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	
Kigali City	0,00	9,72	14,54	6,19	6,43	8,18	4,50	3,08	12,68	4,62	1,80	2,19	50 500
Kigali Ngari	17,65	0,00	7,82	3,94	6,63	1,91	3,97	1,14	8,40	12,46	8,44	8,03	94 441
Gitarama	18,42	6,18	0,00	7,35	5,12	2,52	5,11	2,24	2,52	1,73	1,39	3,33	74 426
Butare	10,11	7,10	19,89	0,00	23,71	5,06	1,39	0,56	1,73	0,96	0,66	3,01	59 798
Gikongoro	3,80	17,46	14,79	28,02	0,00	24,36	4,24	0,24	0,66	1,02	0,51	2,69	82 860
Cyangugu	5,34	0,57	1,75	1,03	5,24	0,00	4,72	0,42	0,75	0,49	0,22	0,35	19 189
Kibuye	4,29	2,19	10,78	0,79	22,29	11,45	0,00	6,36	1,01	1,27	0,23	1,89	39 786
Gisenyi	4,64	2,57	9,53	0,78	0,83	3,30	14,76	0,00	18,12	19,49	0,91	1,79	47 089
Ruhengeri	4,09	9,49	2,53	0,58	0,48	1,53	1,23	10,85	0,00	11,8	10,21	5,72	77 655
Byumba	4,15	6,87	0,81	0,57	2,20	2,99	0,75	0,81	6,17	0,00	21,32	1,02	67 855
Umutara	2,10	0,97	0,60	0,26	0,82	3,15	0,18	0,26	0,88	10,47	0,00	2,17	19 345
Kibungo	5,24	4,32	2,52	1,81	1,83	2,70	1,49	2,10	2,29	2,76	5,12	0,00	36 867
Burundi	5,08	10,9	2,12	34,21	8,28	3,70	0,41	0,3	0,57	0,26	0,30	9,47	85 011
D. R. Congo	8,71	16,41	8,37	7,02	13,98	28,22	56,16	70,86	38,32	25,35	1,30	3,54	196 551
Uganda	4,26	2,04	2,49	1,18	0,52	0,41	0,44	0,39	5,00	2,43	29,18	4,00	83 022
Tanzania	0,93	3,06	1,06	5,78	1,48	0,26	0,29	0,15	0,67	4,64	18,27	50,63	168 647
Others	1,17	0,16	0,40	0,49	0,16	0,27	0,37	0,24	0,23	0,24	0,13	0,18	4 754

There is also some disparity in the volume of international immigrants – while only 5.3% of migrants in the Kigali Ngari Province were born in the D.R.Congo, some 16.4% declared having stayed there previously. In the same vein, 4.6% of the migrants in the Gikongoro Province were born in the D.R.Congo but 14% cited that country as their place of previous residence. In the Kibungo Province, 14% of the migrants are known to have been born in Tanzania but over 50% of the recent migrants cited that country as their place of previous residence (29%). On the other hand, in the Umutara Province, there are more immigrants who were born in Uganda (33.6%) than those who declared that country as their previous residence. In the case of the Byumba Province, 37% of the immigrants were born in the D.R.Congo while only 18% cited it as their place of previous residence. Most of these disparities are attributable to the fact that migrants had made a number of intermediate stopovers before finally settling in a particular province.

## 4.5.4 : Place of Destination of Migrants

## a. Place of Destination of lifetime migrants

In this section the analyses are focusing on the place of destination of persons born in each province or country and who were counted elsewhere during the census. The last column of table 4.20 gives the total number of migrants by province or country of birth.

Table 4.20 : Place of Destination of migrants born in each province/country by place of present residence

				Pla	ace of	Prese	ent Re	siden	се					
Place of Birth	Kigali City	Kigali Ngari	Gitarama	Butare	Gikongoro	Cyangugu	Kibuye	Gisenyi	Ruhengeri	Byumba	Umutara	Kibungo	Total	Number of Migrants
		Migrants born in each of the Provinces												
Kigali City	0,0	29,8	14,0	8,5	2,8	3,6	2,6	7,2	6,8	5,7	7,6	11,4	100,0	33 279
Kigali Ngari	43,2	0,0	3,3	2,5	1,2	0,6	1,1	1,2	2,6	6,6	17,9	19,8	100,0	108 385
Gitarama	57,3	10,1	0,0	9,4	1,2	0,7	1,5	3,0	1,0	1,0	4,2	10,7	100,0	112 650
Butare	39,2	19,2	10,1	0,0	5,9	1,6	0,5	1,3	0,9	0,7	2,9	17,8	100,0	98 530
Gikongoro	17,5	25,3	8,7	19,4	0,0	8,5	1,7	0,7	0,5	0,9	2,5	14,3	100,0	85 980
Cyangugu	67,5	4,5	3,3	3,2	3,1	0,0	5,6	2,4	1,4	1,1	1,7	6,1	100,0	28 021
Kibuye	29,9	7,5	10,8	1,6	10,5	6,6	0,0	14,9	0,9	1,1	2,0	14,3	100,0	54 047
Gisenyi	29,9	10,1	10,1	1,3	0,6	1,8	7,6	0,0	13,1	4,0	5,2	16,3	100,0	45 750
Ruhengeri	13,3	17,1	1,3	0,4	0,3	0,8	0,4	12,6	0,0	7,6	24,5	21,7	100,0	97 787
Byumba	16,2	14,6	0,7	0,5	0,2	0,8	0,2	1,1	2,4	0,0	58,7	4,6	100,0	82 984
Umutara	23,7	6,1	1,7	0,8	0,9	1,1	0,4	1,8	1,9	35,4	0,0	26,3	100,0	18 650
Kibungo	41,7	15,9	3,2	2,6	1,2	1,6	0,8	3,4	2,2	3,5	23,8	0,0	100,0	32 946
	Immigrants born outside the country													
Burundi	36,2	20,3	1,8	15,0	1,6	2,2	0,2	0,8	0,6	0,5	1,3	19,5	100,0	60 670
D. R. Congo	20,4	4,2	2,2	2,5	0,5	3,8	10,0	32,5	7,2	9,7	2,0	4,8	100,0	166 081
Uganda	21,0	3,5	1,1	1,0	0,1	0,3	0,1	0,7	1,8	1,4	59,5	9,4	100,0	100 649
Tanzania	10,5	4,8	1,0	4,2	0,3	0,5	0,1	0,5	0,5	1,2	21,2	55,0	100,0	42 880

The City of Kigali is the main destination of internal immigrants originating from the Cyangugu, Gitarama, Kigali Ngari, Kibungo and Butare provinces and for international immigrants born in Burundi. Persons born in Kigali City have been found to have migrated principally to the Province of Kigali Ngari (30%) and to a lesser extent, towards Kibungo (11.4%).

Most of the lifetime migrants of the province of Kigali Ngari were born in the provinces of Gikongoro, Butare and of Ruhengeri and its internation immigrants come mainly from Burundi(20%). On the other hand, some 43% of the lifetime migrants born in the Kigali Ngari province are presently resident in the City of Kigali while another 20% are in the province of Kibungo.

The province of Gitarama is home to 14% of persons born in Kigali City and of barely 10% of those born in the provinces of Kibuye, Butare and Gisenyi. It has very few lifetime international immigrants. On the other hand, 57% of lifetime migrants from this province are presently resident in the City of Kigali and another 10% in the Kibungo Province.

Some 19% of lifetime migrants born in the Gikongoro province and 15% of the immigrants born in Burundi constitute the majority of lifetime migrants in the Butare Province. On its part, 39% of the lifetime migrants from this province are resident in the City of Kigali, 19% in the province of Kigali Ngari and another 18% in Kibungo.

The province of Gikongoro is home to very few lifetime migrants (only 10% of those born in the Kibuye province), but is known to have been the main source of lifetime migrants to three provinces of the country (Kigali Ngari 25%, Butare 19% and Kibungo 14%) and to the City of Kigali(18%).

The province of Cyangugu appears to be one of the least attractive provinces of the country. It is home to only small proportions of lifetime migrants from the other provinces. On the other hand, 67.5% of the lifetime migrants born in this province are currently resident in the City of Kigali. The province of Kibuye equally receives only few immigrants (mainly from the D.R. Congo) and its lifetime emigrants are settled mainly in the City of Kigali (30%) and in the provinces of Gisenyi (15%) and of Kibungo (14%).

The largest number of immigrants born in the D.R. Congo are resident in the province of Gisenyi which is also home to some 15% of the lifetime migrants born in the province of Kibuye and to 12.6% of those born in Ruhengeri. Lifetime emigrants from this province have been found to have settled in the City of Kigali (30%) and in the provinces of Kibungo (16%) and of Ruhengeri (13%).

Almost all the lifetime immigrants in the Province of Ruhengeri come from the neighbouring Gisenyi province but it has been sending quite a substantial volume of migrants towards the provinces of Umutara (26%) and of Kibungo (22%). While the Byumba province receives most of its few lifetime immigrants from the neighbouring Umutara Province, it has been sending over 59% of its lifetime emigrants to that province and a few others to Kigali City (16%) and to the province of Kigali Ngari(15%).

The resident population of the recently created Province of Umutara is composed mainly of persons born elsewhere, including 60% of immigrants born in Uganda, 59% of lifetime migrants born in the Byumba province and a quarter of those born in the provinces of Ruhengeri and of Kibungo. Very few persons born in this province are found to be resident in other provinces, mainly in Byumba (35%), Kigali Ngari (26%) and in the City of Kigali (24%).

As has been noted earlier, the province of Kibungo appears to be among the most attractive of all the provinces of Rwanda. It is home to lifetime immigrants from almost all the provinces of the country except for those born in the provinces of Cyangugu and Byumba. It also receives 55% of the immigrants born in Tanzania and of 20% of those born in Burundi.

## b. Place of destination of recent migrants in Rwanda

The directions of movement of migrants who declared having stayed elsewhere previously is largely identical to that of those of lifetime migrants. There are however some few exceptions.

The proportion of persons who were previously resident abroad and who are presently resident in the City of Kigali is smaller than that of persons who were born abroad. This may be largely due to the fact that many of such persons may have made a couple of stop-overs of more than six months before finally settling in Kigali City. On the other hand, in the provinces of Kibungo and Gisenyi, it is more common to meet persons who had previously stayed abroad than those who were born abroad. These are certainly persons who moved out temporarily during the period of the war and the genocide in the early 1990s.

Table 4.21 : Place of Destination of recent migrants by Province/Country of previous residence and province of destination

					Place	of de	etine	etion						
Place of previous residence	Kigali City	Kigali Ngari	Gitarama	Butare	Gikongoro	Cyangugu	Kibuye	Gisenyi	Ruhengeri	Byumba	Umutara	Kibungo	Total	Number of Migrants
Mig	grants	havi	ng pr	eviou	ısly s	ettl	ed ir	n eac	h of t	he Pr	ovino	ces		
Kigali City	0	30.2	12.9	10.5	3.1	4.6	2.8	6.6	7.2	5.2	6.8	10.1	100.0	50500
Kigali Ngali	40.9	0	3.7	3.6	1.7	0.6	1.3	1.3	2.6	7.5	17.0	19.8	100.0	94441
Gitarama	54.2	13.0	0	8.5	1.7	1.0	2.1	3.3	1.0	1.3	3.5	10.4	100.0	74426
Butare	37.0	18.6	14.9	0	9.7	2.4	0.7	1.0	0.8	0.9	2.1	11.8	100.0	59798
Gikongoro	10.0	33.1	8.0	29.0	0	8.3	1.6	0.3	0.2	0.7	1.2	7.6	100.0	82860
Cyangugu	60.9	4.6	4.1	4.6	6.7	0	7.7	2.4	1.1	1.4	2.2	4.3	100.0	19189
Kibuye	23.6	8.6	12.1	1.7	13.7	8.1	0	17.3	0.7	1.8	1.1	11.1	100.0	39786
Gisenyi	21.6	8.6	9.0	1.4	0.4	2.0	9.8	0	11.1	23.6	3.7	8.9	100.0	47089
Ruhengeri	11.5	19.2	1.5	0.6	0.2	0.6	0.5	15.1	0	8.7	25.0	17.2	100.0	77655
Byumba	13.4	15.9	0.5	0.7	0.8	1.2	0.3	1.3	2.6	0	59.6	3.5	100.0	67855
Umutara	23.8	7.9	1.4	1.1	1.0	4.6	0.3	1.5	1.3	30.9	0	26.2	100.0	19345
Kibungo	31.1	18.4	3.0	4.2	1.2		1.3	6.2	1.8	4.3	26.4	0	100.0	36867
Migrants having settled previously abroad														
Burundi	13.1	20.2	1.1	34.5	2.4	1.2	0.2	0.4	0.2	0.2	0.7	26.0	100.0	85011
D.R. Congo	9.7	13.1	1.9	3.1	1.7	4.1	8.9	39.1	5.6	7.4	1.3	4.2	100.0	196551
Uganda	11.2	3.9	1.3	1.2	0.2	0.1	0.2	0.5	1.7	1.7	66.7	11.3	100.0	83022
Tanzania	1.2	2.9	0.3	2.9	0.2	0.0	0.1	0.1	0.1	1.6	20.6	70.1	100.0	168647

In the case of recent internal migration, intermediary stop-overs certainly explain why only 4% of lifetime migrants from Gisenyi were counted in the Byumba Province though 24% of its recent immigrants had previously been resident in the former Province. On the other hand, 22% of lifetime migrants born in the Ruhengeri Province are resident in Kibungo but only 17% of recent migrants of this province declared

having previously been resident in Ruhengeri. Furthermore, some 29% of migrants whose most recent previous resident was in the province of Gikongoro were counted in the province of Butare though only 15,9% of its lifetime immigrants were reported to have been born in that province.

#### 5: SOCIOCULTURAL CHARACTERISTICS OF THE POPULATION

#### 5.1: Introduction

The three socio-cultural aspects of the population that shall be considered here include religious affiliation, languages spoken and the nationality of the resident population in Rwanda in 2002. Because of the bitter experience from the past history of the country, Among other reasons, ethnicity, was not included in the census questionnaires.

Religion has a dynamic role as a cultural model and a unifying factor for all its adherents. Individual behaviour, whether it be at the workplace, or with regard to his attitude towards population growth or intellectual development, is thus usually regimented by his/her religious affiliation. Ever since the end of the 19<sup>th</sup> Century, with the arrival of Europeans into Rwanda, traditional religion has been assailed by foreign religious beliefs. Most of the existing health, educational and other social infrastructure in the country belong to various religious groups. The colonialists and especially, the Catholic Church spearheaded the fight against Islam ever since the beginning of the last century such as to limit its influence to just certain guarters of urban areas including the commercial areas. Foreign religious influence is being considered here in terms of the influence they have been exerting as agents of change in the spiritual, cultural, social, economic, political and ideological dimensions. But they also do have negative attributes especially when some of them preach against the practice of contraception, promote certain taboos and restrictions on consumption of certain types of food, discourage active participation in economic activity, discriminate against women, perpetrate infighting among groups.....

With regard to languages spoken in Rwanda, the kinyarwanda language is the mother tongue of the Banyarwanda. It is no only spoken by all Rwandese but also in the regions bordering the country. It is one of the three official languages of the country. Foreign languages were introduced into the country with the coming of the Europeans. The kiswahili language was introduced by the Germans since 1907 and became the main language for use in teaching, administration and trading. For a long time, it remained the main medium of communication among persons who shared common or complementary interests (trader-customer, employer-employee). The French language was introduced in 1900 by French missionaries, the White Fathers. Given its status as the language for technical and scientific disciplines, it was seen as a prestigious languages used to project emerging realities as well as a Western culture and institutions. As 1929, the French language was officially introduced into the educational system in Rwanda. Though it has since been taught as from the second cycle of the primary level education, but has only been taught intensively as from the secondary level of education. The English language came to be introduced into Rwanda in view of the need for the country to develop strong economic and trading ties with the overwhelmingly English-speaking countries of East Africa through which most of the imported goods must pass before reaching the country. With the massive return of long-term refugees who had settled for many years in English-speaking neighbouring East African countries the use of the English language became more current in Rwanda and it was finally recognized as the third official language. It was also introduced into all the cycles of the school system in the

country. However, its teaching is still being hindered by the shortage of trained teachers and adequate didactic materials. Article 5 of the Constitution of Rwanda states that kinyarwanda is the national language of the country and that the official languages are kinyarwanda, French and English. All official and administrative documents written in the national language must be translated into at least one of the other official languages but it is never easy to ascertain the significance of each of those languages.

In terms of « nationality », persons of rwandan nationality are analysed as opposed to those having other nationalities. Since Rwanda has very little to offer in terms of commercial attractions, very few foreign nationals have come to be resident there. Usually these are Africans from the neighbouring countries. Article 7 of the Constitution of Rwanda specifies that persons of rwandan origin along with their descendants, have the right to acquire rwandan nationality on demand. This same article provides allowance for double nationality.

#### 5.2: RELIGIOUS AFFILIATION OF THE POPULATION

During the 2002 census, the question on religious affiliation was addressed only to members of ordinary households and the following nine response options were offered: catholic, protestant, adventist, Jehovah witness, other Christian religion, muslim, traditionalist/animist, other religion and no religious affiliation.

As can be seen on table 5.1, the most predominant religious group is the catholic faith which attracts almost half (49.5%) of the resident population of the country. In descending order, the other religious groups are protestants (27.2%), adventists (12.2%), other christian groups (4%), no religious affiliation (3.6%) and Muslim (1.8%). Adherents of the Jehovah Witness faith, traditionalist/animists, and of the other religious each do not make up as much as 1% of the population. Thus, christian religious groups have the following of some 93% of the population of Rwanda.

With regard to the regional spread of the various religious groups, the catholic faith predominates in almost all the provinces with the highest proportion recorded in the Province of Butare (63%), followed by that of Gitarama (59.2%) and of Byumba (58.3%). The proportions in the provinces of Kibungo, Gikongoro, Umutara, Gisenyi and of Kibuye as well as Kigali City fall below the national average.

The protestant faith predominates in the Gikongoro Province where 43.7% of the population are adherents followed by the provinces of Cyangugu (42.1%) and of Kibuye (37.6%). Provinces with the largest proportion of following of the adventist faith are Kibuye (22.6%), Gisenyi (18.5%), Ruhengeri (17.9%) and Gitarama (16.2%). The highest proportions of followers of the other nascent christian religions are to be found mainly in the provinces of Umutara (13.1%) and of Kibungo (5.8%) and in the City of Kigali (5.3%). Adherents of the Jehovah Witness faith are mainly found in the City of Kigali (1.4%). Elsewhere, they hardly constitute as much as 0.5%.

Table 5.1: Distribution of the population in ordinary households by Province/City of residence and by religious affiliation.

Province/ City	Catholic	Protestant	Adventist	Jehovah Witness	Othe christian religions	Muslim	Traditionalist/ animist	others	No religion	Not Stated	Total
Total	49,5	27,2	12,2	0,5	4,0	1,8	0,1	0,6	3,6	0,0	7963809
Kigali city	44,9	24,6	10,7	1,4	5,3	8,8	0,0	0,7	2,5	1,1	566450
Kigali Ngali	56,5	24,4	9,9	0,5	4,0	0,9	0,0	0,5	3,0	0,4	779506
Gitarama	59,2	18,5	16,2	0,2	2,3	1,2	0,0	0,5	1,5	0,4	834279
Butare	62,7	18,9	11,3	0,4	2,3	1,2	0,0	0,4	2,4	0,4	702988
Gikongoro	42,1	43,7	9,0	0,2	1,3	0,1	0,0	0,3	2,8	0,4	479356
Cyangugu	45,7	42,1	5,0	0,2	2,3	1,5	0,0	0,4	2,5	0,3	594703
Kibuye	29,6	37,6	22,6	0,2	3,0	0,3	0,1	0,5	5,6	0,5	464405
Gisenyi	39,3	28,8	18,5	0,8	4,4	1,9	0,1	0,9	4,8	0,5	853985
Ruhengeri	51,7	19,9	17,9	0,3	4,4	0,6	0,1	0,7	3,9	0,4	885309
Byumba	58,3	25,2	3,3	0,4	2,8	1,1	0,4	0,3	8,1	0,3	699915
Umutara	41,4	29,8	6,9	0,5	13,1	2,5	0,0	1,2	3,6	0,9	419801
Kibungo	48,4	27,8	10,7	0,3	5,8	2,8	0,0	0,6	3,0	0,5	683112

The highest proportion of Muslims is to be found among the residents of the City of Kigali (8.8%), and to a lesser extent in the provinces of Kibungo (2.8%) and Umutara (2.5%). The tradionalists/animists are rare in Rwanda (0.1%) with the highest proportions found in the Byumba Province (0.4%) which also has the highest proportion of people with no religious affiliation (8.1%) followed by Kibuye (5.6%). Adherents of other unspecified non-christian religions are to be found mostly in the province of Umutara (1.2%).

Though women outnumber men within the population of Rwanda, they are fewer among the adherents of the muslim and traditionalist religions and among those with no religious affiliation. On the other hand, they predominate among adherents of the protestant, adventist and other nascent Christian religions.

Except for the muslims, 60% of whom are in the urban areas, adherents of almost all the other religions in Rwanda are to be found in the rural areas where over 83% of the population resides. Also, some 30% of followers of the Jehovah Witness faith are to be found in urban areas. On the other hand the traditionalists/animists and persons without any specific religious affiliation are to be found mainly in the rural areas.

An analysis of the literacy levels and level of education of adherents of the various religious groups in Rwanda reveals that religious groups which have a large following in the urban areas, have the highest proportion of literate adherents. In effect, among adherents of the Jehovah faith and muslims, 81% and 75% respectively can read and write in any one language. The corresponding proportions are 17.7% among traditionalists/animists and 29.7% among those without any religious affiliation. However, it is among those religious groups which have the largest following that the

largest number of literate persons are to be found. Thus, more than 53% of residents who can read and write in Rwanda are catholics and 25% are protestants while the muslims and Jehovah witnesses only make up 2.3% and 0.6% respectively.

As expected, it is among those religious groups with the highest proportions of illiterate persons that we meet the highest proportion of persons who have never been to school. Four religious groups have high proportions of their adherents who have attained primary level education above the national average of (50.8%). These include the Jehovah Witness faith (56.4%), Catholics (54.1%), muslims (52%) and adventists (51.9%). Over 57% who have attained university level education in Rwanda are catholics and another 22% are protestants. The implications of these disparities in educational attainment in terms of access to jobs and other opportunities need to be highlighted.

A study of the trends in religious affiliation according to the results of the 1978, 1991 and 2002 censuses indicates that catholics, who constituted 51.7% of the population in 1978, increased in proportion during the 1991 census to reach 62,6% but have slumped to 49.8% during the 2002 census. Adherents of the protestant religions have been found to have been gradually increasing in proportion over the years from 1978 to 2002, possibly at the expense of the catholics. As compared to the 1978 census, the proportion of muslims in Rwanda has doubled today. Ever since the tragic events of the early 1990s in Rwanda, the number of new Christian missions have been introduced into the country and have been gaining ground so rapidly that their adherents now constitute some 4% of the population. On the other hand, the traditionalists/animists have been losing ground from a proportion of 9.4% in 1978 to 0.1% in 2002.

#### 5.3: LANGUAGES SPOKEN BY THE POPULATION

The analysis here concerns the four main languages spoken in Rwanda which are the kinyarwanda, French, English and kiswahili. Almost all the residents of the country (99.7%) could speak kinyarwanda in 2002. The French, English and Swahili languages were spoken only by 3.9%, 1.9% and 3% of the population respectively. Foreign language are spoken more by men than by the women in Rwanda and more in the urban areas than in the rural areas. For example, there are ten times more Swahili speakers in the towns than in the rural areas. It is also worthy to note that, on the average, speakers of the Swahili language are much older than those speaking the French and English languages.

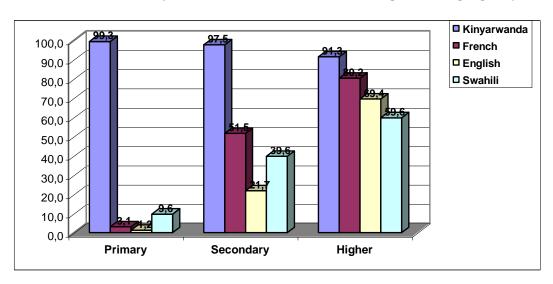
The kinyarwanda language is spoken by more than 99% of the population in all the provinces of Rwanda except in the City of Kigali (97.7%). In effect, Kigali City stands out among the main administrative units of the country on account of the high proportions of its residents who are speaking foreign languages. Some 17.7% of its population can speak French, 16% Swahili and 9.2%, the English language. The only other provinces where up to 3% of the population can speak French are Butare, Gitarama, Cyangugu and Gikongoro. Apart from Kigali City, it is only in the Umutara Province where up to 3% of the population can be found to speak the English language. Outside the City of Kigali, Swahili is mainly spoken in the provinces of Gisenyi and Cyangugu (3.7% each) and at Kibungo (2.7%).

Table 5.3: Proportions (en%)<sup>1</sup> of the resident population speaking ech of the languages according to place of residence and by sex.

Languages		Urban			Rural		Total			
spoken	Male	Female	Total	Male Female		Total	Male	Female	Total	
Total	609975	639469	1249444	3114051	3600314	6714364	3724025	4239783	7963809	
Kinyarwanda	98,2	98,6	98,4	99,5	99,6	99,6	99,3	99,4	99,4	
French	13,6	10,9	12,2	2,8	1,9	2,3	4,6	3,2	3,9	
English	7,2	4,8	6,0	1,4	0,9	1,1	2,4	1,5	1,9	
Swahili	14,6	9,9	12,2	1,7	0,8	1,3	3,9	2,2	3,0	

A cross-classification of ability to speak each of the languages and literacy reveals that, overall, speakers of the kinyarwanda language are among the most illiterate in the country. On the other hand persons who can speak any of the foreign languages, especially the western languages, have high literacy levels – 98% of them are literate as against 88% for speakers of kiswahili. This is only logical since these language are mainly learned in schools and require basic literacy skills. As a consequence, the proportion of the resident population which is literate increases with the level of education attained.

Figure 5.1: Proportions (in %) of the resident population aged 6 years and above and which ever attended school by level of education attained according to the languages spoken



With regard to economic activity, speakers of kinyarwanda are to be found in all branches of activity. Speakers of foreign languages are most likely to be found in non-agricultural and non-manual jobs such as financial transactions, administration, production and distribution services, real estate enterprises, etc...

Generally speaking, the level of knowledge of foreign languages is far too low in Rwanda. In this era of globalization, fluency in foreign languages (especially the English language) is vital for easier exchange of information among countries and for communication with other nationals. In other word, to make full use of the Information and Communications Technology, fluency in English, French and eventually Swahili is a necessary prerequisite.

<sup>&</sup>lt;sup>1</sup> Since a person can speak more than one language at a time, the sum of proportions on the table go above 100%

## 5.4: POPULATION STRUCTURE BY NATIONALITY

The resident population counted in Rwanda in 2002 can be classified into three broad groups: Rwandans, Rwandans with dual nationality and foreigners. As can be seen on table 5.4 persons of rwandese nationality are by far the most numerous in the country since they make 99.2% of the resident population. Rwandans with dual nationality constitute only 0.2% and foreign nationals, barely 0.6%.

Table 5.4: Resident population by nationality according to urban/rural place of residence and by sex

	Place of residence by sex										
		Urban			Rural		Total				
Nationality	Male	Female	Total	Male	Female	Total	Male Female		Total		
Total	727172	645432	1372604	3152275	3603672	6755947	3879447	4249104	8128551		
Rwandese	97,4	97,5	97,4	99,5	99,5	99,5	99,1	99,2	99,2		
Dual Nationality	0,3	0,3	0,3	0,1	0,2	0,1	0,2	0,2	0,2		
Foreign nationals	2,2	2,2	2,2	0,3	0,3	0,3	0,7	0,6	0,6		
Not Stated	0,03	0,03	0,03	0,01	0,01	0,01	0,02	0,02	0,02		

Since the population of rwandese nationality largely predominates among the resident population, its characteristics are therefore similar to those of this population which has been analysed in the various other sections of this report. Emphasis shall be laid here on the population having dual nationality and on foreign nationals. Most rwandese who declared dual nationality are females. In general, they reside in provinces closest to the countries of their other nationality. Dual nationality only gained currency in Rwanda after the tragic events of the early 1990s, within the massive return of refugees who had lived outside the country for several years.

A majority of the foreign nationals resident in Rwanda in 2002 came from the D.R. Congo (80.1%), while some 9.6% came from Burundi. Males generally predominate among this subpopulation except for the case of nationals from the D.R. Congo where women are more numerous (51.5%).

Overall, foreign nationals coming from neighbouring countries are relatively younger with mean ages ranging between 20 and 24 years. Those from other African countries and from Asia have mean ages ranging from 29-30 years while those from Europe and the Americas are generally much older – 35 years and above. Overall, the mean age of foreign nationals is higher than that of rwandese nationals.

Except for nationals of Burundi, only a third of whom are resident in urban areas, most foreign nationals are resident in urban areas. A substantial proportion of Congolese nationals (40%) are also resident in rural areas. Nationals of Burundi are to be found mainly in the provinces sharing borders with that country (Kigali Ngari, Butare, Gikongoro and Kibungo). Congolese nationals are to be found mostly in the City of Kigali and in the provinces of Cyangugu, Kibuye, Gisenyi, Ruhengeri, Byumba and Umutara. On their part, Ugandans are to be found mainly in the provinces of Umutara and of Ruhengeri and in the City of Kigali while Tanzanians reside mainly in the Province of Kibungo. Except for nationals of the D.R. Congo and Burundi, most foreign nationals are settled in the City of Kigali. For the most part, foreign nationals

counted in Rwanda in 2002 had been settled in the country for less than 10 years, that is ever since the end of the hostilities of the early 1990s.

Over 68% of the foreign nationals in Rwanda can read and write though those from Burundi have literacy levels far lower than this average - (55.1%). Generally female foreign nationals have lower levels of literacy. It is also to be noted that foreign nationals generally have relatively higher levels of educational attainment than the Rwandese – 17.7% have attained secondary level education and some 4.5%, university level education. Nationals from the neigbouring countries to Rwanda, especially those from Burundi, are found to generally have lower levels of educational achievement than the others.

It is interesting to note that the proportion of economically active persons among foreign nationals in Rwanda is rather low (25.3%). This level of participation has been down-played by the low levels of economic activity among nationals from the D.R. Congo, who constitute the majority of foreigners in Rwanda, but who are mostly refugees and are generally young. Nationals from the developed countries as well as those from Uganda have much higher levels of participation in economic activity (65% to 76%). In general, female foreign nationals are less economically active than their male counterparts especially in the urban areas. Over 75% of the economically active foreign nationals are employed in the tertiary sector of the economy except for those from Burundi, 66% of whom are in the tertiary sector.

Compared with the situation that obtained during the past censuses, there was a substantial increase in the proportion of foreign nationals in Rwanda between 1978 and 1991. Proportions observed in 2002 did not differ much from those of 1991. However the composition of this subpopulation did change significantly in the sense that, while in 1991 it was the Burundians who predominated among foreign nationals, in 2002, it was rather the nationals from the D.R. Congo. Burundians who were mostly refugees in 1991 had returned to their country during the time of the war and genocide in Rwanda.

# 6: LITERACY AND EDUCATIONAL ATTAINMENT CHARACTERISTICS OF THE POPULATION

#### 6.1: Introduction

In Rwanda, there is at least one primary school in every administrative Secteur and at a secondary school in every District. The average distance to every primary school is less than 3 km. The educational system in Rwanda has undergone various kinds of evolution with the successive regimes that have governed the country since independence. Overall, it has always been under three different types of administration: public sector schools run by the state; private sector schools enjoying state subsidies (run by religious bodies and by parents associations) and private schools run by entrepreneurs and individual parents. However, all these institutions follow the same training programs at the primary and secondary levels and are closely supervised by the state inspectorate of education.

Rwanda has recorded significant progress at the primary level of education with schooling rates of close to 70% but much less progress is evident at the secondary and tertiary levels.

The tragic events of the early 1990s severely affected the educational system in the country with the following major consequences: the death of several school children and staff members at various levels, an exodus of many more to neighbouring countries, drop-out of several children from school for various reasons, the destruction and the pillaging of school equipment and even archives, as well as the total grounding of academic activities between April 1994 and September 1995.

Immediately after these tragic events, the Rwandan government, with the aid of the international community, undertook a certain number of measures in order to bring the system back to its feet among which were: the relaunching of academic activities as from the 1995-1996 school year within the available training institutions; repairing of damaged school infrastructure and the construction of new primary secondary and higher schools; reintegration of pupils and students from the refugee camps into the various cycles; recruitment of new teachers and reintegration of those who had fled; provision of pedagogic materials and school equipment; harmonization of the academic programs as from 1996; non discriminatory admission into academic instruction on the sole basis of merit, creation of the National Center for Examinations, reorganizing the secondary school system into two cycles (a Core cycle of 3 years and a second cycle of another 3 years for either general or professional training) and the exoneration with regard to the minimum age of entry into various educational institutions as well as the offer of various other incentives especially for marginalized children.

In spite of the harsh economic crises, coupled with the recent history of the country, the Government of Rwanda has, with the assistance from the international community, been make available most of the financial requirements for he proper functioning of the educational system with much emphasis on the primary level of education. The results of the 2002 census have shall serve as a yardstick to measure the impact of past efforts and the level of achievement that has so far been attained.

The sections that follow are providing a brief summary of the analyses that have been made with regard to literacy, school attendance and educational attainment in Rwanda.

#### 6.2: LEVEL OF LITERACY

Some 60% of the population aged 15 years and above in Rwanda can read and write at text in at least any one language (which was not specified). Another 4.4% can only read while 35.6% can neither read nor write. In the urban areas of the country, the proportion of literate residents are higher than those in the rural areas (76.7% as against 56.6%). Men are more literate than women (66.5% as against 54.7%).

Table 6.1: Literacy Status of the Resident population in ordinary households aged 15 years and above by province/City of residence and sex

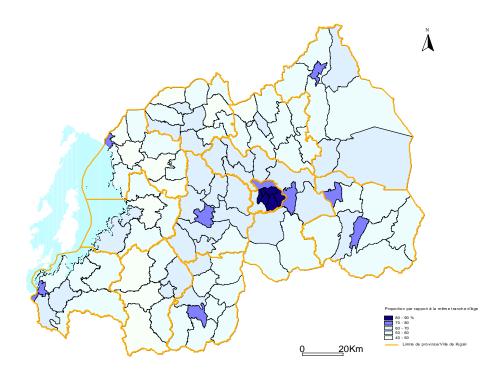
una	abore by	provino	e/City Oi	COIGCIIO	dila oo	•			
	Can read a	and write		Ca	an only rea	ad	Can neit	her read r	nor write
PROVINCE/CITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
Total	60,0	66,5	54,7	4,4	4,4	4,4	35,6	29,1	40,9
KIGALI CITY	85,1	87,7	82,1	2,2	2,0	2,5	12,7	10,3	15,4
KIGALI NGALI	61,5	66,5	57,6	4,7	4,8	4,7	33,7	28,7	37,7
GITARAMA	63,6	66,3	61,6	4,5	4,6	4,4	31,9	29,1	34,0
BUTARE	57,5	60,7	55,1	4,8	4,9	4,7	37,7	34,4	40,1
GIKONGORO	52,3	59,2	46,9	4,7	5,0	4,5	42,9	35,8	48,6
CYANGUGU	60,0	66,0	55,1	4,5	4,4	4,6	35,5	29,6	40,3
KIBUYE	56,1	63,7	50,4	4,8	4,9	4,8	39,0	31,4	44,8
GISENYI	52,7	62,4	45,2	4,9	5,0	4,7	42,5	32,6	50,1
RUHENGERI	56,4	66,5	48,6	4,5	4,3	4,6	39,1	29,2	46,9
BYUMBA	55,5	63,1	49,2	4,1	4,3	4,0	40,3	32,5	46,8
UMUTARA	59,5	66,9	53,1	4,1	4,0	4,1	36,4	29,1	42,8
KIBUNGO	57,9	64,2	53,0	4,7	4,8	4,7	37,3	31,0	42,3

The highest rates of literacy are observed within the 15 to 34 year age range with rates ranging from 67% to 74%. Levels of illiteracy are found to worsen with age as from age 40 and the disparities by sex become more glaring.

Kigali City has the highest proportion of literate persons in the country (85%),followed in descending order, by the provinces of Gitarama (63.6%), Kigali Ngari (61.5%) and of Cyangugu (60%). The lowest rates are observed in the provinces of Gikongoro (52.3%) and Gisenyi (52.7%). In general, men are more literate than the women both in the urban and rural provinces of the country. The lowest literacy levels among women are observed particularly in the provinces of Gisenyi (45.2%), Gikongoro (46.9%), Ruhengeri (48.6%) and of Byumba (49.2%).

A further analysis at the district level (Map 6.1) demonstrates that the highest levels of literacy are found among populations settled in the central and eastern parts of the country while the lowest levels appear to be among populations in the border areas. This result tells much both of the history of the creation of schools in Rwanda as well as the present distribution of educational establishments in the country.

Map 6.1: Literacy rates among the resident population aged 15 years and above by District



In order to compare the trends in literacy levels according to the results of the past three censuses, the minimum age of 7 years is considered. On this basis, it becomes evident that between 1978 and 1991, literacy levels increase by 13% in Rwanda (from 39.8% to 53.3%). On the other hand, these rates have only increased slightly between 1991 and 2002 (from 53.3% to 54.9%). This may partly be explained by the tragic events of the 1990s. However, when the literacy levels by age are compared, it is observed that those for the population aged below 30 years are much higher in 2002 than in 1991 – a sign that literacy levels are picking up among the younger generations.

# 6.3: SCHOOL ATTENDANCE

#### 6.3.1: The population which has ever attended/is attending school

The question relating to school attendance was addressed to residents of both ordinary and collective households, aged 6 years and above. Responses to this question enabled the classification of residents into those who ever attended school and are currently out of school, those currently in school and those who have never been to school.

Overall, 31% of the resident population in Rwanda has never been to school, those who have attended but are now out of school constitute 45% while those who were attending school in 2002 constituted the remaining 24%. As expected, the proportion of residents who have never been to school is higher in the rural areas (33%) than in the urban areas (21.1%). Furthermore, more than half (53.6%) of the urban residents

have ever attended school as against 43.1% of rural residents. The proportion of residents who were attending school in 2002 were identical in both the urban and rural areas.

At the national level, more women were found not to have been to school than men (34.7% as against 26.7%) while there are more men who ever attended or were attending school than women. However, in urban areas, proportionally more women were found to be attending school in 2002 than men (27.0% as against 22.1%).

Table 6.2 : School attendance (in %) among the resident population aged 6 years and above by Province/City of residence

	Atte	nded Sch	ool	Curre	ntly Atter	nding	Never	Never been to School			
PROVINCE	Total	Males	Females	Total	Males	Females	Total	Males	Females		
Total	44,9	47,8	42,3	24,2	25,5	23,0	30,9	26,7	34,7		
KIGALI CITY	60,2	63,8	55,9	25,4	22,6	28,8	14,4	13,6	15,3		
KIGALI NGALI	46,7	48,5	45,1	24,1	25,5	22,9	29,2	25,9	32,1		
GITARAMA	50,1	51,5	48,9	23,7	24,3	23,1	26,2	24,2	27,9		
BUTARE	46,7	47,4	46,1	20,7	21,4	20,0	32,6	31,1	33,9		
GIKONGORO	41,4	45,1	38,1	21,1	21,7	20,6	37,4	33,2	41,3		
CYANGUGU	45,5	47,8	43,4	23,8	25,2	22,5	30,7	27,0	34,1		
KIBUYE	41,5	44,1	39,3	25,3	27,5	23,5	33,2	28,4	37,2		
GISENYI	37,8	41,5	34,6	26,8	30,0	24,1	35,5	28,6	41,4		
RUHENGERI	41,3	44,7	38,3	26,3	29,7	23,4	32,4	25,6	38,2		
BYUMBA	43,3	46,9	40,1	22,3	23,8	20,9	34,4	29,3	38,9		
UMUTARA	41,4	44,9	38,2	25,0	26,6	23,5	33,6	28,5	38,3		
KIBUNGO	42,2	44,4	40,1	24,6	25,8	23,4	33,3	29,7	36,4		

In all the provinces, a higher proportion of females than males are found to never have attended school. The highest proportions of females in this category (more than 41%) were observed in the provinces of Gikongoro and Gisenyi while in the City of Kigali, this proportion is barely 15%. On the contrary, more males than females have ever been to school in all the provinces. The same trend is observed among residents who were attending school in 2002 except in Kigali City where proportionally more females were in school than males (28.8% as against 22.6%).

An analysis of school attendance by single age among residents aged 6-29 years reveals that the proportions who have ever attended school increase with age. As from age 17 more than one young person out of every two, while at age 23, three out of every four of them are already out of school. In other words, there is a tendency to leave school rather early in Rwanda and this is usually after attaining only the primary level of education. Children appear to enter school at younger ages (5-7 years) in the urban areas than in the rural areas where high proportions of children aged 6-7 years are found never to have been in school. This is certainly evidence of delays in entry into school in the rural areas.

The difference between the school age population and the population attending school at various levels demonstrates the degree of unmet needs in terms of schooling for each of the levels of education. With respect to the population aged 6-24 years, 60% were not in school in 2002 either because they had never been to school or because they had left school. In all the provinces of the country and even in

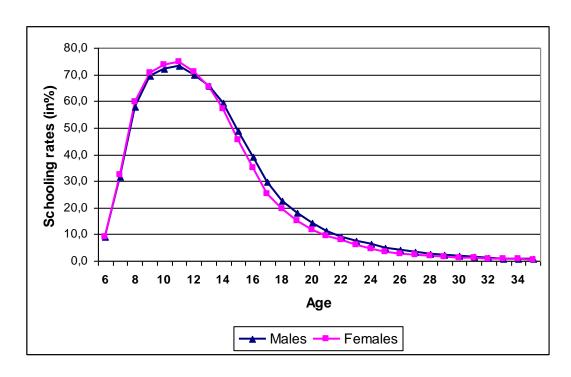
Kigali City, the level of unmet needs in terms of schooling is still very high since 58% to 65% of the school age population corresponding to all levels of education, is out of school.

## 6.3.2 : Schooling rates

Schooling rates for each age group of the population, express the proportion of the population attending school in relation to the population of schooling age which corresponds to various levels of education. Thus the net schooling rate at the primary level for the population segment aged 8-13 years in Rwanda is 67.9%. It is slightly higher among the females especially in the urban areas. At the secondary level, the rate corresponding to the 13-19 year age segment is 39.6% again with higher rates for females in the urban areas. Schooling rates are lowest at the university level of education (10.6%).

However, the net schooling rates at the secondary and higher levels have been grossly overestimated because most of the school children considered for these levels actually belong to the lower cycles of education. In view of the fact that several children repeat classes and because of the age dispensation waived age limits at entry into various cycles of education in Rwanda, several school children are found to be too old for the cycles they are presently attending. As a consequence, the gross schooling rate (number of primary school children irrespective of age in relation to the population of official primary school age) in Rwanda is 104.8% and the mean age of the school children is 12 years. At the secondary level this gross rate is much lower (12.6%) with a student mean age of 19 years while 20% of the students are aged more than 21 years. At the University level, the gross rate of schooling is 1.3% with a student mean age of 25 years though some 42% of the students are aged more than 26 years.

Figure 6.2: Schooling rates by age and by sex



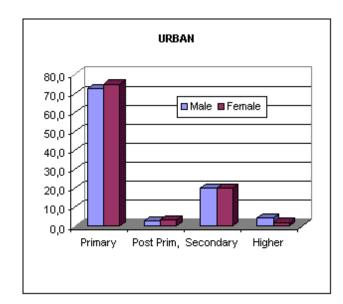
The evidence on figure 5.3 confirms that most of the young population in Rwanda quits school after the primary school level. Wide disparities exist between the provinces in terms of the rates of schooling with the City of Kigali enjoying the highest rates followed, in descending order, by the provinces of Gitarama, Butare, Umutara and Cyangugu.

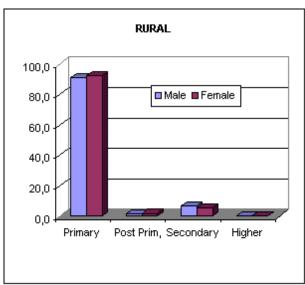
## 6.3.3: Highest Level of Education Attained

To persons who ever attended school or who were attending school in 2002, another question was asked concerning the last class they had successfully completed. Thus it was possible to determine those who attained the primary, secondary and university levels and to even identify those who dropped out mid-course. It should be recalled here that some 33.5% had declared never having attended school or not to have completed as much as the first year of primary schooling.

Of all those who ever went to school, 88.4% attained only the primary school level, 2.1% the post-primary level<sup>2</sup>, 7.7% the secondary level and only 0.8% the university level. Whether it be in the urban or in the rural areas, most Rwandans have stopped schooling at the primary school level (figure 5.4) with females recording a higher proportion. There are proportionally more urban residents who attained secondary and higher levels of education than rural residents.

Figure 6.3 : Educational level attained by male and female residents aged 6 years and above by place of residence





An analysis of the level attained by province reveals that the City of Kigali is standing out prominently with 26.1% of its residents having attained the secondary level and 4.1% having attained the university level of education. On the other hand, in all the other provinces, as many as 9 out of every 10 persons have ever been to school stopped at the primary level. In all the provinces, women are more likely to have stopped at the primary level than the men. However, in the City of Kigali and to a certain extent, in the province of Gitarama, a higher proportion of females than males

\_

<sup>&</sup>lt;sup>2</sup> Post-primary education is usually professional training which lasts for one to two years

is observed to have attained the secondary school level. This is largely attributable to the fact that more men have proceeded to attain higher levels of education.

# 7: ECONOMIC ACTIVITY CHARACTERISTICS OF THE POPULATION OF RWANDA

#### 7.1: Introduction

The 3rd Census of Population and Housing in Rwanda was held at a particularly crucial period in its history. The tragic events of the 1990s not only decimated human life but also destroyed most of the economic infrastructure, leading to a drastic reduction in the level of economic activity in the country. An analysis of the census data on economic activity shall throw some light into the size and quality of the labour force in Rwanda including both its present and future potentials.

The Rwandan economy is predominantly agricultural featuring mainly subsistent agricultural production in small holdings using intensive artisanal methods. The high rural population densities coupled with the tradition of sharing landed property among heirs has led to an excessive fragmentation of family plots to the extent that agricultural production itself is producing less returns. The very low per capita income in Rwanda (US\$ 250) is such that little else can be spared for investment in this sector or in the others. Furthermore, the financial sector has not developed any interest in the rural sector of the economy. On the other hand, activities of the secondary and tertiary sectors are very limited in Rwanda. They are generally limited to the urban areas and mainly to the City of Kigali.

Article 12 of the investment code guarantees equal assess to jobs and equal pay without any sex discrimination. Unfortunately, most Rwandese women are economically active within family holdings as unpaid family labour and hence cannot benefit from such provisions.

During the census, the minimum age of eligibility to answer question on economic activity was deliberately lowered to 6 years in order to capture the extent of child labour and to evaluate the level of training of the potential labour force of future years. Much more care was placed on capturing various dimensions of economic activity during this census such as to better evaluate the participation of women, children and elderly persons. However, it was not possible for the census to capture the high levels of underemployment that are so common in rural areas or to capture multiple employment and the dynamics of the informal sector.

## 7.2: CHARACTERISTICS OF THE ACTIVE AND INACTIVE POPULATION

In Rwanda, the economically active population is larger than the inactive population (56.4% as against 43.6%). Women more numerous among the economically active population (55.2%) than within the inactive population (52.5%). This is true for all the provinces of the country except for the City of Kigali where less than 4 out of every 10 women are economically active.

Within the economically active population, the proportion of jobless persons and of those in search of first employment (first job seekers) is very small in all the provinces and in both urban and rural areas. They represent only 2.24% and 1.6% respectively in the urban areas and much less – 0.16% and 0.2% - in the rural areas. These very low proportions are far from the reality on the ground. In Rwanda several persons who often remain underemployed during the most part of certain seasons of the year still declared themselves as farmers, hence as fully employed in the agricultural sector. Rates of unemployment are generally much higher for all age groups in the urban areas than in the rural areas. They are higher among males than among the females. Unemployment is generally more perceptible in the age segment from 20 to 34 years. A substantial proportion (53.6%) of persons who declared themselves as jobless had attained at least secondary level education and among those who attained secondary level education, most of them had undergone professional training.

Generally, first job-seekers are younger and are rare after age 39 years. More than 59% of first job-seekers had attained secondary level education and 29% underwent professional training.

Table 7.1 : Proportion of the population aged 6 years and above according to economic activity status, place of resident and by sex

		Urbai	n		Rur	al		Tota	al
Economic Activity Status	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total	48,6	51,4	954 237	45,5	54,5	5 111 196	46,0	54,0	6 065 433
Employed	53,4	46,6	470 706	43,2	56,8	2 916 763	44,7	55,3	3 387 469
Unemployed (jobless)	62,6	37,4	10 987	63,6	36,4	4 695	62,9	37,1	15 682
First job-seeker	51,5	48,5	7 966	53,5	46,5	6 930	52,5	47,5	14 896
Economically Active population	53,6	46,4	489 659	43,3	56,7	2 928 388	44,8	55,2	3 418 047
House helpers	28,9	71,1	109 418	46,1	53,9	652 668	43,6	56,4	762 086
Pupils/students	48,6	51,4	290 991	50,0	50,0	1 306 486	49,8	50,2	1 597 477
Retired persons	39,3	60,7	10 774	37,3	62,7	60 548	37,6	62,4	71322
Owners of landed property	39,1	60,9	7 587	41,9	58,1	23 822	41,2	58,8	31 409
Persons with no work	46,1	53,9	45 808	49,4	50,6	139 284	48,6	51,4	185 092
Economically	·								
Inactive population	43,4	56,6	464 578	48,4	51,6	2 182 808	47,5	52,5	2 647 386

Pupils and students predominate among the economically inactive population in Rwanda (60.3%) followed by house helpers (28.8%). This holds true in both urban and rural areas of the country. There is a higher proportion of women among inactive persons in the urban areas where they operate as housewives or house helpers than in the rural areas where they are mostly retired persons. There are as many males as females among the pupil/student category of economically inactive persons especially in the rural areas.

The age structure of the various categories of the economically inactive population is very varied. As expected, the mean ages of the pupil/student category is very young – 12.7 years among boys and 12.5 years among girls. Among the house helpers and persons who declared having no work and not looking for any, the females are relatively older (17.5 years) than the males (13.8 years). Evidently retired persons and property owners are much older with mean ages of 71.4 years and 56.6 years respectively. Also, property owners are generally more educated than retired persons.

Pupils/students constitute the largest proportion (60%) of the inactive population in both the urban and rural areas. Some 8 out of every 10 pupils/student only attained primary level education especially in the rural areas. In the urban areas, some 20% of the pupil/students were attending secondary level education and some 2-3% were at the university level. It is thus evident that the pupil/student category are the most educated category of the economically inactive population. The category of house helpers is dominated by females (71%)especially in the urban areas. More than half of them have never been to school and the remainder only attained primary level education.

On the other hand, persons who declared having no work and not looking for any were generally young adults with average ages of 25.5 years for the men and 29.2 years for the women. They are to be found more in the urban areas than in the rural areas. Most of them either never went to school (40%) or only stopped at the primary school level (40-45%).

# 7.2.1: Economic dependency ratios

In view of the structure of the active and inactive population in Rwanda, 100 economically active persons are theoretically considered to be taking charge of 123.5 dependent persons (including both economically inactive persons and all those aged below 6 years). Economically active persons in urban areas have much higher dependency burdens (141.6%) than those of the rural areas (120.4%). At the level of the provinces, more disparities are evident. While in Kigali City and in the provinces of Ruhengeri, Gisenyi and Kibuye, every 100 economically active person must provide for more than 130 inactive persons and this burden is even as high as 141 in the Province of Cyangugu, the burden is much lower in the provinces of Gitarama, Butare and Kibungo (110-113%).

The net dependency ratio, which considers the burden of all persons aged les than 15 years as well as those above this age who are either inactive or active but unemployed on the economically active and employed population aged 15 years and above, is much higher. At the national level, each economically active and employed person aged 15 years and above must provide for 1.4 dependent persons. This burden is much higher in the urban areas (1.7) than in the rural areas (1.4). The disparities between the provinces remain glaring. In five provinces (Kigali City, Cyangugu, Kibuye, Gisenyi and Ruhengeri) each economically active and employed person aged 15 years and above must provide for 1.5 effectively dependent persons. In the urban areas of the provinces, the burden of dependency is even much higher to the extent that in the towns of Byumba and Umutara, each economically active and employed person aged 15 years and above must theoretically cater for at least two

dependent persons. This burden is as high as three dependent persons in the town of Gisenyi.

# 7.3: CHARACTERISTICS OF THE ECONOMICALLY ACTIVE AND EMPLOYED POPULATION

This section provides an overview of the characteristics of the labour force that is being currently used by the Rwandan economy for the production of its goods and services. Since the proportion of unemployed persons and of first job-seekers is very small in Rwanda, some 99% of the economically active population is currently having a job. This includes 98.8% economically active men and 99.3% of all economically active women. This situation applies to almost all the provinces of the country except in Kigali City where employed persons constitute 94% of all economically active persons. Figure 7.1 demonstrates that economically active and employed persons are fewer among the youth and above 49 years and that the trend in variation of this population by age is identical for the two sexes. However, at the national level, females are more numerous among the economically active population up to age 79 years. The situation is a lot more different in the urban areas where males predominate at all ages.

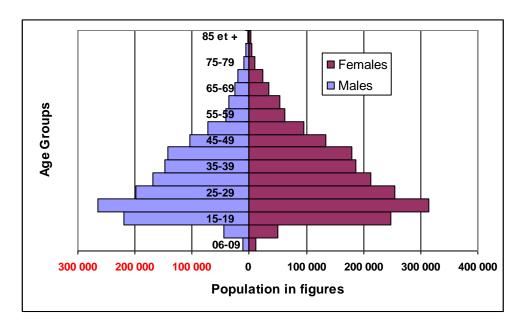


Figure 7.1 : Age Pyramid of the economically active and employed population

The quality of the labour force in Rwanda in terms of its level of education or training is generally poor. Some 37.5% have never been to school, 56% only reached the primary school level and some 4.4%, the secondary level of education. In the labour force, males are generally better trained than the females but even among males, the proportion with a sufficiently high educational level is still small. It is only in the urban areas that relatively high proportions of persons who have reached the secondary school level are found even though such proportions are not as high as 10%. It is therefore evident that the labour market in Rwanda does not yet have the adequately qualified manpower needed for sustaining an effectively modern economy.

## 7.3.1 : The Type of Employment

More than 8 out of every 10 economically active and employed persons are employed in the agricultural sector. This includes 81% of the male labour force and 93% of females. In the rural areas, the agricultural sector is practically the sole employer ( of 90% of the male labour force and of 97% of the females). It is only in the urban areas that some evidence of diversification in economic activity is noticeable but the agricultural sector still employs more than 46% of the urban labour force including as much as 60% of the female labour force. The rest of the labour force is employed in the commercial sector, in craftsmanship and as employees and other unqualified labourers.

The sex structure of the labour force reveals that it is only in the agricultural sector and among administrative staff that females predominate. Males largely outnumber females in such areas as transportation, mechanical works and repairs, armed forces and among labourers. Even in the rural areas where women outnumber men, they are more numerous than men only in the agricultural sector.

The structure of the labour force according to the type of jobs performed is identical in almost all the provinces where 90-93% of the labour force is in agriculture. In Kigali City however, the economy is more diversified with most of the labour force employed as employees and unqualified labourers and workers of the commercial sector come in second position, providing one in every five jobs. Craftsmen and other employees constitute another 17% of the labour force.

# 7.3.2 : Economic Activity Status

In Rwanda, 3 out of every 4 economically active and employed persons are self-employed while some 15% are unpaid family workers working in family farms and businesses. More than 95% of the economically active and employed persons in the rural areas belong to these two categories of workers. In the urban areas, self employed persons still make 50-60% of the workers even though most of the salaried workers of the country are found there. In effect, more than 60% of all persons earning a regular salary and more than half of the wage earners are settled in urban areas. There are more than 3 males to every female among employers and of wage-earners while among regular salary earners, there are about twice as many men as there are women.

Except in Kigali City, 7-8 out of every 10 economically active and employed persons in the other provinces are self employed while some other 11-20% are unpaid family workers. Salaried workers make up some 4-6% of the labour force in these provinces with a higher proportion of those receiving a regular salary than earning wages except in the Kigali Ngari, Cyangugu and Byumba provinces where wage earners are more numerous. In Kigali City, more than half of the labour force is constituted by salaried workers among which a larger proportion (31.2%) earns a regular salary. Overall, some 45% of all employers and earners of regular salaries and 37% of all wage earners in Rwanda are found in Kigali City alone. It also has a sizeable proportion of self-employed persons who are especially active within the informal sector.

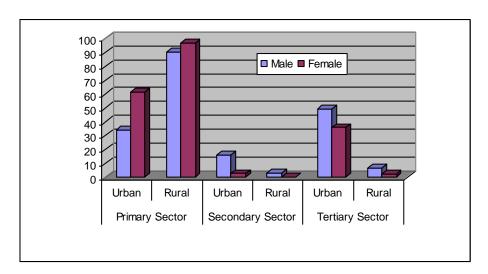
In terms of qualification, a large majority (87-95%) of self employed persons, wage earners and of unpaid family workers have either never been to school or stopped at the primary school level. On the other hand, more than 36% of the employers and half of the workers with regular salaries have at least attained the secondary school level of education. This finding confirms the fact that schooling beyond the primary level can be a guarantee for access to a more secure employment in Rwanda.

## 7.3.3 : The Branch or Sector of Economic Activity

As a logical outcome of the structure of the labour force, as seen earlier, more than 8 out of every 10 economically active and employed persons are active within the primary sector (particularly, in the agricultural sector) in Rwanda. A tenth of the economically active and employed persons are employed within the tertiary sector (commerce, administrative services, etc) while only some 2% are in the secondary sector of the economy.

More than 9 out of every 10 economically active and employed persons in the rural areas are involved in agriculture while the equivalent proportion in the rural area is about 47% including 60% of the female labour force. Activities of the tertiary sectors occupy a major proportion (44%) of the remaining urban labour force. It must be noted that the secondary sector employs more than 16% of the urban male labour force in Rwanda. Most of these are in the area of building construction.

Figure 7.2: Proportional distribution of the economically active and employed population aged 15 years and above by sector of economic activity and place of residence in Rwanda



The surplus of women that has been noticed within the labour force of the country is only noticeable within the primary sector of the economy, especially in agriculture both in the urban and rural areas. In the other branches and sectors, especially in the secondary sector, males largely outnumber females.

In all the other provinces of the country, 89-93% of the labour force is employed in the primary sector of the economy while in Kigali City 67% of the labour force is employed in the tertiary sector and another 16% in the secondary sector. This finding goes a long way to highlight the disequilibria that prevail within the economy of

Rwanda. Almost all the economic activity and all the labour force is concentrated in the agricultural sector and the City of Kigali stands out as the only entity with a much different socioeconomic structure and status.

The level of training or education that each economically active and employed person in Rwanda has reached will largely determine in which sector of the economy he's employed. Overall, 9 out of every 10 employed persons who never went beyond the primary school level are employed in the primary sector of the economy while barely 2% of them are in the secondary sector and while less than 6% are in the tertiary sector. On the other hand, most of the employed persons who have attained at least the secondary school level are employed in the tertiary sector. Employment in the secondary sector in Rwanda appears not to be so dependent on the level of education and training attained.

#### 8: CHARACTERISTICS OF ORDINARY HOUSEHOLDS IN RWANDA

#### 8.1: Introduction

Data collected during the 3rd census of Rwanda, in the same way as that collected during earlier census operations, provides an opportunity for assessing the present situation and trends of evolution of the main characteristics of the ordinary households in the country. An ordinary household can be made up of a single individual or by a group of related or unrelated persons who share the same living premises and resources including expenditure, take their meals together and recognize the authority of one individual called « head of household ». The relationship to the head of household and variables which describe the sociodemographic characteristics of heads of households and of each individual member are the key components which have been employed for analyses in this section.

In the Rwandan society, households are created essentially through marriage but certain peculiar working and housing conditions especially in the urban areas and the direct consequences of the country's recent history have resulted in the creation of other forms of households. In general, households in Rwanda are of averagely small sizes of 4-5 persons. Most households are lodged in dispersed settlements commonly called 'urugo' and agriculture is the main activity and source of revenue for 80% of ordinary households which, in this respect, operate as the primary units of production. With increasing population pressure on land and the tendency to always divide inherited land among heirs, the existing agricultural land, whose fertility has for long been threatened by perennial cultivation without fallow or other fertilizing elements, is again subdivided into such tiny units that food production itself is threatened. The tragic events of the 1990s again came to aggravate this situation to the extent that the purchasing power of most households has considerably diminished. According to a study carried out in 2001 on the household living conditions in Rwanda, 60.3% of the households were found to be living below the poverty line.

A number of measures have been taken in various domains by the Government to improve on the lot of such impoverished households. The « Fund for Assistance to Survivors of the Genocide (FARG) » provides assistance to households in the areas of housing, education, health and income generating activities. The National Poverty Reduction Strategy Program (PRSP) has the improvement of the purchasing power of rural households as one of its objectives. The fifth paragraph of Law No 22/99 of the 12/11/1999 focuses on the regularisation of marriage systems, liberties and on rights to succession and confirms the rights of children to inheritance of their parents possessions irrespective of their sex, among other measures. The legal age at first marriage has been fixed at 21 years such as to somehow reduce the rate at which (premature) households are being created. The law on landed property rights which shall guarantee a better management of land and security of tenure for its occupants is being finalized. Since 1995, several dwellings have been constructed as part of the programme for the resettlement of households in grouped settlements called « imidugudu ».

# 8.2: The total number of ordinary households and the population living in them

In August 2002, there were 1,757,426 ordinary households in Rwanda hosting a resident population of 7,963,809 inhabitants. The other 164,743 inhabitants were staying in collective households. Most of the ordinary households in Rwanda (84.5%), are to be found in rural areas. In view of the fact that average household sizes vary only slightly in the country, the overall proportional distribution of households by province is not very different from that of the population as a whole. Thus the Province of Ruhengeri has the highest proportion of households (11%) followed by those of Gisenyi and of Gitarama while the provinces of Kibuye and Umutara have the least proportions of households in the country (with 5.8% and 5.2% respectively).

Except for the City of Kigali which is entirely urbanized, the proportion of urban households is rather small in the other provinces. It is only in the provinces Butare, Gitarama and Kibungo that such proportions go above the 10% mark. Even then, it is because each of these provinces has two urban agglomerations. On the other hand, in the Umutara Province, the only town has only 1,843 households representing barely 2% of the households of the province.

Table 8.1 : Distribution of households by province according to the sex of the head of household

	Sex of house	ehold Head		
Province/City	Male	Female	Total	Sex Ratio
Kigali City	94117	30847	124964	305.1
Kigali Ngari	107813	64667	172480	166.7
Gitarama	113769	70544	184313	161.3
Butare	94341	70302	164643	134.2
Gikongoro	71069	36022	107091	197.3
Cyangugu	81142	39409	120551	205.9
Kibuye	63634	38767	102401	164.1
Gisenyi	118776	68437	187213	173.6
Ruhengeri	126271	66889	193160	188.8
Byumba	105863	46076	151939	229.8
Umutara	63395	28265	91660	224.3
Kibungo	99044	57967	157011	170.9
Total	1139234	618192	1757426	184.3

The number of households headed by males is by far more numerous than those headed by females who head some 35.2% of all the households in the country. Overall, there are 184.3 male heads of households to every 100 female heads. Among the provinces, the highest sex ratios among household heads have been observed in the City of Kigali (305.1); the provinces of Byumba, Umutara and Cyangugu have sex ratios which are above 200 while the lowest corresponding sex ratio are observed in the province of Butare: 134.2. The provinces of Butare, Gitarama, Kibuye and Kigali Ngari have the highest proportions of female-headed households in the country (more than 37%), especially in the rural areas. In the urban areas, the highest proportions of female-headed households are observed in the towns of the provinces of Butare, Kibungo and of Kibuye.

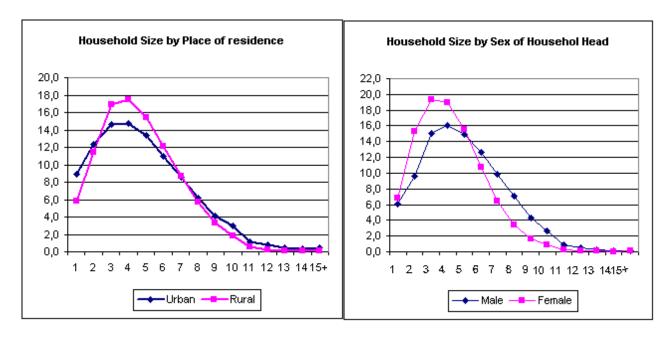
Since 1991, the volume of ordinary households in Rwanda has increased by 17% from 1,502,153 households in 1991 to 1,757,426 households in August 2002. In 1978, there were some 1,055,950 households in Rwanda. In other words, the rhythm of creation of ordinary households in Rwanda has rather slackened during the second intercensal period from a growth rate of 2.8% between 1978-1991 to 1.4% between 1991-2002.

Between 1991 and 2002, the proportion of female-headed households increased considerably from 25.0% to 35.2%. On the other hand, between 1978 and 1991, this proportion had remained constant. The recent history of the country largely explains this pattern of evolution.

## 8.3: The Size of Ordinary Households

An analysis of the distribution of households by size reveals the existence of a large proportion of small-size households (of 1-2 persons) in Rwanda (19.6%). Most of the households in the (61.2%) are made up of 3-6 members. This concerns 62.4% of the rural households and 55.1% of those in the towns. Households with more than 10 members are very few (less than 3%) but they are more common in the urban areas (4.6%). Female-headed households are generally of smaller sizes than those headed by males especially in the rural areas. When household sizes are small (up to 5 persons), the proportion of female-headed households is higher but above this size, it is the males who are more numerous.

Figure 8.1: The Distribution (in %) of households by size according to urban/rural residence and the sex of the household head.



At the national level, half of the households have an average size of below 3.76 persons. The median household size in rural areas is slightly larger than that in the urban areas (3.76 as against 3.72 persons per household). Male headed households have a larger median household size (4.08) than female headed households (3.26).

The average household size in Rwanda is 4.53 persons per household. It varies only slightly by place of residence: 4.58 persons per household in the urban areas as against 4.52 persons in the rural areas. On the other hand the average size differs significantly according to the sex of the household head: 3.98 for those headed by females and 4.83 for male-headed households.

Table 8.2: Average household sizes by province/City according to urban/rural residence and the sex of the household head

		Urban			Rural			Total	
Province/City	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total
Total	4.7	4.3	4.6	4.9	3.9	4.5	4.8	4.0	4.5
Kigali City	4.5	4.6	4.5	-	-	-	4.5	4.6	4.5
Kigali Ngali	4.5	4.5	4.5	4.8	4.1	4.5	4.8	4.1	4.5
Gitarama	4.9	4.0	4.6	4.8	4.0	4.5	4.8	4.0	4.5
Butare	4.7	4.1	4.4	4.6	3.8	4.2	4.6	3.8	4.3
Gikongoro	4.7	4.1	4.5	4.8	3.8	4.5	4.8	3.8	4.5
Cyangugu	5.4	4.5	5.1	5.3	4.1	4.9	5.3	4.1	4.9
Kibuye	4.7	4.0	4.4	4.9	3.9	4.6	4.9	3.9	4.5
Gisenyi	5.2	4.4	4.9	4.9	3.9	4.5	4.9	3.9	4.6
Ruhengeri	5.2	4.0	4.8	5.0	3.8	4.6	5.0	3.8	4.6
Byumba	5.2	4.0	4.8	4.9	3.8	4.6	4.9	3.9	4.6
Umutara	4.6	4.4	4.6	4.8	4.1	4.6	4.8	4.1	4.6
Kibungo	4.7	4.3	4.5	4.6	3.9	4.3	4.6	4.0	4.4

The average household size varies only slightly among the provinces. The largest household sizes are recorded in the Province of Cyangugu (4.9 persons), while the smallest sizes are found in the provinces of Butare and Kibungo (4.3 and 4.4 persons respectively). Female-headed households are generally larger in the urban areas than in the rural areas in all the provinces. Also, the average household size is found to increase with age up to the 45-49 year age group and then decreases afterwards. Generally, household size varies very little according to the various other characteristics of the household head except when such attributes are closely correlated with the sex or the age of the household head or to the standard of living of the household that he/she heads. In effect, the average household size of households with a high standard of living (5.8 persons) is much higher than that of households with an average standard of living (5 persons) or with low standard of living (4.4 persons).

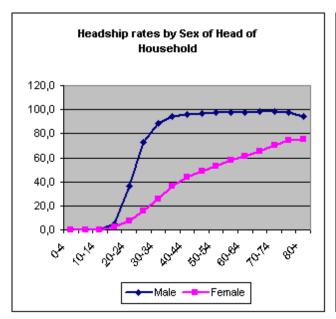
The average household sizes in Rwanda do not seem to have changed much since 1978. In fact, between 1978 and 1991, average household sizes appear to have increased slightly from 4.5 to 4.7 persons. From 1991 to 2002 these sizes rather diminished to their 1978 levels.

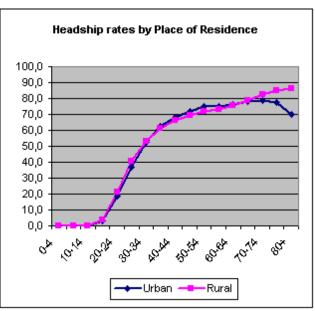
#### 8.4: Access to the Status of head of Household in Rwanda

Overall, heads of households constitute 22.2% of the resident population aged 15 years and above. The equivalent proportion among males is 30.8% and among females is 14.7%. It varies according to urban/rural residence. Among the provinces, the highest headship rates are recorded in the Province of Butare (23.7%) and the lowest in that of Cyangugu (20.4%).

Male headship rates are much higher than those of the females at all ages. They increase phenomenally between the ages 20-40 years especially among the males. In effect, between the 30-39 year age limits, they increase from 29.2% to 91.0% among males but only from 7.3% to 30.8% among females. As from 40 years, the female headship rates begin to increase at a faster rate than those of the males. Women therefore attain the status of head of household rather late and often when they are already old and widowed. The pattern of headship rates for each sex do not vary much according to place of residence but the gap between male and female headship rates is much wider in the rural areas than in the towns.

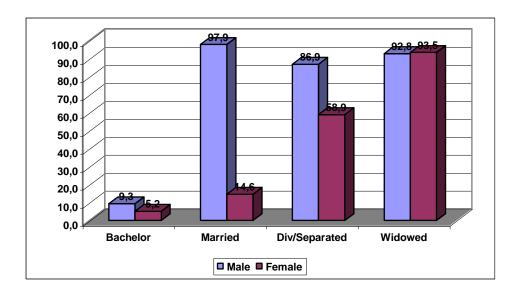
Figure 8.2 : Patterns of Headship rates by age according to the sex and place of residence of the Heads of Households





Of all the socio-demographic characteristics of heads of households in Rwanda, it is their marital status which is most sensitive to the sex of the head of household. In principle, most males accede to the status of head of household once they are married or shortly before first marriage while most women only attain this status when their marriages have broken down either as a result of the death of their spouses or through divorce or separation.

Figure 8.3: Household headship rates by marital status and sex of the head of household (population aged 15 years and above)



## 8.5: The composition of ordinary households

In Rwanda, it is common for the structure of an ordinary household to be similar to that of a basic family unit. An average household is usually constituted by a head of household who is usually a man, his spouse, their children and often, some other related or unrelated members. There is an increasing number of other forms of households of either one individual or of unrelated persons existing especially in the urban areas these days.

Table 8.3: The Distribution of the population in ordinary households by relationship to the head of household according to place of residence and sex of household members.

Relationship to head	Urb	an		Rur	al		Total		
of household	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Head of household	30.8	13.7	22.1	30.8	14.9	22.3	30.8	14.7	22.2
Spouse	0.1	20.3	10.5	0.1	23.1	12.4	0.1	22.7	12.1
Child	44.8	44.1	44.5	57.4	51.2	54.0	55.3	50.1	52.5
Fostered child	0.6	0.7	0.7	0.3	0.3	0.3	0.4	0.4	0.4
Father/mother	0.0	0.4	0.2	0.0	0.1	0.1	0.0	0.2	0.1
Brother/sister	4.2	3.7	3.9	1.7	1.8	1.7	2.1	2.0	2.1
Grandchild	4.3	4.3	4.3	5.1	4.8	4.9	4.9	4.7	4.8
Other related persons	5.9	6.2	6.1	2.8	3.1	2.9	3.3	3.5	3.4
Unrelated persons	9.2	6.5	7.8	1.7	0.9	1.3	3.0	1.7	2.3

It should be recalled that in august 2002, 22.2% of the resident population in ordinary households was made up of household heads (including 30.8% of the males and 14.7% of the females). Almost 23% of the resident women were spouses to the heads of households as against only 0.1% of the males (table 8.3). More than half of the population in ordinary households (55.5% of males and 50.1% of females) were

children of the household head. In the urban areas, the proportion of children was smaller than in the rural areas. Overall, persons not belonging to the nuclear family unit in the households constituted 11.2% of the enumerated resident population in the rural areas and 23% of that in the towns. Among these persons, whether they were related or not, only grandchildren were found to be proportionally more numerous in the rural areas than in the towns. Males were more predominant among unrelated household members while women were more numerous among members who were resident parents of the head of households.

## 8.6: The Typology of Households

Using information from responses relating to relationaship to the head of the household, it was possible to reclassify the various households into four broad family categories namely:

- The parental households: made up of a head of household, his spouse(s) and their children along with related or unrelated members.
- The single-parent households: made up of a head of household and his children. They may also be extended to have related or unrelated members.
- The conjugal households: made up of a head of household, his spouse(s) without their children. They may also be extended to have related or unrelated members.
- Non-family households: made up of one or more related or unrelated persons but who do not constitute a family unit.

In Rwanda, parental households are the most common since they represent 47.7% of all households. They are followed by single-parent households and by non-family households respectively, constituting 29.1% and 16.4% of the enumerated households. Conjugal households only make up 6.8% of all households in the country. In fact, these types of households represent the early stages of family formation and are destined to eventually grow into parental households.

Table 8.4: The Distribution of households by type according to place of residence and sex of head of household.

	Urban			Rural				Total		
Type of household	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.	Total	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Non-Family households	27.1	24.2	26.2	9.7	23.4	14.6	12.5	23.5	16.4	
Conjugal households	8.7	0.2	6.0	10.7	0.2	6.9	10.4	0.2	6.8	
Single-parent households	3.9	74.9	26.5	3.8	75.9	29.6	3.8	75.7	29.1	
Parental households	60.3	0.7	41.4	75.8	0.6	48.9	73.3	0.6	47.7	

Some wide disparities exist when household types are compared by sex and by place of residence. Some 73% of the households headed by men are parental households while 3 female household heads out of every 4 head single-parent households and the other quarter of them is heading non-family households both in the urban and rural areas. More than a quarter (27.1%) of the non-family households in the towns are found to be headed by men but very few of them (9.7%) head such households in rural areas. Overall, this classification goes a long way to confirm the

fact that women most often accede to the status of head of household in Rwanda when their male spouses are absent from such households.

Parental households predominate in all the provinces, but the highest proportions (more than half) are recorded in the provinces of Gikongoro and of Cyangugu in the south-western part of the country and in those of Ruhengeri, Byumba, Umutara and Gisenyi in the northern parts of the country. Single person households are particularly numerous in the provinces of Butare (37.3%), Kibungo (34.7%), Kibuye (33.6%), Kigali Ngari (30%) and Gitarama (29%). They are rare in the Umutara province (19.7%) and even in Kigali City (21%) which on the other hand have a high proportion of non-family households.

Compared with the situation in 1991, single-person households are found to have increased from 19.0% in 1991 to 29.1% in 2002. This increase is certainly due to the phenomenal increase in the proportion of female-headed households as a result of the events of the 1990s. Consequently, the proportion of parental households declined from 59.1% in 1991 to 47.7% in 2002. The proportion of non-family households increased slightly from 14.3% in 1991 to 16.4% in 2002.

#### 9. CHARACTERISTICS OF HOUSING IN RWANDA AND LIVING CONDITIONS

The data from the 3<sup>rd</sup> Census of Rwanda relating to housing and overall living conditions has thrown some light into the overall situation of dwellings in the country, on access to dwelling units, on the availability of certain basic facilities in such units and on the ownership of certain basic equipment that improve on the quality of living conditions in homes.

# 9.1: The distribution of housing units by the type of housing.

The most common type of housing settlement in Rwanda is the scattered isolated housing pattern which is home to 63.9% of all households and to 64.4% of the resident population. This housing pattern consists of isolated dwelling units fairly distant from each other and surrounded by family farms. It typifies the rural landscape in (housing 68.2% of all the rural dwelling units and 68% of the rural population) while in the urban areas, it houses 40.3% of the households and 40.5% of the population.

Table 9.1. Proportions (in %) of housing units and of the corresponding resident population by type of housing and place of residence.

	Urban		Rural		Total	
Type of Housing	Households	Population	Households	Population	Households	Population
Total	100.0	100.0	100.0	100.0	100.0	100.0
Grouped housing (Imidugudu)	8.9	8.9	21.3	20.7	19.4	18.8
Former grouped housing	6.0	5.8	5.8	5.9	5.8	5.9
Isolated housing	40.3	40.5	68.2	68.8	63.9	64.4
Planned housing	6.5	7.9	0.2	0.2	1.2	1.4
Spontaneous/unplanned housing	35.0	33.5	1.6	1.6	6.8	6.6
Other type of housing	3.2	3.4	2.9	2.9	3.0	2.9

The existence of a high proportion of isolated housing even in the urban areas of the country may be attributable to the recent administrative reforms which extended the limits of urban agglomerations to cover areas which are still largely rural in nature. Thus, some parts of Kigali City and large portions of some urban districts are found to still have scattered isolated settlements which are typical of the rural domain even though they are integral parts of the towns.

There is however a marked change in the configuration of housing types in Rwanda when compared with the situation in 1991. The proportion of isolated housing has declined from 76.3% in 1991 to 63.6% in 2002. This can be explained by the recent Government policy launched since 1994, aimed at encouraging and generalizing residence in grouped settlements or village centres called « imidugudu » especially in the rural areas. The purpose is to find lasting solutions to the settlement of repatriated refugees, to more rationally manage agricultural land, to be able to provide some basic facilities more conveniently to rural populations, etc.

The proportion of households living in grouped housing settlements (old or new) increased from 17% to 25% in Rwanda and from 18% to 27% in the rural areas of the country.

Planned housing is very rare in Rwanda since only 1.2% of the households and barely 1.4% of the resident population are living in such settlements, mainly in urban areas. Spontaneous housing which is another essentially urban phenomenon, is found to be lodging 35% of all urban households and 33.5% of its population living in ordinary households. This type of settlement has many nefarious implications in terms of the quality of housing and the living conditions in most urban households.

## 9.2: The distribution of housing units by type of housing structure

Housing structures lodging just one dwelling unit are the most common in Rwanda in the sense that they lodge some 94.7% of all the ordinary households in the country and 95.5% of the resident population in such households.

Table 9.2: Proportions (in %) of housing units and of the corresponding resident population by type of housing structures and place of residence.

	Urk	oan	Ru	ral	Total	
Type of housing Structure		Population	Households	Population	Households	Population
Total	100.0	100.0	100.0	100.0	100.0	100.0
Building hosting one household	78.6	82.4	97.6	98.0	94.7	95.5
Building hosting several households	17.8	14.3	2.0	1.7	4.4	3.6
Story building(with one or more households)	0.2	0.2	0.1	0.1	0.1	0.1
Several buildings in a compound	3.2	2.8	0.2	0.2	0.7	0.6
Other type of housing structure	0.2	0.2	0.1	0.1	0.1	0.1

The proportion of buildings housing several households is much higher in urban areas (17.8%) than in the rural areas (2%) of the country. In effect, the high demand for housing in the urban areas has rendered the construction of buildings that can host several households at a time, a necessity.

### 9.3: The distribution of households by type of roof.

Zinc is the most common type of material used for roofing in Rwanda found on roofs of 43.7% of the housing units lodging 45.3% of the resident population. Compared with the situation during the last two censuses, there has been quite some improvement in the quality of roofing in Rwanda. The proportion of roofs covered with zinc or tiles (locally made or industrial) increased from 37% in 1978 to 75.9% in 1991 and then to 83.5% in 2002. During the same periods, the proportion of roofs covered with grass declined from 62.4% to 22.6% and then to 11.6% respectively. Zinc roofs are more common in urban areas (75.4%) than in the rural areas (37.9%) reflecting the differences in the household incomes between the urban and rural areas of the country.

Table 9.3: Proportions (in %) of housing units and of the corresponding resident population by type of roofing material and place of residence.

	Urb	ain	Ru	ral	l Tot	
Type of roofing material	Households	Population	Households	Population	Households	Population
Total	100.0	100.0	100.0	100.0	100.0	100.0
Zinc	75.4	75.9	37.9	39.6	43.7	45.3
Local tiles	19.6	19.3	43.5	43.7	39.8	39.9
Industrial tiles	0.8	0.9	0.3	0.3	0.4	0.4
Concrete	0.1	0.1	0.0	0.0	0.0	0.0
Cartons/plastic sheets	1.9	1.9	3.4	3.1	3.2	2.9
Grass	2.0	1.7	13.3	11.8	11.6	10.2
Others	0.3	0.2	1.6	1.4	1.4	1.2

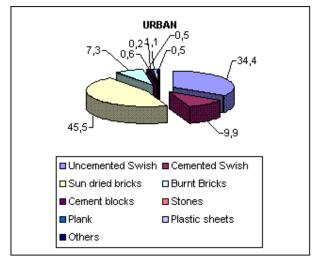
On the other hand, local tiles are more widely used for roofing in the rural areas where they are found on the roofs of 43.5% of the housing as against 19.6% in the urban areas. This is mainly due to the fact that such tiles are locally burnt using clay and wood which are abundant and cheap as opposed to zinc which is imported and is more expensive.

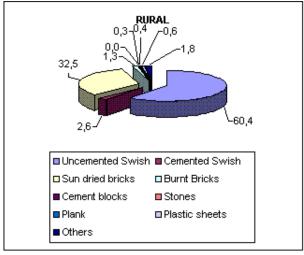
Overall, some 3.2% of the housing units are covered with plastic sheets and other temporary materials. These are generally found in refugee settlements for foreign nationals and in other transit settlements for repatriated Rwandans who are awaiting more permanent installation.

Some 11.6% of the housing units are still being roofed with grass. These include 13.3% of the housing units in the rural areas and some 2% of those in the urban areas. This partly reflects differences in household incomes but also the fact that grass is more readily available in rural areas.

#### 9.4: The distribution of households by type of materials for the outside walls.

Figure 9.1 Proportions (in %) of housing units by type of material for outside walls and place of residence.





The most common type of materials for the construction of walls in Rwanda is uncemented mud/swish and wood supports. It is used for the wall of more than half of the housing units (54.8%) but more especially in the rural areas (60.4% of the housing units). However, even in the urban areas up to 34.4% of the housing units are still found to have walls of this type.

Sun-dried mud bricks are more commonly used for the walls in the urban areas (45.5% of the housing units) than in the rural areas (32.5%). On the other hand, burnt bricks are used for the walls of 7.3% of the walls in the urban areas as against 1.3% in the rural areas.

The use of cement blocks, stones and planks is still rather rare in Rwanda whether it be in the urban or in the rural areas.

#### 9.9: Materials for the Floor

The floors of most (85.9%) of the housing units in Rwanda are of earth. This includes 91.8% of the floors in housing units lodging 90.7% of the resident population in the rural areas but still as many as 53.7% of the floors in the urban areas. Such a situation encourages excess humidity in the homes and exposes their residents to risks of several infections especially those of the respiratory system.

Table 9.4: Proportions (in %) of housing units and of the corresponding resident population by type of material for the floor and place of residence.

	Urk	an	Ru	ral	То	tal
Material for the floor	Households	Population	Households	Population	Households	Population
Total	100.0	100.0	100.0	100.0	100.0	100.0
Earth	53.7	50.1	91.8	90.7	85.9	84.3
Cement	43.0	46.6	6.7	7.6	12.3	13.7
Stones	0.6	0.6	0.4	0.5	0.5	0.5
Tiles	0.5	0.7	0.1	0.1	0.1	0.2
Burnt bricks	1.8	1.8	0.8	1.0	1.1	1.1
Other	0.2	0.2	0.1	0.1	0.1	0.1

#### 9.10 : The Size of housing units.

Overall, 74% of the housing units in Rwanda are made up of 1 to 3 rooms other than the other auxiliary premises (corridors, living rooms, kitchens, bathrooms/toilets, stores, etc.). In fact the average size of dwelling units in the country is 2.7 rooms. Since the average household sizes are equally small (4.5 persons), the dimensions of the housing units could be seen to match such sizes and to meet the optimum needs of their members. The situation does not appear to differ much by place of residence or according to the sex of the head of household. All the same, there are

much more housing units with only one room in the urban areas and more of them 4-5 rooms in the rural areas.

Table 9.5 : Proportions (in %) of housing units by number of rooms according to the place of residence and the sex of the head of household.

Number of		Urban			Rural			Total			
rooms	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1	20.5	21.4	18.5	15.1	14.5	16.2	15.9	15.6	16.6		
2	28.1	27.5	29.4	30.1	29.6	31.1	29.8	29.3	30.8		
3	27.4	26.5	29.3	28.6	28.7	28.4	28.4	28.3	28.5		
4	16.1	16.1	16.1	18.7	19.2	17.7	18.3	18.7	17.5		
5	4.5	4.8	3.9	5.1	5.5	4.4	5.0	5.4	4.3		
6	1.4	1.6	1.2	1.1	1.1	0.9	1.1	1.2	0.9		
7	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.3		
8	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1		
9	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0		
10	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

## 9.11 : Main source of water supply.

Public water standpipes located outside the homes supply water to some 21.4% of the households lodging an equivalent proportion of the resident population. They are the main source of water supply for a greater proportion of housing units in the urban areas (36.2% of housing units lodging 35.3% of the population) than in the rural areas in Rwanda (18.7% of the housing units with 18.8% of the population). Most household in the urban areas which enjoy piped water usually do not have such water within their units but within the courtyard or outside the homes.

Over the entire national territory, only 0.5% of the households have piped water within the units. These include barely 2.6% of the households in the urban areas and a rather insignificant proportion of the rural households (only 0.1%).

Generally, the proportion of all the households which have access to pipe-borne water, whether it be within the housing units or outside, remains fairly small in Rwanda (23. 9%)

Table 9.6: Proportions (in %) of housing units and of the corresponding resident population by main source of water supply and place of residence.

	Urb	an	Ru	ral	Т	otal
	Households	Population	Households	Population	Households	Population
Main source of water supply	100.0	100.0	100.0	100.0	100.0	100.0
Piped water in the unit	2.6	3.4	0.1	0.1	0.5	0.6
Piped water within the yard	11.3	13.3	0.3	0.3	2.0	2.3
Piped water outside the yard	36.2	35.3	18.7	18.8	21.4	21.4
Protected well/spring	30.2	29.3	46.5	46.3	43.9	43.6
Unprotected well/spring	10.8	10.4	16.9	17.1	16.0	16.0
Rain water	0.0	0.0	0.6	0.7	0.5	0.6
River water	4.3	4.1	7.4	7.3	6.9	6.8
Lake/stream/pond/surface water	4.1	3.8	9.4	9.3	8.6	8.5
Other sources	0.5	0.4	0.1	0.1	0.2	0.1

The most common source of water supply is the protected wells or springs which provide water for 43.9% of the housing units including 46.5% of those in the rural areas and 30.2% in the urban areas.

Some 16% of all the households in Rwanda obtain water from unprotected wells and springs. In other words, their source of water does not have any particular protection against likely elements of contamination and may thus be of poor quality.

There is a further 6.2% of households which still depend mainly on rainwater or on surface water from rivers, streams, lakes and ponds which is generally of doubtful quality.

## 9.12 : The main source of energy for lighting.

The most popular source of lighting in the ordinary households in Rwanda is the wicker or "lampion" used in some 68.2% of the households in the rural areas and in 45% of those in the urban areas. The 'lampion' is usually a small locally made container from scrap metal with a piece of cotton cloth attached to the lid and filled with either diesel oil or kerosene. The use of the lampion in a household is thus one of the indicators of the low standard of living of such a household. This is true both in the rural areas but also in the urban areas where several households are still found to be using this source of lighting. Its use however presents certain hazards such as the emission of toxic gases that are dangerous to the eyes and to the respiratory system, the poor lighting that is provided especially for reading, the fact that it is difficult to carry such an instrument around especially outside the house, the risk of fire outbreak especially when it falls down or is placed near easily inflammable materials, etc.

Table 9.7: Proportions (in %) of housing units and of the corresponding resident population by main source of energy for lighting and place of residence.

	Urk	an	Rural		То	tal
Main source of energy for lighting	Households	Population	Households	Population	Households	Population
Total	100.0	100.0	100.0	100.0	100.0	100.0
Electricity/electrogaz	23.4	26.1	0.5	0.6	4.1	4.6
Private /hydro-electric source	0.1	0.1	0.0	0.0	0.0	0.1
Solar energy/generator	0.2	0.2	0.1	0.1	0.1	0.1
Bush/Kerosene lamp	24.2	26.4	7.7	8.9	10.3	11.7
Lampion/wicker	45.0	42.2	68.2	69.2	64.6	65.0
Candle	3.0	1.8	0.3	0.2	0.7	0.5
Wood	3.2	2.5	20.3	18.4	17.7	15.9
Others	0.9	0.7	2.8	2.5	2.5	2.2

The use of wood for lighting equally presents the same hazards. This source of lighting is still being used in 17.7% of the households in Rwanda including as much as 20.3% of the households in the rural areas but as few as 3.2% of those in the urban areas.

The bush or kerosene lamp which is certain a more adapted source of lighting, is unfortunately relatively more expensive and cannot be afforded by most of the households. Only 10.3% of the households were found to be using such a source in Rwanda, including 24.2% of those in the urban areas but only 7.7% in the rural areas which have lower incomes. In effect, in the rural areas, the bush lamp is perceived as a sign of relatively higher wellbeing.

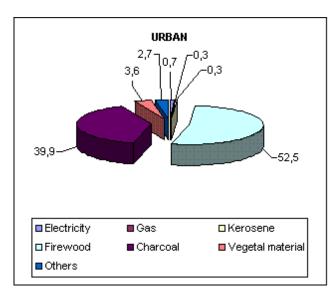
Some 0.7% of the households were using mainly candles for lighting but this is essentially in urban areas (3%).

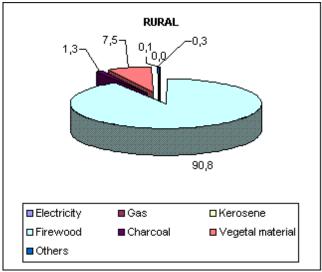
The proportion of households in the country found to be having access and using electricity from the ELECTROGAZ company (National Company which distributes electric power and water) was just 4.1% including 23.4% of urban households and only 0.5% of rural households.

## 9.9 Main source of energy for cooking.

Firewood is the main source of energy for cooking in Rwanda since it is used in some 84.9% of the households in which 85.3% of the population resides. Firewood is used more by the rural households (by 90.8% of the housing units lodging 91.4% of the resident rural population) than in the urban areas (52.5% of the households lodging 52.6 % of the population).

Figure 9.2: Proportions (in %) of housing units by main source of energy for cooking according to urban/rural place of residence.





Overall, charcoal is the main source of energy for cooking in 7.2% of the households in which 7.5% of the population resides in Rwanda. It is however mainly in the urban areas that this source of energy is more widely used (by 39.9% of the households lodging 41.6% of the population). The use of charcoal remains quite rare in the rural areas (by only 1.3% of the households and 1.2% of the population) as shown on the figure 9.2 above.

Some 6.9% of the households lodging 6.6% of the resident population were rather using various others forms of vegetal material for cooking in Rwanda. These include mainly farm waste from the harvest of sorghum or maize, banana leaves and various sorts of branches and dry grass and stems. The use of these vegetal materials in rural areas (by 7.5% of the households in which 7.2% of the population resides), is more an offshoot of their involvement in agricultural activities but also an impact of high rural densities resulting in intensive land use and destruction of the vegetation. They were being used by a smaller proportion of urban households (3.6%) and population (3.4%).

Overall, it is evident that in 99.0% of the households in which some 99.4% of the total population is staying in Rwanda, the main source of energy for cooking comes from the immediate environment (either from wood products or from leaves and grass). This high dependency on the immediate environment has been have rather deleterious effects on the vegetal cover of the country, particularly on the woodlands, forest reserves and parks and the ultimate outcome is likely to be large scale deforestation and subsequent desertification if palliative measures are not taken forthwith.

#### 9.10: The type of toilet facilities.

Most of the housing units in Rwanda (83.0%) lodging most of the resident population (86.2%) have private latrines. In the urban areas, fewer housing units (65.3%) use private latrines than in the rural areas. Overall, over 86% of the population has

access to private latrines and these include 89.1% of those in the rural areas and 70.5% of rural residents.

Table 9.8: Proportions (in %) of housing units and of the corresponding resident population by type of toilet facility used and place of residence.

Type of toilet	Urb	an	Ru	ral	Total		
facility	Households	Population	Households	Population	Households	Population	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Water Closet System	2.3	2.9	0.0	0.0	0.4	0.5	
Private latrine	65.3	70.5	86.3	89.1	83.0	86.2	
Public latrine	30.6	25.2	10.1	8.2	13.2	10.8	
In the bush	0.8	0.6	1.9	1.5	1.7	1.3	
Other	1.0	0.8	1.7	1.2	1.7	1.2	

Public or collective latrines are used by 13.2% of the housing units lodging 10.8% of the population. They are more common in the urban areas (30.6%) than in the rural areas (10.1%). The frequent use of such facilities in the urban areas is dictated by the availability of several structures which host more than one housing unit in the urban areas of the country, especially in the City of Kigali.

The use of the water-closet system or flush toilets is very rare in Rwanda (0.4%) and is limited to the urban areas (2.3% of the households and 2.9% of the urban population) where pipe borne water is readily available.

Some 1.7% of the households do not have any specific toilet facility and must use the surrounding bushes or some other unidentified facility. This is more common in the rural areas (1.9%) than in the urban areas (0.8%).

#### 9.11: The mode of occupancy of the housing units

As table 9.10 shows, 86.9% of the housing units in Rwanda belong to their occupants. In fact 89.7% of household heads are owner-occupiers of their dwellings. This proportion is higher in the rural areas (93.9%) than in the towns (67.9%). Rented, and other type of housing are only common in the urban areas. However, as a result of the recent history of the country, it is not uncommon to find households being lodged freely in the rural areas of the country.

Tableau 9.9: Proportions (in %) of housing units and of the corresponding resident population by mode of occupancy and place of residence.

Mode of occupancy	Urb	an	Ru	ral	To	tal
wiode of occupancy	Households	Population	Households	<b>Population</b>	Households	<b>Population</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Owner-occupier	59.7	67.2	91.8	93.9	86.9	89.7
Tenant	29.8	24.2	2.2	1.6	6.5	5.1
Hire-purchase	0.2	0.3	0.1	0.0	0.1	0.1
Free lodging	6.9	5.3	5.1	3.7	5.4	4.0
Service housing	2.1	1.7	0.4	0.3	0.6	0.5
Temporary/refugee housing	1.0	1.1	0.3	0.3	0.4	0.4
Other	0.3	0.2	0.2	0.1	0.2	0.2

## 9.12: Availability of equipment for receiving information.

The most frequently used gadget for receiving information in households in Rwanda is the radio set which is available in some 43.4% of the households lodging 48.8% of the resident population. This proportion is higher in the urban (61.5%) where income and education levels are relatively higher, than in the rural areas (40.1%).

Table 9.10: Proportions (in %) of housing units and of the corresponding resident population by availability of gadgets for receiving information and place of residence.

Possession of a	Urban		Ru	ral	Total	
Radio or television set	Households	Population	Households	Population	Households	Population
Total	100.0	100.0	100.0	100.0	100.0	100.0
Radio set	52.8	55.1	39.9	45.1	41.9	46.7
Television set	0.4	0.5	0.0	0.0	0.1	0.1
Radio & Television	8.7	12.4	0.2	0.2	1.5	2.1
None	38.1	32.0	60.0	54.7	56.6	51.1

On the other hand, the proportion of households having none of these gadgets is higher in the rural areas (60.0%) than in the towns (38.1%). Its is only in 1.5% of the households that both gadgets are available and this is more in the urban areas (8.7%) than in the countryside (0.2%).

## 9.13: Availability of equipment for communication.

The telephone set, whether it be the fixed line of the mobile set, is an almost exclusively urban facility in Rwanda. Most households do not have access to the telephone. Urban households have more access to the mobile phones than to fixed line phones which had been in existence several years before the advent of the former. It is only of recent that the rural telephone network is being introduced to connect some parts of the districts of the country.

Table 9.11: Proportions (in %) of housing units and of the corresponding resident population by availability of a telephone set and place of residence.

Possession of a	Urban		Ru	ral	Total	
Telephone set	Households	<b>Population</b>	Households	<b>Population</b>	Households	<b>Population</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Fixed line telephone	1.3	1.8	0.2	0.2	0.4	0.5
Mobile telephone	10.1	12.2	0.3	0.4	1.8	2.2
Fixed line & mobile	2.6	3.9	0.1	0.1	0.4	0.7
None	85.9	81.9	99.3	99.2	97.2	96.5

It is however worthy to note that the fact that most households do not own a telephone set does not necessarily mean they do not have access to such a facility. There are many pay phones and other privately-owned commercial telephone booths in the quarters of most of the towns and even in some of the commercial centers in the rural areas.

The use of the computer and/or the internet is very rare in Rwanda. Only 0.1% of the households own a computer at home, whether it be connected to the internet or not. The few that do have such a facility are found in the urban areas, particularly, in the City of Kigali.

Table 9.12: Proportions (in %) of housing units and of the corresponding resident population by availability of a computer/internet connection and place of residence.

Possession of a	Urban		Ru	ral	Ensemble	
computer/internet	Households	Population	Households	Population	Households	<b>Population</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Computer	0.6	0.8	0.0	0.0	0.0	0.1
Computer & Internet	0.3	0.4	0.0	0.0	0.0	0.1
None	99.1	98.8	100.0	100.0	100.0	99.8

## 9.14 : Availability of a means of transport (vehicle, motorcycle, bicycle).

Generally speaking, the motor vehicle is not a means of transport that can be easily available to most persons or households on account of its initial and running costs. 99.3% of the households and 98.9% of the resident population do not have such a facility at home. To privately own a motor vehicle for family or other transport is still considered a luxury by most households in Rwanda which find it difficult to meet their most basic needs. Nevertherless, some 3.6% of the urban households own such a facility while in the rural areas, the proportion is close to zero.

Table 9.13: Proportions (in %) of housing units and of the corresponding resident population by availability of a motor vehicle and place of residence.

Disponibilité	Urban		Ru	ral	Total	
de véhicule						
	Households	Population	Households	Population	Households	<b>Population</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0
None	96.4	94.6	99.8	99.8	99.3	98.9
1 vehicle	2.9	4.2	0.1	0.2	0.5	0.8
2 vehicles	0.5	0.8	0.0	0.0	0.1	0.2
3 vehicles	0.2	0.4	0.0	0.0	0.1	0.1
4 or more vehicles	0.0	0.1	0.0	0.0	0.0	0.0

The same situation prevails when ownership of motorcycles in the households is considered. Most households (99.7%) and most of the resident population (99.6%) do not have a motorcycle at home whether it be in the towns or in the rural areas.

Table 9.14: Proportions (in %) of housing units and of the corresponding resident population by availability of a motorcycle and place of residence.

Possession of a	Urban		Rura	al	Total		
motorcycle	Households	Population	Households	Population	Households	Population	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
None	99.1	98.9	99.8	99.7	99.7	99.6	
1 motorcycle	0.9	1.0	0.2	0.2	0.3	0.4	
2 motorcycles	0.0	0.1	0.0	0.0	0.0	0.0	
3 motorcycles	0.0	0.0	0.0	0.0	0.0	0.0	
4 or more motorcycles	0.0	0.0	0.0	0.0	0.0	0.0	

On the other hand, the bicycle is a very well-known and common means of transport in Rwanda. This notwithstanding, it remains a rare commodity in most of the households in the country. Over 91% of the households in which reside some 89.7% of the population do not own a bicycle at home. A relatively larger proportion of rural households are found to be owning bicycles (8.3%) than urban households (7.5%). The simple reason is that, the urban areas offer several other alternative means of transportation of goods and individuals than the rural areas.

Table 9.15: Proportions (in %) of housing units and of the corresponding resident population by availability of a bicycle and place of residence.

Possession of a	Possession of a Urban		Ru	ral	Total	
bicycle	Households	Population	Households	Population	Households	Population
Total	100.0	100.0	100.0	100.0	200.0	100.0
None	91.7	90.3	91.3	89.7	91.4	89.7
1 Bicycle	7.7	9.0	8.3	9.8	8.2	9.7
2 Bicycles	0.4	0.5	0.3	0.4	0.3	0.4
3 Bicycles	0.1	0.1	0.0	0.0	0.0	0.1
4 or more Bicycles	0.1	0.1	0.1	0.1	0.1	0.1

#### 10. THE STANDARD OF LIVING OF THE POPULATION

As opposed to other surveys, the 3rd Census of Rwanda has the added advantage of having collected information capable of providing indicators for the follow-up of the achievement of a number of internationally recognized poverty-reduction goals disaggregated down to the smallest administrative level. This section shall employ data from housing unit variables that measure the level of well-being, to develop a non-monetary measure of poverty or standard of living at the household level.

The composite index of the level or standard of living was constructed using details of the type of dwelling and of the facilities available within it (building materials used, source of water supply, source of lighting, type of toilet facility used, etc) and the possession of some valuable goods (radio, telephone, vehicle, etc).

## 10.1. The Standard of Living by province and by rural/urban residence

## 10.1.1. The variation in the standard of living of households by province

There is a marked variation in the standards of living of ordinary households by province.

Table 10.1 : Proportions of ordinary households by province according to standard of living category

Province/City	Very low	Low	Average	High	Very High	Total	Very low or low (P0)
RWANDA	0.08	0.72	0.17	0.02	0.00	1.00	0.81
Gikongoro	0.09	0.83	0.08	0.01	0.00	1.00	0.91
Kibuye	0.05	0.84	0.10	0.01	0.00	1.00	0.89
Byumba	0.10	0.79	0.11	0.01	0.00	1.00	0.89
Ruhengeri	0.11	0.77	0.11	0.01	0.00	1.00	0.88
Gisenyi	0.10	0.75	0.14	0.01	0.00	1.00	0.85
Umutara	0.19	0.66	0.15	0.01	0.00	1.00	0.85
Butare	0.06	0.77	0.15	0.02	0.00	1.00	0.83
Kibungo	0.12	0.72	0.16	0.01	0.00	1.00	0.83
Gitarama	0.02	0.81	0.16	0.01	0.00	1.00	0.83
Cyangugu	0.11	0.68	0.19	0.02	0.00	1.00	0.79
Kigali Ngari	0.07	0.72	0.20	0.01	0.00	1.00	0.79
Kigali City	0.00	0.24	0.51	0.21	0.03	1.00	0.25

The Gikongoro Province has the highest proportion of households which have low or very low standards of living (91.5%). This Province is closely followed by those of Kibuye (89.4%), Byumba (88.6%), Ruhengeri (88.0%), Gisenyi (85.2%), Umutara (84.5%), Kibungo, Butare (83.4%) and Gitarama (83.2%). All these provinces have household standards of living which are higher than the national average of 80.5%. The only provinces whose overall household standards of living which are lower than the national average are Cyangugu, Kigali Ngari and Kigali City with respectively 79.3%, 78.9% and 24.7% of the households falling below the average national standard of living level.

Table 10.2 : Columnwise distribution of ordinary households by province according to standard of living category

Province/City	Very low	Low	Average	High	Very High	Total
Ensemble	100.0	100.0	100.0	100.0	100.0	
Kigali City	0.2	2.4	21.6	61.9	78.2	7.1
Kigali Ngari	8.3	9.8	11.9	2.8	0.8	9.8
Gitarama	2.3	11.8	10.0	3.6	1.7	10.5
Butare	6.9	10.0	8.2	6.7	7.8	9.4
Gikongoro	6.6	7.0	2.8	1.8	0.7	6.1
Cyangugu	9.2	6.5	7.8	4.3	2.1	6.9
Kibuye	3.6	6.8	3.4	1.6	0.5	5.8
Gisenyi	13.0	11.1	8.6	5.2	3.6	10.7
Ruhengeri	15.1	11.7	7.2	4.6	1.7	11.0
Byumba	10.2	9.4	5.5	2.3	1.2	8.6
Umutara	12.0	4.7	4.6	1.4	0.3	5.2
Kibungo	12.6	8.9	8.3	3.8	1.4	8.9

The Ruhengeri Province, with 26.8% of all households in the country having low or very low standards of living, is the largest contributor to overall poverty levels in the country. This could be partly attributable to the fact that this province has the largest number of ordinary households in the country (11%) but poor housing conditions explain the rest. The other provinces found to substantially contribute to overall household poverty levels in the country include those Gisenyi (24.1%), Kibungo (21.5%), Byumba (19.6%), Kigali Ngari (18.1%), Butare (16.9%) and Umutara (16.7%).

#### 10.1.2. Variation of the Household Standards of Living by Place of Residence

Out of the total number of 1,757,426 ordinary households counted during the 3rd census, 144,904 of them had very low standards of living, representing 8% of all households, 1,270,464 or 72% had low standards of living, 293,877 or 17% had standards of living which could be considered as average while some 42,638 of them (or 2%) had high standards of living and only 5,543 of the households of the country (representing less than 1% of the households) enjoyed very high standards of living. In all therefore, less than 3% of the ordinary households in Rwanda were considered as having above-average standards of living while some 80% of them were living in conditions below the average standard of living and which could thus be termed as poor households.

Table 10.3: Proportions of ordinary households and corresponding proportions of the resident population by sex of the household head and the standard of living category according to Urban/Rural place of residence.

Sex and Standard	Urba	an	Rur	al	Total		
of Living	Households	<b>Population</b>	Households	<b>Population</b>	Households	Population	
Male	1.00	1.00	1.00	1.00	1.00	1.00	
Very low	0.02	0.02	0.09	0.07	0.08	0.06	
Low	0.37	0.34	0.77	0.77	0.71	0.70	
Average	0.43	0.41	0.14	0.15	0.18	0.19	
High	0.16	0.19	0.00	0.01	0.03	0.03	
Very High	0.03	0.04	0.00	0.00	0.00	0.01	
Female	1.00	1.00	1.00	1.00	1.00	1.00	
Very low	0.03	0.02	0.10	0.09	0.09	0.08	
Low	0.53	0.48	0.79	0.79	0.75	0.74	
Average	0.34	0.37	0.10	0.12	0.14	0.16	
High	0.09	0.12	0.00	0.00	0.01	0.02	
Very High	0.01	0.01	0.00	0.00	0.00	0.00	
Total	1.00	1.00	1.00	1.00	1.00	1.00	
Very low	0.02	0.02	0.09	0.08	0.08	0.07	
Low	0.42	0.38	0.78	0.77	0.72	0.71	
Average	0.40	0.40	0.12	0.14	0.17	0.18	
High	0.14	0.17	0.00	0.00	0.02	0.03	
Very High	0.02	0.03	0.00	0.00	0.00	0.00	

The distribution of households according to standard of living category varies widely between the urban and rural areas of the country. Overall, barely 2% of the ordinary households in the urban areas have very low standards of living as against 9% in the rural areas. While some 42% of urban households are having low standards of living, the equivalent proportion in the rural areas is 78%. In the towns, 40% of the households enjoy average standards of living while only 12% of rural households fall into this category. The rural areas have an insignificant number of households which can be considered as having high or very high standards of living while 16% of all urban households fall into this category.

# 10.2. Characteristics of household heads by standard of living category of their households

### 10.2.1. Standard of living by level of education of household head

**No Schooling :** Even in the urban areas, a majority of the households whose heads never attended school have low or very low standards of living. In effect 74% of such households and 70% of the population housed by such household heads fall into this category.

Table 10.4: Proportions of ordinary households and corresponding proportions of the resident population by level of education attained by the household head and the standard of living category according to Urban/Rural place of residence.

Level of education			_			
and standard of living			Rural		Total	
	Households					
No Schooling	1.00	1.00				
Very low	0.05	0.04	0.13		0.12	
Low	0.69				0.79	
Average	0.24	0.27	0.07	0.08		
High	0.02	0.03			0.00	0.00
Very High	0.00	0.00	0.00			
Primary	1.00	1.00	1.00	1.00	1.00	1.00
Very low	0.02	0.01	0.07	0.06	0.06	0.05
Low	0.46	0.43	0.78	0.78	0.74	0.73
Average	0.45	0.45	0.14	0.16	0.19	0.20
High	0.07	0.10	0.00	0.00	0.01	0.02
Very High	0.00	0.01	0.00	0.00	0.00	0.00
Post-Primary	1.00	1.00	1.00	1.00	1.00	1.00
Very low	0.00	0.00	0.03	0.02	0.02	0.02
Low	0.25	0.22	0.65	0.62	0.55	0.52
Average	0.59	0.58	0.31	0.34	0.38	0.40
High	0.15	0.18	0.01	0.01	0.04	0.06
Very High	0.01	0.01	0.00	0.00	0.00	0.00
Secondary	1.00	1.00	1.00	1.00	1.00	1.00
Very low	0.00	0.00	0.03	0.03	0.02	0.02
Low	0.09	0.07	0.46	0.42	0.28	0.24
Average	0.51	0.48	0.45	0.50	0.48	0.49
High	0.36	0.40	0.05	0.05	0.20	0.23
Very High	0.03	0.05	0.00	0.00	0.02	0.02
Higher	1.00	1.00	1.00	1.00	1.00	1.00
Very low	0.00	0.00	0.01	0.01	0.00	0.00
Low	0.01	0.01	0.21	0.18	0.04	0.03
Average	0.19	0.17	0.46	0.49	0.23	
High	0.56	0.56				
Very High	0.24		0.03			

The corresponding proportions in the rural areas are far much higher (93% and 92%) with as high as 13% of the households having very low standards of living and barely 7% having average standards of living.

**Secondary and Higher education**: the analyses demonstrate a strong correlation between the level of education of the head of household and the standard of living of his household. As the level of education attained by the household head increases, so too does the standard of living of his household. In urban areas, among households whose heads attained secondary level education, 51% enjoy average standards of living while as many as 36% enjoy higher standards of living. In rural areas, the standards are slightly lower but the direction of the correlation is identical.

# 10.2.2. The impact of the standard of living of the household on primary school attendance

The impact of household standard of living of net primary school attendance is very significant. As shown on table 10.4, the higher the standard of living of the

household, the higher the rate of primary school attendance for the children of such a household. Households with very low standards of living equally have the lowest rates of primary school attendance (52.8%). The rate increases to 67.7% for households with low standards of living, representing a change of some 15% points. The difference is of 10% points between the latter and those households with an average standard of living. It is much wider (25% points) between households with a low standard of living and high standard of living (83.0%). Evidently, low household standards of living are a severe handicap to schooling in Rwanda.

Table 10.5: Rates of primary school attendance among the resident population in ordinary households aged 8-13 years by standard of living category and sex of the household head.

Sex of Household	Standard of Living Category							
head	Very Low	Low	Average	High	Very High	Total		
Total	52.8	67.7	77.7	83.0	86.6	68.7		
Male	53.2	67.0	77.3	85.2	87.8	68.3		
Female	52.5	68.3	78.0	81.0	85.4	69.2		

#### 10.2.3. Household Living Standards and Economic Activity

The standard of living of households is also determined by the employment status of the head of household. As demonstrated on table 10.6, among households with an average, high or very high standard of living, a large majority are headed by persons who are employers or salaried workers. A stable, regular salary, provides some amount of security from want and contributes to the improvement of the conditions of well-being of the household. Households with low or very low standards of living are more likely to be headed by self-employed persons (especially farmers), unpaid family workers apprentices or wage earners. In other words, irregular income, including wage earning cannot guarantee a comfortable well-being for the household. Most self employed household heads are either farmers or are employed in the informal sector of the economy.

Table 10.6: Proportion of ordinary households by the employment status of the heads of households

Employment status	Very Low	Low	Average	High	Very High	Total
Total	0.08	0.73	0.16	0.02	0.00	1.00
Self-employed	0.09	0.77	0.13	0.01	0.00	1.00
Employer	0.01	0.27	0.42	0.23	0.05	1.00
Salaried worker	0.01	0.16	0.53	0.27	0.04	1.00
Wage earner	0.06	0.50	0.39	0.05	0.00	1.00
Apprentice	0.03	0.49	0.38	0.09	0.01	1.00
Unpaid Family worker	0.05	0.74	0.20	0.01	0.00	1.00
Other	0.12	0.56	0.26	0.05	0.01	1.00
Not stated	0.06	0.57	0.29	0.08	0.01	1.00

## 10.2.4. Standard of Living by Sector of Activity of the Household Head

The sector of activity of the head of household is also correlated with the standard of living of the households they head. Overall, a large proportion of households with low standards of living (75%) are headed by individuals who work in the "other private" sector of the economy which includes the agricultural and the entire informal sectors. The standards of living of most households whose heads work in relatively more stable sectors as in the public administration, parastatal institutions and in the NGOs. This pattern obtains for both male and female household heads.

Table 10.7: Proportion of household heads by sex and sector of activity of the head of household according to standard of living category

Sex by Sector		Standard	of Living Ca	tegory		
of activity	Very Low	Low	Average	High	Very High	Total
Masculin	0,08	0,71	0,18	0,03	0,00	1,00
Public	0,01	0,23	0,50	0,22	0,04	1,00
Parastatal	0,01	0,24	0,42	0,27	0,06	1,00
NGO	0,01	0,20	0,43	0,29	0,06	1,00
Cooperative	0,03	0,43	0,39	0,13	0,02	1,00
Other private	0,08	0,74	0,16	0,02	0,00	1,00
NS	0,05	0,56	0,30	0,07	0,01	1,00
Féminin	0,09	0,77	0,13	0,01	0,00	1,00
Public	0,01	0,20	0,54	0,23	0,02	1,00
Parastatal	0,01	0,14	0,43	0,38	0,04	1,00
NGO	0,01	0,14	0,38	0,40	0,07	1,00
Cooperative	0,05	0,47	0,31	0,15	0,02	1,00
Other private	0,09	0,78	0,12	0,01	0,00	1,00
NS	0,07	0,68	0,21	0,04	0,00	1,00
Ensemble	0,08	0,73	0,16	0,02	0,00	1,00
Public	0,01	0,22	0,51	0,22	0,03	1,00
Parastatal	0,01	0,23	0,42	0,28	0,06	1,00
NGO	0,01	0,19	0,42	0,31	0,06	1,00
Cooperative	0,04	0,44	0,38	0,13	0,02	1,00
Other private	0,08	0,75	0,15	0,01	0,00	1,00

#### 11. CHARACTERISTICS OF VULNERABLE PERSONS IN RWANDA

## 11.1. The Population of Handicapped Persons

Handicapped persons are considered among the vulnerable individuals in a population. Most of them are inactive and thus constitute a burden to be shouldered by the society at large. However, some of them have potential capabilities which can be harnessed for development. Data from the 3<sup>rd</sup> Census has been analysed here to bring out the various ways in which some of the handicapped persons have been integrated into the Rwandan society.

As opposed to the *International Classification of Handicaps* produced by the WHO(1980), which highlights three types of handicap, namely: deficiency, incapacitation and disadvantages, the 3rd Census of Rwanda considered mainly the dimension of *incapacitation* as recommended by the United Nations. The respondents were thus given the opportunity to mention various types of major or minor restrictions which hinder their performance of daily activities.

This section analyses responses which each resident of all ordinary households provided to the specific questions relating to the type of major handicap he/she is suffering from and to the cause of such a handicap.

-

<sup>&</sup>lt;sup>3</sup> By "deficiency" the WHO explains a handicap from the physical viewpoint by designating any loss of substance or alteration in the structure or physiological, anatomical or neurological functioning of the organs.

By "incapacitation", The WHO considers each individual and aligns the handicap to any partial or complete inhibition in the ability to accomplish specific tasks within the limits of what is considered humanly normal – limitations in learning, speaking, walking, among others.

By "disadvantage", the WHO considers limitations from the social point of view, which may affect the interaction between the individual and his immediate social and physical environment – for example in the area of education, employment, information and communication.

## 11.1.1. The size and distribution of handicapped persons

Table 11.1.: The distribution of handicapped persons by province according to place of residence and sex

	Urban			Rural			Total			
Province/ City	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Total	21 100	18 931	40 031	131 926	136 544	268 470	153 026	155 475	308 501	
Kigali City	9 139	7 106	16 245	-	-	-	9 139	7 106	16 245	
Kigali Ngari	1. 54	1 065	2 219	15 012	16 547	31 559	16 166	17 612	33 778	
Gitarama	2 184	2 059	4 243	14 106	15 957	30 063	16 290	18 016	34 306	
Butare	2 148	2 613	4 761	9 825	11 075	20 900	11 973	13 688	25 661	
Gikongoro	505	503	1 008	8 777	9 432	18 209	9 282	9 935	19 217	
Cyangungu	815	673	1 488	10 358	9 528	19 886	11 173	10 201	21 374	
Kibuye	1 109	1 344	2 453	9 645	11 041	20 686	10 754	12 385	23 139	
Gisenyi	810	574	1 384	14 417	14 383	28 800	15 227	14 957	30 184	
Ruhengeri	992	988	1 980	16 597	17 835	34 432	17 589	18 823	36 412	
Bymba	936	889	1 825	11 914	10 839	22 753	12 850	11 728	24 578	
Umuatra	352	202	554	9 891	8 732	18 623	10 243	8 934	19 177	
Kibungo	956	915	1 871	11 384	11 175	22 559	12 340	12 090	24 430	

According to the results of the last census, there were 308,501 handicapped persons in Rwanda among which there were 155,475 females and 153,026 males, representing 50.4% and 49.6% respectively of the handicapped population. Handicapped persons constitute 3.9% of the total population in the ordinary households in Rwanda.

For a country like Rwanda, this proportion of handicapped persons has far reaching implications. They are a vulnerable category of the population which requires special attention and assistance from the entire community.

When place of residence is considered, the number of handicapped persons in the rural areas is 7 times more numerous than that resident in the urban areas (268,470 as against 40,031). There is a predominance of female handicapped persons in rural areas and of males in the urban areas. It must be noted that the total resident rural population is 5 times more than the urban population implying that handicapped persons are disproportionately more in the rural areas of the country.

Among the provinces, Ruhengeri Province has the highest number of handicapped persons (36,412), followed by the provinces of Gitarama (34,306), Kigali Ngari (33,778) and Gisenyi (30,184). The smallest numbers are found in the City of Kigali (16,245), and in the provinces of Umutara (19,177) and Gikongoro (19,217).

Table 11.2: The distribution of handicapped persons by province/city according to the type of handicap

Province / City	Blind	Deaf/Dumb	Handicap of Iower limbs	Handicap of upper limbs	Mental deficiency	Trauma	Other handicap	Total
Total	13 098	21 618	90 555	77 759	14 816	3 496	87 159	308 501
Kigali City	641	1 173	5 448	4 307	629	483	3 564	16 245
Kigali Ngari	1 525	2 105	8 991	9 834	1 526	411	9 386	33 778
Gitarama	1 300	2 568	8 365	7 527	1 956	349	12 241	34 306
Butare	999	2 019	6 596	4 966	2 112	357	8 612	25 661
Gikongoro	813	1 207	5 347	4 216	1 377	194	6 063	19 217
Cyangugu	840	1 429	6 358	5 354	1 241	266	5 886	21 374
Kibuye	908	1 483	6 562	6 921	815	217	6 233	23 139
Gisenyi	1 405	2 258	10 705	7 909	921	275	6 711	30 184
Ruhengeri	1 806	2 240	12 157	9 794	1 173	314	8 928	36 412
Byumba	1 163	1 891	8 011	5 505	1 335	170	6 503	24 578
Umutara	813	1 377	5 220	6 073	677	127	4 890	19 177
Kibungo	885	1 868	6 795	5 353	1 054	333	8 142	24 430

The breakdown of handicapped persons by type shows that persons suffering from physical handicaps (of the upper and lower limbs) are by far more numerous both in the urban and rural areas. The rarest types of handicaps are persons suffering from trauma and from mental deficiency.

## 11.1.2. The level of incapacitation among the population

The rate of incapacitation or handicap<sup>4</sup> is being employed here to show the level of variation of the occurrence of handicaps among the population in Rwanda. Since this variable was not included in the preceding censuses, a study of trends is not possible here.

Table 11.3. : Rate of incapacitation (in %) by place of residence and by sex

Place of residence	Male		Female	Total
Total		4.1	3.7	3.9
Urban		3.5	3.0	3.2
Rural		4.2	3.8	4.0

The rate of incapacitation at the national level is 3.9% implying that 4 out of every 100 persons in the ordinary households in Rwanda were suffering from one sort of incapacitation or another in 2002. This rate is slightly higher among males (4.1%) than among females (3.7%). In general, males are more likely to be exposed to risks of incapacitation given the nature of their daily activities.

\_

<sup>&</sup>lt;sup>4</sup> The rate of handicap or incapacitation relates the total number of handicapped persons to the enumerated reference population.

The rate of incapacitation is higher among rural populations (4.0%) than among residents of the urban areas (3.2%). Male rates are generally higher than those of the females irrespective of the place of residence. This disparity has may partly be explained by the differences in the structure of the various populations but also by the differences in the health conditions in the rural and urban areas of the country.

Handicap rates are highest in the provinces of Kibuye (5.0%) and Umutara (4.6%) and lowest in those of Gisenyi and Byumba (3.5%) and in the City of Kigali (2.9%).

# 11.1.3. Variation in the Rates of incapacitation by certain characteristics of the Population

An analysis of the levels of incapacitation among various categories of the population can help throw some light on which persons need special attention from local authorities and from specific projects and programmes which target handicapped persons. It also highlights the social disparities that cause incapacitation within the population .

An analysis of the rates of handicap by age reveals that incapacitation increases with age irrespective of the sex of the person or his place of residence. As one grows up, one is the more exposed to risks of incapacitation from one cause or the other.

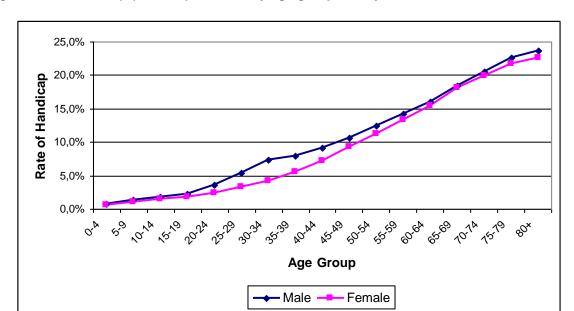


Figure 11.1.: Rates (%) of incapacitation by age group and by sex

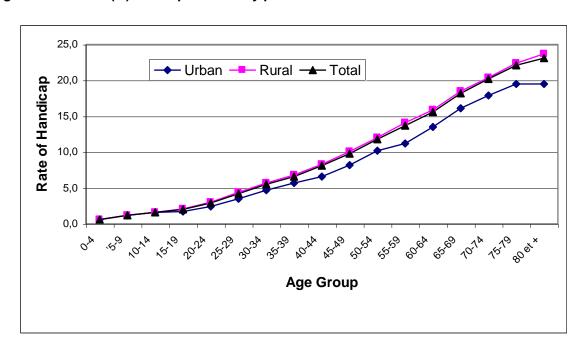


Figure 11.2. : Rate (%) of incapacitation by place of residence

Rates of incapacitation are higher among illiterate persons (6.3%)than among those who can read and write (3.7%). This is largely due to the differences in the age structures of these populations – there are more elderly persons among the illiterate population while most literate persons are young.

It is interesting to note that the highest rates of incapacitation are registered among persons who have undergone technical education (9.0%) and among persons who never went to school (7%). The correlation with technical education may be explained by the fact that, for purposes of rehabilitation, most handicapped persons are offered technical training in specialized schools. Among the handicapped persons who never went to school, elderly persons and women are more numerous.

With regard to economic activity, rates appear to be much higher among employed persons (5%) than within the total population. This is understandable since most employed persons are of adult age. Since most pupils and students are relatively younger, rates of incapacitation are lower among them (1.3%). On the other hand, these rates are very high among retired persons (28%)and among landowners (26.6%) whose mean ages are high (above 50 years).

Among the employed persons, rates of incapacitation are highest among selfemployed persons (5.7%) and employers (5.4%) and lowest among apprentices (2.5%) and unpaid family workers (2.6%); most of whom are young persons.

## 11.1.4. Characteristics of handicapped persons

The highest number of handicapped is recorded among the 40-45 year age group. These numbers are fewer at both extremes of the age distribution.

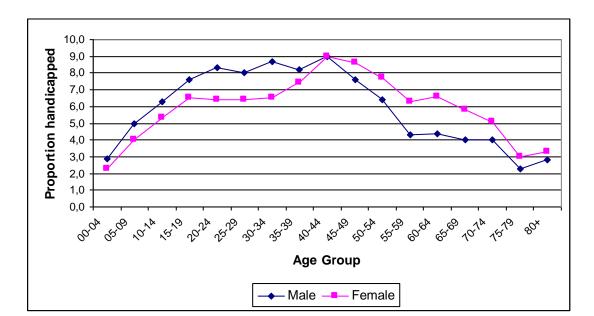


Figure 11.3.: Proportional distribution of handicapped persons by age group and sex

Before age group 40-45 years, there are proportionally more handicapped males than females but the pattern is reversed after this age as shown in the figure above. Based on the age/sex structure of the handicapped persons, the mean age of the handicapped population was obtained as 40.6 years as against 21.2 years for the total population.

Among the 269,683 handicapped persons aged 12 years and above who declared their marital status, 91,325 (representing 33.9%) were monogamously married while 64,259 (23.8%) were never married and 21.4% were widowed. The tendency is for more handicapped persons to be found in those categories in which there are more elderly persons but it appears that many unmarried persons are found among the handicapped indicating that handicapped persons may be having difficulties in finding partners.

More than half of the handicapped persons (52.7%) are illiterate. Those who can read and write represent 42.2%. The rest can only read. Among the handicapped persons who ever attended school, 4 out of every 5 of them (84.3%) attained only the primary level, 6.1% underwent general secondary education, 1.7%, technical education.

Some 58.6% of handicapped persons aged 6 years and above are economically active and employed while 16.7% declared having no work. A large majority of employed handicapped persons are self-employed (86.1%). However a significant proportion of them (45.5%) who are still young (6-15 years) were employed as unpaid family workers.

## 11.1.5. Types and Causes of incapacitation

An analysis of incapacitation by type has the attribute of highlighting the various types of handicap in terms of their frequency of occurrence and geographical location. Such information is vital for decision-making with regard to project and programme orientation.

Tableau 11.4: Type of handicap

Type/ Sex	Blind	Deaf/ dumb	Lower limbs	Upper limbs	Mental deficiency	Trauma	Other	Total
Total	4.2	7.0	29.4	25.2	4.8	1.1	28.3	100.0
Male	4.3	7.3	32.1	26.0	4.4	0.9	25.1	100.0
Female	4.2	6.8	26.7	24.4	5.2	1.4	31.3	100.0

Most of the handicapped persons in Rwanda suffer from lower limb incapacitation (29.4%) or from upper limb incapacitation (25,4%). Persons suffering from trauma represent 1.1% of all handicapped persons.

Tableau 11.5: Causes of incapacitation

Cause/	Congenital	Illness	Accident	War	Genocide	Mines	Other	Don't
Sex								know
Total	11.8	49.8	16.5	6.2	2.6	1.2	6.3	5.7
Male	13.1	43.6	21.1	8.2	2.2	1.7	5.3	4.8
Female	10.5	55.9	11.8	4.3	3.1	0.6	7.3	6.5

The most common cause of incapacitation in Rwanda is illness (49.8%), followed by (16.5%) and by deformations from birth (11.8%). Anti-personnel mines during war time are causes of incapacitation for 1.2% of the cases.

Among handicapped children aged 25 years or less, more than half of them still have their both parents surviving. However, among the children suffering from trauma, only 32% still have both parents alive, 33.6% only have a surviving mother and 27% have lost all their parents.

While over 70% of the entire population aged 6 years and above have ever been to school, the corresponding proportion among the handicapped is 66.2%. In the same vein, a higher proportion of persons is found to never have attained any level of schooling than is observed among persons without any incapacitation. These levels are far higher among blind and deaf and dumb persons (67.9%) largely because specialized institutions for training of such categories of persons are few in the country.

With regard to participation in economic activity, physically handicapped persons have the highest rates of activity (64.7% for those with upper limb incapacitation and 59.7% for those with lower limb incapacitation). These rates are 36% among mentally deficient persons, 45.6% among those with trauma and 45.6% among the blind. Most of the handicaps in Rwanda are attributable to various types of diseases. The only exception is among those suffering from trauma who attributed it to war (30.9%)

and to the genocide (32.9%). Accidents are the second most common cause of incapacitation especially among the physically handicapped (27.1% among those with upper limb problems and 21.2% among those with lower limb problems).

## 11.1.6. Living Conditions of Handicapped persons

The living conditions of the handicapped persons in Rwanda are captured by examining information on housing units headed by handicapped persons. In all, there are 177,401of which105,620 are headed by males and 71,781 by females. Some 21,418 handicapped heads of households are resident in urban areas and 155,983 in the rural areas.

The largest number of handicapped household heads are found in the 40-49 year age segment. In general, most handicapped persons are heading nuclear households while most female handicapped heads of households are heading single-parent households and most of them are of relatively smaller sizes.

Some 3 out of every 5 households headed by handicapped persons (64.6%) are lodged in isolated dwellings while 21% are lodged in recent agglomerations or « imidugudu ». Most of the homes of handicapped household heads are covered with either zinc or local tiles. More than half of the walls of their dwellings (56.8%) are of uncemented wood and swish and 34.8% are of sun-dried bricks. Almost all of the floors (87.9%) are of earth.

Two out of every five households headed by handicapped persons (44.1%) obtain their water mainly from protected wells and over a fifth (21.3%) from public standpipes. Some 16.4% of them draw water from unprotected wells and springs while another 16.1% obtain theirs from streams, rivers, lakes, ponds and other surface water points.

About 61% of the households headed by handicapped persons use the lampion or wicker for lighting while up to 23.3% use wood. Kerosene lamps are used by only 8% of them. For cooking, most of the households headed by handicapped persons (85.7%) use firewood but up to 9% must rely on other vegetal material for cooking.

Some 3 out of every 5 households (61.4%) have neither a radio nor a television set in their dwelling units.

When handicapped heads of households are classified according to the standard of living of their dwelling units, 10% of them have very low standards of living, over 75% have low standards of living and barely 15% have just average standards of living. Hardly any of them lives heads dwellings whose standards could be considered as high or very high.

## 11.2. The Population of Elderly Persons

This section has the objective of highlighting the realities of this subpopulation of persons who are burdened by old age such as to better inform decision-makers on what specific measure could be taken to improve on their lot.

## 11.2.1. Demographic characteristics of elderly persons in Rwanda

Table 11.6: The distribution of the resident population and of elderly persons aged 60 years and above by province and by sex

	Tot	al Populat	ion	Eld	erly Pers	ons	Proportion of elderly persons			
Province/City	Male	Female	Total	Male	Female	Total	Male	Female	Ensemble	
Rwanda	3 879 448	4 249 105	8 128 553	146 315	201 060	347 375	3.8	4.7	4.3	
Kigali City	325 778	277 271	603 049	5 472	6 906	12 378	1.7	2.5	2.1	
Kigali Ngari	370 910	418 420	789 330	14 308	19 002	33 310	3.9	4.5	4.2	
Gitarama	404 737	451 751	856 488	17 628	24 225	41 853	4.4	5.4	4.9	
Butare	340 020	385 894	725 914	12 989	19 776	32 765	3.8	5.1	4.5	
Gikongoro	233 454	256 275	489 729	11 696	15 170	26 866	5.0	5.9	5.5	
Cyangugu	291 017	316 478	607 495	11 373	15 889	27 262	3.9	5.0	4.5	
Kibuye	218 301	250 715	469 016	9 758	13 703	23 461	4.5	5.5	5.0	
Gisenyi	403 276	461 101	864 377	12 530	18 752	31 282	3.1	4.1	3.6	
Ruhengeri	416 074	475 424	891 498	15 941	23 749	39 690	3.8	5.0	4.5	
Byumba	337 481	370 305	707 786	13 363	18 147	31 510	4.0	4.9	4.5	
Umutara	203 514	218 109	421 623	8 054	9 489	17 543	4.0	4.4	4.2	
Kibungo	334 886	367 362	702 248	13 203	16 252	29 455	3.9	4.4	4.2	

In Rwanda, some 347,375 elderly persons aged 60 years and above were counted during the 2002 census out of a total resident population of 8,128,553 inhabitants. They represent 4.3% of the population. Though this proportion may appear to be relatively small, their numbers are fairly significant to merit special attention during the analyses of census results.

There are more female elderly persons than males in all the other provinces of the country except in the City of Kigali. This may be explained by the natural advantage women enjoy in terms of longevity but also to the excessive adult male mortality during the time of the war and genocide in the 1990s. The provinces with the highest proportion of elderly persons are those of Gikongoro (5.5%), Kibuye (5.0%) and of Gitarama (4.9%). The least proportions are recorded in the City of Kigali (2.1%) and in the Province of Gisenyi (3.6%).

Table 11.7: The distribution of elderly persons and sex ratios by age groups

Ago groupo	Male		Female		Total		Say Batia
Age groups	Figures	%	Figures	%	Figures	%	Sex Ratio
60 and above	146 315	100.0	201 060	100.0	347 375	100.0	72.8
60-64	45 221	30.9	66 588	33.1	111 809	32.2	67.9
65-69	35 178	24.0	49 750	24.7	84 928	24.4	70.7
70-74	30 970	21.2	40 050	19.9	71 020	20.4	77.3
75-79	16 255	11.1	21 734	10.8	37 989	10.9	74.8
80-84	12 081	8.3	14 707	7.3	26 788	7.7	82.1
85+	6 610	4.5	8 231	4.1	14 841	4.3	80.3

The very old persons aged 80 years and above represent barely 12% of all elderly persons in Rwanda. Those aged 60-79 years are thus in the majority (88%). This is largely explained by the low life expectance at birth of the country ( $e_0$ =51.2 years) but more particularly, by the low life expectancy after 60 years of age ( $e_{60}$ =14.8 years).

The proportions of elderly persons gradually diminish as age increases -56.6% of them are aged below 70 years. These proportions appear to diminish faster with age among the women than among the men even though the women still outnumber the men at each age group.

The overall sex ratio is 72.8 implying that, in Rwanda there are 73 elderly men to every 100 elderly women. The pattern of sex ratios across the age groups is not regular.

Elderly women are proportionally more in ordinary households than elderly men (99.6% as against 95.2%). On the other hand, there are more elderly men in collective households than women. In effect, only 850 elderly women were counted in all the collective households in the country, representing 0,2% of all elderly persons.

Irrespective of the age group considered, elderly men are more numerous among elderly persons still married than the women. There are 6 times as many elderly males than females in consensual unions while there are 2.2 times as many elderly men than women in monogamous unions and twice as many men than women in polygamous unions.

On the other hand there are 5 times as many widowed elderly women than men and also relatively fewer divorced and separated males than females in Rwanda. In other words, most elderly males spend their old age in the company of a spouse either because of the age difference between spouses or because of remarriage while most elderly women are more likely to live through these years single and even heading households with dependent persons.

Table 11.8 : Proportions (in %) of migrant elderly persons by province of origin and province of destination (recent migration)

				Р	lace o	f Curr	ent res	idenc	е			
Place of previous residence	Kigali City	Kigali Ngari	Gitarama	Butare	Gikongoro	Cyangugu	Kibuye	Gisenyi	Ruhengeri	Byumba	Umutara	Kibungo
Rwanda	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kigali City		7.7	4.2	1.7	2.1	2.1	0.8	0.5	1.7	1.3	1.0	1.4
Kigali Ngari	32.9		11.5	2.7	2.9	0.9	3.2	0.6	13.6	23.8	5.2	7.3
Gitarama	9.6	55.5		9.2	5.7	0.9	8.8	3.5	3.5	0.8	0.8	2.6
Butare	6.2	8.0	31.1		28.2	2.4	0.9	0.4	0.5	0.5	0.6	3.3
Gikongoro	2.0	15.8	18 .4	36.8		35.4	8.8	0.1	0.3	1.0	0.5	2.6
Cyangugu	3.3	0.2	0.4	0.4	1.1		5.8	0.2	0.2	0.0	0.1	0.2
Kibuye	1.6	1.7	9.0	0.7	32.9	18.7		10.5	0.5	0.2	0.2	1.4
Gisenyi	2.7	2.3	6.6	0.2	0.1	8.0	13.8		18.4	11.8	0.7	1.2
Ruhengeri	2.3	12.9	2.2	0.2	0.1	0.1	0.3	17.7		12.1	6.1	4.0
Byumba	2.8	10.9	0.4	0.3	0.3	0.0	0.2	0.4	12.9		17.5	1.0
Umutara	1.8	0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.3	12.1		2.5
Kibungo	3.7	5.1	1.0	0.9	0.9	1.1	0.3	1.4	1.0	1.3	6.0	
Other Countries	31.0	29.2	15.0	46.8	25.5	37.0	57.0	64.6	47.1	35.2	61.2	72.4

The general tendency has been for migrant elderly persons to have moved into their present residence from nearby provinces or countries. In other words, long distance migration is not very common among elderly persons in Rwanda. Most of the provinces sharing borders with other neighbouring countries to Rwanda have each recorded a large proportion of elderly persons who last settled in these countries. The proportions are as follows: Kibungo (72.4%), Gisenyi (64.6%), Umutara (61.2%), Kibuye (57.0%), Ruhengeri (47.1%) and Butare (46.8%).

#### 11.2.2. Sociocultural Characteristics of elderly persons

More than 75% of elderly persons can neither read nor write and barely one out of every 5 of them indicated he could read and write. Others could only read. There are more literate old men than women in Rwanda (37.2% as against 8.6%). Some six out of every 10 elderly men are illiterate as opposed to 9 out of every 10 elderly women.

Illiteracy among elderly persons is slightly higher in the rural area than in the urban areas of Rwanda. While around 30% of urban elderly persons can read and write, this proportion is barely 20% in the rural areas.

As in the case of illiteracy, some 75% of the elderly persons in Rwanda have never been to school. This concerns nearly half of the elderly men and almost 9 out of every 10 elderly women. The situation does not differ according to place of residence.

Most of the elderly persons who ever attended school only attained primary level education. It is only in the urban areas that a small proportion of elderly men and women who attained secondary level education can be found (7.3% of the men as

against 2.3% of the women). This is ample testimony of the difficulties Rwandan had in accessing education during the colonial period (the persons concerned here were all born before 1942).

Almost all elderly persons in Rwanda are speaking the Kinyarwanda language (99.6%). Very few of them are able to speak other foreign languages and these are mainly found in the urban areas. The main other foreign language that they appear to speak is Swahili (3.5%) and to some extent, the French language (1.6%).

More elderly men can speak foreign languages than the elderly women. In effect, elderly men in Rwanda are more literate, more numerous to have attended school and to have migrated to other towns and countries than the women and this advantage reflected itself in their proficiency in foreign languages.

More than one out of every two elderly persons is catholic, less than 3 out of every 10 are protestants and one out of every 10 are adventists. Elderly persons are very few in the other religious denominations. Their predominant affiliation (93.9%) to Christian religions (Catholic, Protestant, Adventist, Jehovah Witness and other Christian religions) has historical undertones linked to early evangelisation and colonisation which have gradually phase out adherents of the traditional religion.

The proportion of foreign nationals among elderly persons in Rwanda is equally very small (0.6%). Among the few foreign nationals, more than 7 out of every 10 of them have come from the DRC and 10% from Burundi.

# 11.2.3. Socio-economic Characteristics of elderly persons in Rwanda.

A little less than 70% of the elderly person were found to be still economically active during the 2002 census. Even at the advanced ages of 80 years and above, more than 3 out of every 10 elderly persons were still economically active and employed. This implies that for most elderly persons in Rwanda, they must remain economically active to ensure their daily subsistence.

Almost all the elderly persons who declared themselves as economically active, especially in the rural areas, were farmers. In the urban areas, there is some amount of variation in the types of activities carried out by elderly persons with a few indulging in craftwork (7.4%), or employed as unqualified labourers (4.9%) or as traders (3.8%). A few others are in the liberal and scientific professions (3.5%). In the towns, economically active elderly women who are not farmers, are traders (3.0%).

# 11.2.4. Living conditions in households headed by elderly persons

More than 9 out of every 10 elderly males are heads of households in which they were enumerated while less than 7 out of every 10 elderly females have this status. While at the national level, female heads of households constitute barely 25% of the resident population aged 15 years and above, they make up 67% of all elderly women.

Elderly men are found to be heading relatively larger households (of 5 persons or more) than elderly females (2-3 members) both in the urban and rural areas.

Most households headed by elderly persons draw their water from protected springs or wells (48.6%). Their next most common sources of water are the public standpipe (18%) and unprotected springs and wells (16.5%). However, for almost 16% of the households headed by elderly persons, water is obtained from uncertain surface water sources and from rivers. This situation obtains both in the urban and rural areas.

The private latrine is the main type of toilet facility available to most households headed by elderly persons (85.6%) whether they be male or female and irrespective of their place of residence. The equivalent proportion in all households in Rwanda is 83%. Some 10.7% of households headed by elderly persons share collective toilet facilities.

Some 34.8% of households headed by elderly persons have a radio set at home as compared to the 41% recorded for all households in the country. The situation differs marked by place of residence with 47.1% of urban households of this type having radio sets and 33.3% those in the rural areas having them.

There are also disparities in both the urban and rural areas, by the sex of the elderly person heading the household with an 18% point difference between the male and female headed households having radio sets, in favour of the male-headed households.

In Rwanda, almost 2 out of every 3 elderly persons is suffering from one handicap or the other. This proportion is 1 out of every 20 persons in the population as a whole. Physical handicaps are far more common among elderly persons (1 out of every 3 for the lower limbs and 1 out of every 5 for the upper limbs). Elderly persons in Rwanda are therefore logically more likely to suffer from handicaps by virtue of their many years of exposure to risk of incapacitation such as illness, war and other accidents.

In general, households headed by elderly persons are more numerous in the very low standard of living category (77.6%), more especially in the rural areas (80%) than in the urban areas (58.6%). Only 11.2% of households headed by elderly persons in the rural areas fall into the category with average standards of living. The equivalent proportion in the towns is 30.2%. While almost no household headed by elderly persons in the rural areas can be considered as falling into the high standard of living category, this proportion is 6.5% in the urban areas. This is to be expected given the fact that the few educated elderly heads of households who have relatively lucrative jobs are only found in the urban areas of the country.

# 11.3. The Population of Children in Rwanda in 2002

The concept of « children » is used here to denote all young persons aged less than 18 years, in compliance with the definition of the UNICEF and other UN agencies. This section focuses on the size, spatial distribution and the structure, in functional age categories of the subpopulation of children in Rwanda such as to give a clear picture of 'the future of Rwanda » that they represent. Such information should help in the better target of future projects and programmes and hence in the better allocation of available resources for optimal impact.

# 11.3.1. The size and structure of the population of children

### 11.3.1.1. The size of the population

During the 3rd census of Rwanda, 4,223,526 children aged less than 18 years, representing some 52% of the total population, were counted in Rwanda. There were 2,077,384 boys (49.3%) and 2,138,930 girls (50.7%) respectively. Male children represented 53.7% of the male population while female children represented 50.4% of the female population.

Among the provinces, the highest proportion of children was recorded in the provinces of Ruhengeri, Gisenyi and Kibuye. They represented 56.2%, 56.2% and 54.1% of their resident populations respectively. The lowest proportion of children was recorded in the City of Kigali.

## 11.3.1.2. The relationship of children to the heads of households

The following observations can be made with regard to the relationship of the children to the heads of the households in which they had been enumerated:

- Some 15,052 children were already **heads of households.** These included 9,368 boys (62.2) and 5,684 girls (37.8%). Among the provinces, the highest proportion of child heads of households were recorded in the provinces of Ruhengeri, Gisenyi and Kibuye.
- During the 2002 census, some 28,479 children were spouses of the head of households, irrespective of the type of union. Over a third of the children who declared this status was counted in the provinces of Ruhengeri (16.1%) and Gisenvi (13.1%) alone.
- The largest category of children were those who were declared as **children of the head of household.** There were 3,417,218 of them representing 81% of all the child population. The highest proportions of children in this category were recorded in the provinces of Ruhengeri (84,8%) and Byumba (84.3%) while the lowest proportion was recorded in the City of Kigali (71,2%).
- There were 22,525 **fostered children** enumerated and the highest proportion (1.3%) was recorded in households in the City of Kigali.
- Some 89,571 children were declared as **brothers or sisters** of the heads of households with the highest proportions recorded in the City of Kigali (3.6%) and in the Province of Gisenyi (3.1%).
- There were 344,882 **grandchildren** counted. Among the provinces, the highest proportion of grandchildren was recorded in the Gitarama Province ad the lowest proportion in the City of Kigali.

- Children who had **other relationships with the heads of households** represented 8.2% of all enumerated children (188,386). The highest proportion in this category (8.3%) was found in the City of Kigali and the lowest proportion in the Province of Byumba (3.2%).
- Some 87,594 children (2.1%) were **unrelated to the heads of households** with the highest proportion in this category (8.3%) recorded in the City of Kigali.

# 11.3.1.3. Structure by functional age groups

Information on the structure and spatial distribution of the subpopulation of children furnished by the 3rd census of Rwanda is essential in that it provides decision makers and other interested development partners with the details necessary for programming of interventions meant to have an impact on their wellbeing. Such interventions normally concern specific age categories.

Table 11.9: The distribution of children aged less than 18 years by single years according to urban/rural residence.

			POPULA	TION AGI	ED LESS	THAN 18	YEARS		
Age		Urban			Rural			Total	
	Male	Female	Total	Male	Female	Total	Male	Female	Total
All Ages	298 151	311 120	609 271	1 784 509	1 829 746	3 614 255	2 082 660	2 140 866	4 223 526
0	23 496	23 472	46 968	138 157	140 096	278 253	161 653	163 568	325 221
1	18 768	18 615	37 383	107 744	109 174	216 918	126 512	127 789	254 301
2	20 425	20 646	41 071	120 724	123 209	243 933	141 149	143 855	285 004
3	17 398	17 297	34 695	97 550	99 202	196 752	114 948	116 499	231 447
4	17 030	16 904	33 934	93 798	96 526	190 324	110 828	113 430	224 258
5	17 585	17 904	35 489	107 782	110 524	218 306	125 367	128 428	253 795
6	17 772	17 983	35 755	108 957	111 672	220 629	126 729	129 655	256 384
7	15 310	15 378	30 688	95 229	96 354	191 583	110 539	111 732	222 271
8	14 165	14 689	28 854	90 080	93 485	183 565	104 245	108 174	212 419
9	12 816	13 407	26 223	83 655	86 292	169 947	96 471	99 699	196 170
10	13 454	13 659	27 113	89 311	92 267	181 578	102 765	105 926	208 691
11	13 076	13 683	26 759	86 378	88 250	174 628	99 454	101 933	201 387
12	15 529	16 445	31 974	99 511	102 413	201 924	115 040	118 858	233 898
13	14 237	16 006	30 243	92 193	96 288	188 481	106 430	112 294	218 724
14	15 651	18 047	33 698	97 536	101 291	198 827	113 187	119 338	232 525
15	16 358	18 691	35 049	95 402	97 382	192 784	111 760	116 073	227 833
16	17 169	19 282	36 451	93 231	95 028	188 259	110 400	114 310	224 710
17	17 912	19 012	36 924	87 271	90 293	177 564	105 183	109 305	214 488
Total Population	727 172	645 432	1 372 604	3 152 276	3 603 673	6 755 949	3 879 448	4 249 105	8 128 553

From the data presented on table 11.9, the following details can be summarized for specific age categories:

- Target groups for vaccination: there were 579,522, children aged less than 2 years including 291,357 girls and 288,165 boys. This subcategory represents 13.7% of the child population in Rwanda.

- The early childhood population: Some 1,574,026 children aged 0-5 years were counted during the 2002 census representing 37.3% of the child population with a sex ratio of 97.3. This subgroup of children represents 19,3% of the total population of the country.
- Nursery school age population: There were 709,500 children aged 3-5 ears in Rwanda in 2002. These represent 16.8% of the child population among which there were 351,143 boys and 358,357 girls.
- Children of primary school going age: Some 1,274,836 children aged 7-12 years including 628,514 boys and 646,322 girls were enumerated in 2002. These represent 30.2% of the child population.
- Children of secondary school age: There were 1,333,751 children aged 13-18 years in Rwanda in 2002 including 651,915 boys and 681,836 girls and comprising 30% of the child population.
- The adolescent population: Children within the adolescent age category (12-18 years) constituted 35% of the child population and 19% of the total population. In terms of figures, there were 1,568,649 of them including 766,955 boys and 800.694 girls. Some 84% of them were resident in rural areas and the rest in the towns.

Evidence from these functional age groups highlights the youthful nature of Rwanda's population (52% of the total population) and underscore the challenges that the decision makers must face within the short and medium terms to meet the specific needs of the various subgroups of children such as to prepare them for a brighter future.

# 11.3.2. The dynamics of the child population in Rwanda

Since these aspects have been handled in greater detail by other parts of this synthesis report, only highlights are presented here.

Tableau 11.10: The distribution of the children aged 12-17 years by province of residence according to their marital status

Province/City	Bachelor	Consensual union	Married	Divorced /separated	Widowed	Not stated	Total
Total	1 197 338	8 774	5 016	533	1 505	134 498	1 347 664
Kigali City	71 269	581	362	40	103	11 888	84 243
Kigali Ngari	122 257	771	347	41	144	13 307	136 867
Gitarama	123 882	363	347	27	129	14 065	138 813
Butare	103 032	538	350	29	130	10 834	114 913
Gikongoro	68 988	603	340	30	62	7 089	77 112
Cyangugu	93 168	477	317	33	99	8 033	102 127
Kibuye	70 918	458	332	24	84	7 389	79 205
Gisenyi	135 573	1 226	665	75	176	14 089	151 804
Ruhengeri	140 153	1 606	643	81	176	16 156	158 815
Byumba	104 791	823	371	49	75	9 440	115 549
Umutara	57 907	565	446	51	115	10 112	69 196
Kibungo	105 400	763	496	53	212	12 096	119 020

## 11.3.2.1. Marriage among adolescents

- Adolescents in consensual unions: Some 0.7% (8,774) of the children aged 12-17 years were found to be in consensual unions in 2002. These included 2,704 boys and 6,070 girls. Girls are thus more concerned than boys. Among the provinces, the highest proportion of girls in this category were recorded in the provinces of Ruhengeri (1.4%), Umutara (1.2%) and of Gisenyi (1.2%).
- Married adolescents: Some 5,016 were declared as married and 66.9% were girls. The highest proportion of married girls was recorded in the Province of Umutara (with 0.6% of all children).
- Divorced or separated adolescents: These were relatively few (533 cases) with a predominance of girls (83.1%). The highest proportions were recorded in the provinces of Ruhengeri and Umutara where around 0.1% of the children declared this status.
- Widowed adolescents: Some 1,505 children were declared as widowed and most of these were girls (802 or 53.3%).

### 11.3.2.2. Fertility among adolescentes

- Of the 901,555 adolescents girls who responded to the questions relating to fertility, some 4% had already had at least one birth.

# 11.3.2.4. Mortality and survival of children

 The observed infant and child mortality in Rwanda were 139 and 102 deaths to every 1000 births with wide disparities according to place of residence and in favour of the urban areas with Kigali City recording the lowest mortality levels.

# 11.3.2.5. Migration of children

- A total of 480,370 (11.4% of all children) were found to have changed their province of residence since birth (life-time migrants) in 2002. There is a tendency for migration propensity to increase with age in Rwanda.

### 11.3.3. Child development in Rwanda

- School attendance: Out of the 2,387,209 children aged 7-17 years enumerated in 2002, some 1,851,349 (including 905,879 boys and 945,470 girls) had attended or were currently attending school. These represent 77.6% of the target population. Some 19.2% of them, including 225,973 boys and 231,253 girls, had never attended school. Others did not respond to the question.
- Level of education attained: Of all the children aged 7-17 years, 530,351 or 28.6% had never been to school or had not successfully completed any class, 1,772,325 or 74.2% had attained primary level of education, 5,562 of them or 0,2% had attained the post primary level and only 64,394 or 2,4%, the secondary level.

- School drop-out among children: Among all the children aged 6-17 years, 528,758 of them were already school drop-outs. Some 52,3% of them were girls and drop-out rate increased with age.
- School attendance and household standard of living: Using the composite index of the standard of living of individual households in Rwanda<sup>5</sup>, it transpires that the rate of primary school attendance of children aged 8-13 years increases markedly depending on the improvement in the standard of living category of the household. While the schooling rate at the national level is 68.7%, it was barely 52.8% among children in households with very low standards of living but was as high as 86.6% among those in households with very high standards of living. It could thus be concluded that poor household standards of living are a hindrance to primary school attendance of children in Rwanda.
- Schooling of the girl child: Available data from the census indicates that the levels of primary schooling are identical for both boys and girls in Rwanda. In some areas, girls register higher rates than the boys.

# 11.3.4. Children and participation in economic activity

- The economic activity status of children: of the 2,643,403 children aged 6-17 years enumerated in Rwanda in 2002, 352,550 (or 13.3%) were declared as economically active. Some 52.8% of them were girls.
- Branch of economic activity: The economically active children in Rwanda were found to be employed in mainly four branches: agriculture and forestry (83.1%), house-helpers (11.9%), trading (1.2%) and production activities (0.7%). Several hundred of children were found to be employed in risky activities such as in the extractive and construction sectors.
- Child employment status: Most of the children with jobs were self-employed (48.3%) while another significant number were working as unpaid family workers (37.2%). Very few of the employed children were salary or wage earners (4.6% and 5.8% respectively). The employment status of children was found to improve with age.

### 11.3.5. The Situation of Vulnerable Children in Rwanda

Overall, the following categories of children can be considered as critical cases requiring special attention:

 Orphaned Children: Out of the 4,223,526 children aged less than 18 years enumerated in Rwanda in 2002, some 2,959,463 (or 70%) of them still have their both parents alive. One out of every five of them had lost their fathers and one out

\_

This index was constructed during the analysis of the theme relating to « the Situation of well-being in Rwanda ». It takes into consideration certain characteristics of the housing units, facilities available to household members such as water and energy for lighting and cooking and toilets as well as the availability of certain valuables such as radio and television sets, telephones, vehicles, motorcycles and bicycles. The details for constructing the composite index are presented in the said report.

of every 25 either their mothers or both parents while one in every 30 had no idea of the survival status of their parents. The highest proportion of orphaned children were recorded in the City of Kigali (35%), and in the provinces of Gisenyi (34.3%) and Butare (32.9%) while the lowest were in those of Cyangugu (23.1%), Byumba (23.9%) and Gikongoro (25%).

- Fostered children: A total of 22,525 fostered children were enumerated in ordinary households in Rwanda. These included 10,212 boys (45.3%) and 12,313 girls or 54.7% of this category of children. Some 26% of all the fostered children were counted in the urban areas. Among the provinces the largest number of fostered children was found in the City of Kigali (17.5%) and in the provinces Gisenyi (13.2%) and Butare (9.6%). The lowest proportion was recorded in the Province of Gikongoro (with 4.3% of all fostered children). It is worthy to note that the administrative units with the highest proportion of fostered children are equally those with the highest proportion of orphaned children in Rwanda.
- Handicapped children: Overall, some 93,299 children were found to be suffering from one type of incapacitation or another. These represent 2.2% of the children. Most of the children were suffering of from physical incapacitation (of the lower (14.7%) or upper (11.6%) limbs. The major causes of such incapacitation were illness (21.9%) and congenital causes (16.4%).
- Child heads of households: Out of the 1,757,426 heads of households counted in Rwanda in 2002, 15,052 of them (or 0.9%) were aged less than 18 years. Most of the child heads of households were males (62.2%). Most of such had lost either both of the parents (43.4%), the mother (18.9%) or the father (13.1%) or had no idea of the survival status of their parents (5.7%). For some 18.9% of them their both parents were still alive. An analysis of the standards of living of households headed by children revealed that 14.9% had very low standards of living and 72.5% low standards of living while 11.8% had average standards of living and only 0.8% high standards. In other words, child-headed households in Rwanda thrive under very difficult conditions.

# 11.4. The Population of Women in Rwanda in 2002

The analysis of data on women in Rwanda is of interest in view of their numerical strength within the total population and their primordial responsibilities in the area of production, education and reproduction within the society. The analysis here highlights the peculiarities of the life of the average rwandan woman.

### 11.4.1. The Size and Distribution of the female population

In Rwanda, women outnumber men in almost all the provinces and places of residence except in Kigali City and in the town of Umutara.

Table 11.11: The distribution of the population in ordinary households according to urban/rural residence and by sex

	Urban				Rural		Total			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Numbers	609,975	639,469	1,249,444	3,114,051	3,600,314	6,714,365	3,724,026	4,239,783	7,963,809	
%	48.8	51.2	100.0	46.4	53.6	100.0	46.8	53.2	100.0	

Of the 8,128,553 inhabitants enumerated in Rwanda in both the ordinary and collective households in 2002, 52.3% were women while among the 7,963,809 persons enumerated in the ordinary households, the female population constituted 53.2%. There were 639,469 women in the urban population representing 51.2% of the urban population and 3,600,314 in the rural areas representing 53.6% of the rural population.

Between 1991 and 2002, the female population of Rwanda grew at an average annual rate of 1.3% as against 1.0% for the male population giving an average national crude growth rate of some 1.2%. These low rates are largely due to the war and the genocide of the 1990s which caused several deaths and displaced many of the inhabitants of the country.

The femininity ratio within the national population is 109.5 but it is much lower among the urban population. This ratio increases with age such as to reach values of 147.3 at the 60-64 age group and drops to 124.5 among those aged 85 years and above.

### 11.4.2. Dynamics of the female population in Rwanda

### 11.4.2.1. Marital status and Fertility

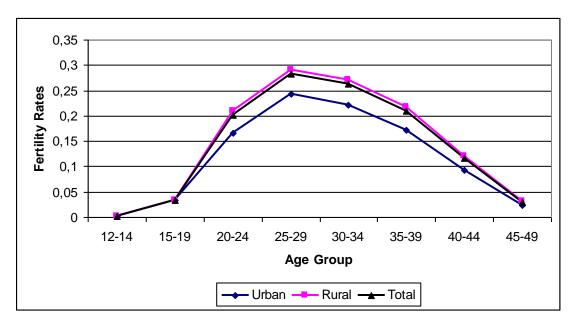
As from age 30 years, there are much fewer unmarried women than men left in Rwanda. On the other hand, there much more widowed and divorced/separated women than men. In effect, there are as many as 8 widowed women to every single widowed man in the country.

The mean number of children ever born is 3.1 children and varies from 2.4 children in the urban areas to 3.2 children in the rural areas.

Table 11.12: Age-specific fertility rates and the total fertility rates (TFR) by place of residence.

Age Groups		Age-specific Fer	tility rates	
	Urban	Rural	Total	
Total	0.124	0.141	0.138	
12-14	0.002	0.001	0.001	
15-19	0.033	0.033	0.033	
20-24	0.167	0.210	0.202	
25-29	0.243	0.291	0.282	
30-34	0.221	0.271	0.263	
35-39	0.172	0.217	0.210	
40-44	0.093	0.121	0.117	
45-49	0.024	0.031	0.030	
TFR	4.9	6.2	5.9	

Figure 11.4: Age-specific fertility rates by place of residence



The age-specific fertility rates are higher among women of the rural areas than among those of the urban areas. Rural fertility levels and patterns are quite similar to those at the national level. The Total Fertility rate (TFR) is 5.9 children per woman at the national level, 4.8 children in the urban areas and 6.2 children in the rural areas.

The proportion of women without a live birth at the age 45-49 years is very small (2%) in Rwanda implying that infertility levels are low. The equivalent proportion is 2.9% in the urban areas and 1.9% in the rural areas. The apparent infertility levels are relatively highest in the City of Kigali and in Gisenyi town (3.7%) but also in the town of Umutara (3.8%).

### 11.4.2.2. Mortality levels among women

Indirect estimations from the data of the census reveal that the life expectancy at birth of rwandan women is higher than that of the women -53.8 years as against 48.4 years for the men. The mean national life expectancy stands at 51.2 years.

Overall, out of the mean number of children ever born of 2.9 the mean number of children surviving is 2.1 children representing 71% of all live births. In the rural areas

the mean number of children ever born is 3.03 children with 2.14 or 70.5% surviving on the average. Equivalent proportions in the urban areas are 2.22 children ever born and 1.65 or 74.4% surviving.

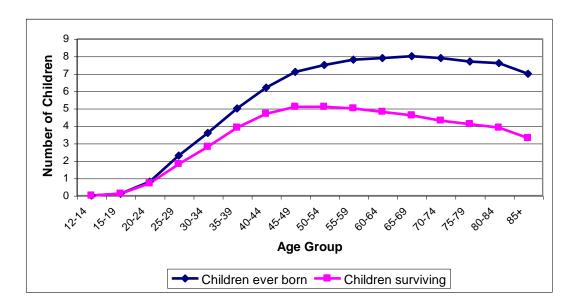


Figure 11.5: Mean number of children ever born by the age group of their mothers

Naturally, child loss increases with the age of the mother – before she reaches the age of 45 years, an average rwandan woman has lost 25% of her 6.24 total live births and by 65 years, she has lost 40% of an average of 7.9 live births. This high probability of child loss may partly explain why couples still prefer to maintain high fertility levels in Rwanda in order to compensate for eventual loss through deaths. In effect, by the end of her reproductive lifespan, it is estimated that an average women in Rwanda would have delivered some 7 children but would have lost at least two through death.

Infant mortality levels still remain high in Rwanda. They are 133 per 1000 births for the females and 145 per 1000 births for the males giving a national average of 139 for both sexes. In other words, in Rwanda, one out of every 7 children dies before its first birthday anniversary. The under-5 mortality levels stand at 194 for females and 232 for males giving a national average of 221 for the both sexes. In other words, 1 out of every 5 children die before their fifth birthday anniversary in Rwanda. These levels are among the highest in the African continent.

### 11.4.2.3. Migration of Women in Rwanda

Only few women were found to have migrated in Rwanda because 90% of them are non-migrant. In other words only 10% of the female population were found to be resident in a province different from their province of birth. Women are therefore more sedentary than men given that the femininity ratio among the non-migrant population is above 100 in all the provinces of the country.

Table 11.13: Proportional distribution of women by migration status and by province of residence at the time of the census

Place of Birth	Kigali City	Kigali Ngari	Gitarama	Butare	Gikongoro	Cyangugu	Kibuye	Gisenyi	Ruhengeri	Byumba	Umutara	Kibungo
Rwanda	86.2	96.9	99.3	97.9	99.6	98.8	96.3	93.6	98.4	97.4	83.1	92.6
Abroad	13.8	3.1	0.7	2.1	0.4	1.2	3.7	6.4	1.6	2.6	16.9	7.4
Neighbouring countries	11.8	2.9	0.7	2.1	0.4	1.2	3.7	6.4	1.6	2.6	16.8	7.4

Most of the immigrant population coming from the neighbouring countries are females. The longer the distance between the place of birth and the place of current residence, the greater the probability that there shall be fewer female migrants recorded. In other words, female migration is generally short distance. Overall 80% - 90% of the female resident population in the provinces are non-migrant except for the particular case of the City of Kigali (46.5%) and the Province of Umutara (54.7%).

International immigration is quite pronounced in the Umutara Province (with inflows from Uganda), in Kigali City (from neighbouring countries), and in the provinces of Kibungo (from Tanzania) and Gisenyi (from the D.R. Congo).

In all the provinces, the proportion of the female migrant population is higher in the urban than in the rural areas mainly because of rural urban migration engendered by the repulsive nature of poverty conditions in the rural areas.

### 11.4.3. Literacy and educational level of Women

Overall, femininity ratios<sup>6</sup> are much lower among the literate than among the illiterate population in Rwanda. In other words, males are generally more among the literate population while females predominate among those who can neither read nor write. This situation obtains both in the urban and rural areas of the country. Also the difference in the proportions of illiterate males and females is wider than that which obtains in the proportions of literate males and females.

Female illiteracy is high in almost all the administrative units of the country. It concerns 40.2% of the females but only 28.6% of the males, giving a femininity ratio of 140.5%. The highest proportions of illiterate women are recorded in the provinces of Gisenyi (50.8%), Gikongoro (48.8%), Ruhengeri (47.3%) and Byumba (46.8%). Also rural women are far more illiterate than urban women in all the provinces but the gap between the sexes is much wider in the urban areas than in the rural areas except in the provinces of Gitarama, Gikongoro and Ruhengeri.

\_

<sup>&</sup>lt;sup>6</sup> Since women generally outnumber men especially in the adult age groups, interpretation of the femininity ratios may give a rather biased impression in view of this background imbalance between the sexes. That is why, in this section it is rather the femininity ratios of the individual proportions by sex that have been presented. These have the advantage of normalizing the imbalances in distributions by sex from the outset.

With regard to school attendance, more girls appear to be in school than the boys up to the age 14 years in the rural areas and up to the age 24 years in the urban areas. In other words, girls appear to stay longer within the school system in the urban areas than in the countryside. Schooling rates are generally high among children aged less than 20 years and diminish rapidly after this age. This implies that most children quit school after completing only the primary level education. Overall, schooling rates are generally as high among the girls as among the boys and are even higher than those of the boys in a number of provinces.

With regard to the educational level attained, the general tendency is for those who ever attended school to stop at the primary level and women predominate among those who have not achieved any level. At the secondary level, barely 5% of the women and 7% of the men have attained this level. The highest proportions in the country are recorded in the City of Kigali where apparently more women are found to have attained secondary level education than the men. This is so because more men do not stop at this level but proceed to higher levels. Indeed, very few persons are found to have attained higher levels of education in Rwanda (0.3% of the women and 0.8% of the men) representing 36 out of every 100 males having attained this level.

## 11.4.4. Participation in economic activity among women

Much effort was made during the 2002 census to capture the participation of women in economic activity in the country. Overall, 56% of them were found to be actively involved in the production of goods and services. Women predominate in the labour force in the rural areas (94%). Within the inactive population, most females are either pupils/students or among retired persons and landowners in view of the fact that they largely outnumber males among the elderly population.

Women generally predominate among the labour force in the primary sector (87%), particularly in the rural areas, where they serve as farmers and are mostly self-employed. Women are scarce in such professional categories as employers and salaried workers, which require a reasonable level of education and some material and financial capital base, as a prerequisite. Such professions are more common in the secondary and tertiary sectors that are located mainly in the urban areas.

## 11.4.5. Sociocultural characteristics of the female population

The main religious denominations with a large following in Rwanda are the Catholic, Protestant and Adventist religions. Femininity ratios are highest among followers of the "other Christian religions" (128.4), "other religions" (122.6%) and among protestants (122.4%). They are lowest among those with no religious affiliation (71.3%), animists or traditional religions (87.5% and among the muslims (95.4%).

With regard to the languages spoken, more women than men were found to be speaking Kinyarwanda both in the urban and rural areas (114 women to every 100 men at the national level). Far fewer of them are proficient in any of the foreign languages (85 females to every 100 males).

### 11.4.6. Women in vulnerable situations in Rwanda

# 11.4.6.1. Handicapped women

In terms of numbers, there are more women than men suffering from incapacitation in Rwanda, especially in the rural areas, but the men have higher rates of handicap. Overall, handicapped women represent 3.7% of the female population of the country.

Among the provinces, the highest proportions of handicapped females in the country are recorded in Kibuye, Butare, Kigali Ngari, Gikongoro and Ruhengeri. On the other hand, the highest proportions of handicapped men are found rather in the City of Kigali and in the Province of Umutara.

Among the young generations, there are fewer girls suffering from incapacitation than the boys but as from age 45 years, there are more handicapped women than men. Handicapped women predominate among the inactive population (111.7 women to 100 men) with ratios as high as 153% among the retired persons. They are fewer among the active population (96.3 women to 100 men).

#### 11.4.6.2. Widowed Women

In Rwanda, there are many more women than men who were found to have lost their spouses and have never remarried. Overall, there are 8 widowed women to every single widower in Rwanda. This proportion is even higher (9-10 to 1 widower) in the provinces of Ruhengeri, Umutara, Gisenyi, Cyangugu and Kibuye.

There are much fewer widows among women who can read and write (perhaps because they are relatively younger and can easily remarry) than among those who are illiterate where there are more than 13 of them to every widower.

On the contrary, there are more widows among the economically active population (11 widows to 1 widower) than among the inactive population (7 to1) largely because young persons predominate in this category. In other words, widows are generally more economically active to ensure their subsistence in Rwanda.

## 11.4.6.3. Elderly Women

Overall, elderly women aged 60 years and above represent 59% of all elderly persons in Rwanda. The are resident more in the rural areas (87.8%) than in the urban areas (12.2%).

The highest proportions of elderly women in the country are to be found in the provinces of Gitarama (12.0%) and Ruhengeri (11.9%) and the lowest are in the City of Kigali (3.4%) and in the Province of Umutara (4.7%).

Overall, there are 144 elderly women to every 100 elderly men in Rwanda. This ratio is higher in the provinces of Butare (171.3%), Gisenyi (151.3%) and in the City of Kigali (153%).

Among elderly persons, very wide disparities exist between the sexes with regard to the levels of literacy: while there are twice as many illiterate elderly women as there are men, there are barely 33 literate elderly women to every 100 men in Rwanda.

### 11.4.6.4. Female Heads of Households in Rwanda

In Rwanda, female household heads represent 35.2% of all the household heads. They constitute 31.8% of those in the urban areas and 35.8% of those in the rural areas.

Within the urban areas of the country femininity ratios among household heads are highest in the towns of Butare (83.6%) and Kibuye (72.3%) where many adult male are known to have perished during the war and genocide of the 1990s. This ratios are lowest in the City of Kigali (32.8%) which has been destination of much of male dominated international as well as internal migration and in the Umutara Province which received many immigrants from Uganda.

Within the rural areas, the highest femininity ratios are recorded in the provinces of Butare (72.8%) and Gitarama (63.4%), and the lowest in those of Byumba (42.6%) and Umutara (44.8%).

In the whole country, the average household size for female-headed households is 4 persons as against 4.8 members for those headed by males. This is to be expected, because most households headed by males are more likely to include the spouse of the household head while, in most cases, females accede to such a status when the husband is no longer around either as a result of death or migration.

Most female heads of household are widowed (56%). In effect, among all widowed heads of households, there are 10 widows to each widower in Rwanda.

# 11.4.7. Living Conditions in housing units headed by women

In general, the living conditions that obtain in dwellings run by women are poorer than those run by the men. In the urban areas of the country one in every 4 household heads in the spontaneous slum areas is female and in the rural areas one in every 5 heads of households living in the recent agglomerated settlements or imidugudu is female. Also, in the rural areas, 6 out of every 10 heads of households living in dwellings with walls of plastic sheeting or other temporary materials are women.

The general tendency is for dwelling units headed by women to have 2-3 rooms in the urban areas and 1-2 rooms in the rural areas. Those headed by men are much larger.

There are far more female-headed households among households who draw water from such unreliable sources as unprotected wells and springs, rivers, lakes ponds and other surface water points.

In Rwanda, firewood and charcoal are the main sources of energy for cooking. In the urban areas 6 out of every 10 heads of households using firewood for cooking are

females and 3 out of 10 using charcoal are women. Over the whole country, it is more likely to meet female heads of household whose members must resort to other vegetal materials for cooking than those of male-headed households.

Most female heads of households own the dwelling they occupy (89.4%) while some 9.8% are either renting them or lodged freely.

Also, most of the female headed households in Rwanda (69.8%) have neither a radio nor a television set. Only 29.4% of them have a radio set. A vast majority of such households have neither a means of telecommunication (telephones, computers or internet) nor means of transport (vehicles or motorcycles). Only 3.4% of such households own a bicycle.

### 12. POPULATION PROJECTIONS

### 12.1. Introduction

The present situation and future evolution of the population as presented in this section is in response to the urgent need for the Government of Rwanda, its development partners and for other decision makers at decentralized levels, to have at their disposal, reliable updated details on the size, structure and other characteristics of the population, to aid in development planning. Such details should bring decision makers and other development planners to have a clearer idea of the challenges that shall be facing the country in the near and distant future such as to better focus their present and future social and economic planning, programming and policies to meet the needs of the population.

# 12.2. Assumptions underlying the projections

The projections of the total, urban and rural population of Rwanda, as presented in this report, were made on the bases of a certain number of underlying assumptions with regard to the future dynamics of the population using the « component » method of projections that is found in the *Demproj* module of the *SPECTRUM* software for demographic projections. These assumptions are grounded on the situation and the dynamics of the population as observed during the 3<sup>rd</sup> census of Rwanda.

For the regional projections, these have been derived from the national projections using the *« proportional allocation approach »* as described in the *United Nations Manual VIII*. This approach is based on the assumption that the relationship observed between the structure of the population of each region with regard to that of the national population at the baseline level or at the start of the projections shall remain constant over the entire period of the projections. Where migratory flows are minimal, as has been observed in Rwanda, such an assumption can hold true for most of the provinces for a period of up to 25 years, except for the City of Kigali. With regard to the City of Kigali, its population was projected as a derivative of the urban projections using the *«* urban-rural growth differential method *»* and the modified version of the *« proportional allocation approach »* designed for projecting city populations in the *United Nations Manual IV* 

### 12.2.1. Fertility assumptions

Evidence from the results of the censuses of 1978 and 1991 indicate that fertility levels in Rwanda have been declining in a consistent manner in response to the explicit and vigorously applied policy of fertility reduction that was in place in the 1980's supported by a family planning programme which offered various options for fertility limitation.

In view of this experience and also based on the recent past history of the country and on the plight of the reproductive health programmes that are currently in place, and also in view of the fact that the public has acquired some level of sensitization with regard the ill-effects of rapid population growth from having a large number of offspring, the following fertility assumptions were retained to guide the future dynamics of the population of Rwanda:

- 1. High assumptions: The total fertility rate (TFR) is expected to decline from 5.9 children per woman to 3 children by the year 2020 as stipulated among the objectives of the National Population Policy of Rwanda (ONAPO, 2003)<sup>7</sup>: TFR: from 5.9 children per woman in 2002 to 2.68 children in 2022.
- 2. Medium assumptions: The total fertility rate is expected to constantly decline at the rate of 0.1 of a child for each year of projections over the entire period from 2002 to 2022. This pattern is largely inspired by the observed decline over the past decade.:

TFR: from 5.9 children per woman in 2002 to 3.9 children in 2022.

3. Low assumptions: The total fertility rate is expected to constantly decline from 5.9 children per woman to 4.9 children between 2002 and 2022. In other words, the fertility levels in the country shall decline to meet those observed in the urban areas of the country in 2002:

TFR: from 5.9 children per woman in 2002 to 4.9 children in 2022.

# 12.2.2. Mortality assumptions

The present health and social conditions that prevail in Rwanda are those of a post-conflict environment bearing the sequels of the war and genocide of the 1990s during which most of the health infrastructure was damaged, the health programmes were discontinued and the health personnel decimated. Furthermore, the present high costs of health care, the high levels of malnutrition among children consequent on the economic crisis and the social effects of the events of the 1990s couples with the promiscuous lifestyle that had been led by individuals in the refugee settlements, are all factors that could rather lead one to expect mortality levels in Rwanda to have increased in recent years.

Indeed, evidence from the 1991 census estimates of mortality as compared to those of 2002 reveals that these levels did increase during the intercensal period from a life expectancy at birth  $(e_0)$  of 53.7 years in 1991 to 51.2 years in 2002. This confirms the fact that the country did in effect go through very difficult times with deleterious effects on the health and survival status of its population. Under such circumstances, it becomes very illusive to come up with like future trends of mortality evolution given that past events may no longer recur and that other factors with uncertain future evolution such as the AIDS pandemic are currently prevalent.

The Government of Rwanda has endorsed the WHO paradigm of « health for all » and has been putting in place policies and programmes aimed at attaining this global objective. These include a National AIDS Control Programme for educating the public on this disease and for caring for the identified cases, a national programme for the control of malaria meant to put an end to this persistent threat to people's health and life in Rwanda, and the creation of health mutual assistance associations all over the

112

<sup>&</sup>lt;sup>7</sup> ONAPO (2003), Politique nationale de population pour le développement durable au Rwanda : Objectifs démographiques, Kigali, janvier 2003, p. 44.

national territory to assist the adhering populations to more easily handle the costs of treatment of their major ailments.

All these various health and social measures, coupled with other positive, complementary measures in the domain of decentralization, good governance and in the improvement of the overall economic conditions of the population are expected, it is hoped, to improve on the living standards and the life expectancy of Rwandan men and women in the future.

Even though present mortality levels may have been higher than those of the recent past, it is hoped that sooner or later, the various palliative social, health and economic policies and programmes shall bear fruit and result in the reversal of such trends. Under this presumption, it is expected that the life expectancy at birth of the population shall from henceforth be increasing and shall reach 56 years at the end of the projection period (2022).

Thus, the following three main assumptions were advanced to define expected future trends of mortality in Rwanda:

1. High assumptions: The life expectancy at birth  $(e_0)$  shall increase from 51.2 years in 2002 to 58 years in the year 2020 as stipulated in the objectives of the National Population Policy of Rwanda (ONAPO):

(Male  $e_0$ ): from 48.4 years in 2002 to 56.1 years in 2022 (Female  $e_0$ ): from 53.8 years in 2002 to 61.5 years in 2022

2. Medium assumptions: The life expectancy at birth (e<sub>0</sub>) shall experience a constant annual gain of 0.3 of a year per each year of projections for the entire period from 2002 to 2022:

(Male  $e_0$ ): from 48.4 years in 2002 to 53.4 years in 2022 (Female  $e_0$ ): from 53.8 years in 2002 to 58.8 years in 2022

3. Low assumptions: The life expectancy at birth (e<sub>0</sub>) shall experience a minimal but constant annual gain of 0.1 of a year per each year of projections for the entire period from 2002 to 2022:

(Male  $e_0$ ): from 48.4 years in 2002 to 50.4 years in 2022 (Female  $e_0$ ): from 53.8 years in 2002 to 55.8 years in 2022

### 12.2.3. Migration assumptions

Unlike in the case of fertility and mortality where trends were expected to lead toward a decline in both the levels of fertility and mortality, migration levels have been found to be rather low and hence to have been playing a rather insignificant role in the dynamics of the population of Rwanda, except in certain urban areas. In fact, the present high rural densities, the relatively low economic potential of the country, its recent past history in spite of the gradual return of peace and security as well as the limited migratory exchanges with neighbouring countries, all lend credibility to such an assumption. Any substantial flows that may have been observed in the past are not likely to recur on a regular basis in the future.

Assumptions: The contribution of migration shall remain insignificant under all assumptions.

Of all the three basic variants of assumptions that have been postulated, those corresponding to the *medium variant of assumptions* are considered to describe the most likely trend of the future evolution of the population of Rwanda between now and the year 2022. The others represent other likely alternative trends on condition that all the objectives of the National Population Policy of Rwanda shall have been met *(high assumptions)* or in the event of most of the present policies and programmes only yielding mitigated levels of success *(low assumptions)*.

# 12.3. Summary of the expected population up to the year 2022

In August 2002, some 8,128,553 persons were enumerated as resident of Rwanda. These included 52.3% of women and 47.7% of men giving a sex ratio of 91 males to every 100 females. The age structure of the population bore testimony of dynamics that include high fertility (to produce a broad base for the age pyramid) and equally high mortality (to produce a narrow summit). In effect, each woman in Rwanda is estimated to be able to deliver 5.9 children, on the average during her reproductive life span. Mortality levels still remain high: infant mortality is 139 per 1000 births and the life expectancy at birth is just 51.2 years. However, from the evidence at hand, it is expected that this situation shall be improving in future.

Over the next 20-year period the TFR of Rwandan women would have dropped to either 2.7 children for the high variant of projections or to just 4.9 children for the low variant. In other words, the present population of the country is expected to double in the next 26 to 27 years irrespective of which of the variants of assumptions holds true.

### 12.3.1. Trends in the evolution of the total population

Depending on each of the variants of projections, the future population of Rwanda shall grow as shown in table 12.1 below:

Table 12.1: The trends in growth of the total population between 2002-2022 according to various assumptions

Year	High Assumptions	Medium Assumptions	Low assumptions
2002	8,128,553	8,128,553	8,128,553
2007	9,290,911	9,309,619	9,344,399
2012	10,546,481	10,644,995	10,784,323
2017	11,738,740	12,031,780	12,368,283
2020	12,367,825	12,847,878	13,358,569
2022	12,740,143	13,377,602	14,031,092

## 12.3.2. Trends in the evolution of the urban and rural population

As at the 3<sup>rd</sup> census, 16.9% of the total population was found to be resident in the urban areas of the country. By the end of the projection period, it is estimated that this proportion shall be close to 29% irrespective of the variant of projections considered. At that time, the size of the urban population shall be about half the size

of the 2002 total population of the country. The evolution of the rural and urban populations according to the various variants of projections is shown on table 12.2.

Table 12.2 : Trends in the growth of the urban and rural populations of Rwanda according to various variants of projections: 2002-2022

Year	High Assumption	ons	Medium Assur	nptions	Low assumptions		
	Urban	Rural	Urban	Rural	Urban	Rural	
2002	1,372,604	6,755,949	1,372,604	6,755,949	1,372,604	6,755,949	
2007	1,723,224	7,567,690	1,726,613	7,583,001	1,732,935	7,611,468	
2012	2,276,421	8,270,056	2,297,079	8,347,908	2,326,346	8,457,979	
2017	2,932,652	8,806,089	3,003,864	9,027,914	3,085,562	9,282,721	
2020	3,363,493	9,004,335	3,490,569	9,357,310	3,625,534	9,733,033	
2022	3,661,735	9,078,408	3,840,141	9,537,459	4,022,687	10,008,401	

### 12.3.3. Trends in the evolution of the population in the provinces

Information on the likely future trends in the evolution of the population of the different provinces in the country is worthwhile for decentralized planning such as to enable decision makers at all levels to more judiciously plan for meeting future needs and to better track their efforts toward the meeting of the objectives set in the Vision 2020 document of the Government of Rwanda. The projections presented on table 12.3 are derived from the medium variant of the total population projections.

Table 12.3: Trends in the evolution of the population of Rwanda by province from 2002 to 2022

	2002	2007	2012	2017	2020	2022
Province/						
City						
RWANDA	8,128,553	9,309,619	10,644,995	12,031,780	12,847,878	13,377,602
Kigali City	603,049	763,181	1,021,452	1.343.741	1,566,918	1,728,066
Kigali Ngali	789,330	896,413	1,009,387	1.121.040	1,183,230	1,221,889
Gitarama	856,488	972,682	1,095,268	1.216.420	1,283,902	1,325,850
Butare	725,914	824,394	928,292	1.030.974	1,088,167	1,123,720
Gikongoro	489,729	556,167	626,261	695.534	734,119	758,104
Cyangugu	607,495	689,910	776,859	862.790	910,654	940,407
Kibuye	469,016	532,644	599,773	666.116	703,069	726,040
Gisenyi	864,377	981,641	1,105,357	1.227.625	1,295,728	1,338,062
Ruhengeri	891,498	1,012,441	1,140,039	1.266.143	1,336,383	1,380,046
Byumba	707,786	803,806	905,110	1.005.227	1,060,993	1,095,658
Umutara	421,623	478,822	539,167	598.807	632,026	652,676
Kibungo	702,248	797,517	898,028	997.362	1,052,691	1,087,085

Overall, the average population densities in Rwanda are expected to rise from 321 persons per km² to 529 per km² by the end of the projection period. However, this national average is concealing some wide regional disparities which require the urgent attention of decision-makers and development planners forthwith. In effect, while population densities in the City of Kigali are expected to triple from 1,924 to 5,514 persons./Km² and to increase in the Ruhengeri Province from 540 to 836

persons/Km<sup>2</sup>, those of the provinces of Umutara and Kibungo shall increase from 100 to 154 persons/Km<sup>2</sup> and from 236 to 365 persons/Km<sup>2</sup> respectively.

# 12.3.4. Trends in the evolution of the population of school children

On the basis of the observed overall primary schooling rate of 62.61% in 2002, the population of school-going age that is expected to be available for admission in the primary schools in the country shall have increased by about half of its size in 2002 by the year 2022. In effect, there were 971,471 children aged 7-13 years in the primary schools in Rwanda in 2002 and these shall increase to 1,443,521 children in 2022 if presenting rates of schooling are maintained. If they improve as it is stipulated in the various development agenda, then the size shall be much more than the figure indicated above with various ramifications in terms of more school, teachers, school equipment, didactic materials, etc... The situation varies widely when other levels of schooling are considered and shall certainly be worse if major improvements are made in the transition from the primary level to the secondary level and from this level to the higher levels of education.

Table 12.4 : Derived projections of the expected population of school children in Rwanda by sex : 2002-2022

Year	Primary (7-13 y	years)	Secondary (14	-19 years)	Higher (20-24 years)		
	Male	Female	Male	Female	Male	Female	
2002	473,226	498,245	51,641	51,313	2,781	2,065	
2007	500,545	522,065	52,133	51,398	3,897	2,684	
2012	561,441	591,179	53,824	52,486	3,992	2,708	
2017	641,393	682,966	59,261	57,816	4,094	2,753	
2020	684,866	727,790	64,173	63,350	4,283	2,875	
2022	706,266	749,529	67,712	67,390	4,478	3,014	

# 12.3.5. Trends in the evolution of the economically active population

At the time of the census in 2002, some 53.5% of the population of the country aged 6-64 years was economically active in the country. These amounted to 3,387,469 persons and are expected to have almost doubled by the end of the projection period if current participation rates remain constant. Details are shown on tableau 12.5.

Table 12.5 : Trends in the evolution of the economically active and employed population and in the number of jobs to be created during each intercensal period depending of the projection variant considered : 2002-2022

Year	Year High Assumptions			umptions	Low assumptions		
	Employed population	New jobs to be created	Employed population	New jobs to be created	Employed population	New jobs to be created	
2002	3,387,469		3,387,469		3,387,469		
2007	4,067,059	139,533	4,064,578	138,682	4,061,760	137,696	
2012	4,785,151	146,306	4,775,066	144,355	4,764,813	142,440	
2017	5,551,611	158,775	5,528,551	155,845	5,508,298	153,565	
2020	6,051,227	170,304	6,018,110	167,294	5,998,961	168,522	
2022	6,401,048	176,006	6,363,539	174,138	6,349,350	177,031	

## 12.3.6. Trends in the evolution of ordinary households

In 2002, there were 1,757,426 ordinary households counted in Rwanda. Should the household headship rates observed in 2002 be maintained constant (29.96% among males and 14.55% among females), the total volume of ordinary households in Rwanda shall have doubled in the next 20 years irrespective of the projection variant considered as shown on table 12.6.

Table 12.6: Trends in the evolution of the volume of ordinary households and in the number of new households to be created during each intercensal period by projection variant between 2002-2022

Year	High Assum	otions	Medium Ass	umptions	Low assumptions		
	Households	Households New		New	Households	New	
		Households		Households		Households	
2002	1.757.426		1.757.426		1.757.426	_	
2007	2.125.495	81.151	2.123.846	80.580	2.121.995	79.936	
2012	2.576.825	95.019	2.570.023	93.655	2.562.410	92.123	
2017	3.081.883	104.767	3.065.265	102.355	3.046.594	99.632	
2020	3.408.876	111.401	3.383.351	108.195	3.355.652	104.974	
2022	3.638.252	115.593	3.605.518	111.854	3.570.617	108.119	

# 12.4. Possible consequences of the future evolution of the population

## 12.4.1. The relatively high fertility and mortality levels

The present high fertility levels among couples in the country (with a TFR of 5.9 children per woman) are such that the country has one of the highest population densities in Subsaharan Africa and these are destined to be increasing inexorably in the future if strong measures are not taken to restrain population growth. The high mortality levels imply that survival probabilities are still low especially among the young children. As long as infant and child mortality levels remain high, fertility is likely to remain high.

### 12.4.2. The rapid rates of urbanization

The observed rate of urbanization during the past decade should merit the attention of the concerned authorities in the area of proper planning such as to endow all urban centers with the requisite infrastructure and services that befit an urban environment. This is the more serious in the case of the City of Kigali which alone hosts more than 45% of the total urban population of the whole country. However, such development should not be done at the expense of the rural areas where average densities are expected to be above 400 persons/Km² in 2022. Development planners need to lay emphasis on the improvement of the lot and living conditions of the rural population in such a way as to stem the waves of rural-urban migration which are often sparked off by unbalanced development policies in favour of urban areas.

### 12.4.3. The development of the country's human resources

With primary schooling rates of barely 62.7% the country is still very far away from attaining the projected *universal primary school attendance by the year 2015*!

Furthermore, a lot more efforts need to be deployed by the educational authorities and other development partners to increase the transition rate from the primary to the secondary levels of education in the country. While up to 90% of those who ever attended school leave school at the primary level, less than 10% proceed to the secondary level of education which imparts most of the life skills and the knowledge required for improving the much-needed human resource base of the economy.

# 12.4.4. Creation of jobs outside the agricultural sector of the economy

Given the high densities and the scarcity of agricultural land in the rural areas of the country, there is urgent need to seriously envisage the creation of more and more possibilities of off-farm employment for the excessive workforce that is available in the rural areas of the country and even in some of the urban areas. As more and more young persons of working age move urbanwards in search for employment, it is the responsibility of urban planners to device strategies for containing them and eventually providing them with employment opportunities.

# 12.4.5. Tackling the problem of underemployment and of the quality of the manpower

In Rwanda, the problem is not only that of finding jobs for the several new entrants into the job market during each intercensal period but also that of how to overcome the existing problem of underemployment that is so rife in the rural areas during certain periods of the year. The other problem is that of the quality of the available labour force. In effect, among the present labour force of the country, 1/3 has never been to school, more than 50% only reached the primary level and hence most of the jobs (90%) are in the primary sector of the economy where no specific intellectual skills are needed. Under these circumstances, the present labour force cannot be relied upon to modernize and diversify the economy of the country. For this to be possible, much more consistent effort shall have to be deployed both in the area of professional training and channeling of investments towards sectors of the economy outside the agricultural sector.