



CARICOM CAPACITY DEVELOPMENT PROGRAMME (CCDP)

2000 ROUND OF POPULATION AND HOUSING CENSUS SUB-PROJECT

NATIONAL CENSUS REPORT

GUYANA



**CARICOM CAPACITY DEVELOPMENT PROGRAMME
(CCDP)**

In collaboration with the

**CANADIAN INTERNATIONAL DEVELOPMENT AGENCY
(CIDA)**

**2000 ROUND OF POPULATION AND HOUSING CENSUS
DATA ANALYSIS SUB-PROJECT**

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FOREWORD

The Caribbean Community Council of Ministers, acting on the advice and recommendations of the Standing Committee of Caribbean Statisticians (SCCS), in February 2000, approved the use of a regionally coordinated approach for the 2000 Round of Population and Housing Censuses. The strategy included an activity on the **Analysis and Dissemination of Census Data and Results**, which comprised the preparation of National Census Reports (NCRs) and Regional Special Topic Monographs (RSTMs).

Fourteen Member States and four Associate Members participated in the programme. The participation of these countries in the Regional Census programme was in recognition of the value and economy of regional co-operation and coordination in executing the Censuses and for the production of comparable, high quality socio-economic data, useful in planning, and improving the quality of life and in achieving overall progress of the peoples of the Region.

The NCRs were undertaken by writers from the Region with experience in Demography, with two reviewers from the University of the West Indies (UWI) ensuring the soundness of the quality of the publications. On the basis of the review and comments by the respective National Statistical Offices and consultation with the writers and reviewers, the Reports were finalised by the CARICOM Secretariat.

The first and final drafts of this publication, “**2000 Round of Population and Housing Census of the Caribbean Community: National Census Report, Guyana**” were prepared by Mr. Sonkarley Bealie of Guyana and reviewed by Professor Chukwudum Uche of UWI, Mona, Jamaica. The tables for the Report were generated by the staff of the Bureau of Statistics, Guyana as well as by the staff of the CARICOM Secretariat, specifically with respect to the RSTMs. The final draft was extensively reviewed by the Secretariat, including technical and language review and general formatting.

The analysis of the Census was funded by the Canadian International Development Agency (CIDA) through the CARICOM Capacity Development Programme (CCDP). **The CCDP was designed as a strategic response to key trends and emerging priorities in the CARICOM environment with the objective of promoting the economic and social development of CARICOM through the deepening of the regional integration process. The overall aim of the CCDP was the strengthening of the institutional capacity of CARICOM to provide leadership in the regional integration process, and the enhancing of the implementation capacity of the CARICOM Secretariat to achieve clear results in core programme areas.**

Specifically, the outputs of the Census Statistics Sub-Project under the CCDP were to lead to improved development planning in Member Countries and in the Region through the use of the census data and information. The deliverables anticipated are eighteen (18) National Census Reports; five (5) Regional Special Topic Monographs; a volume of Basic Tables; training of personnel in demographic analysis through a seven-week workshop facilitated by UWI; and the establishment of an online facility to enable access to census data by users for analysis, research, policy formulation and decision-making.

National Census Report 2002, Guyana

The Census Data Analysis project was aimed at filling the gap existing in the Region and specifically within the national statistical systems in the area of demographic and population analysis, thereby enabling its use in policy and decision-making. Statisticians are in short supply in the Region and the area of demography is even more severely affected. The Census Data Analysis project provided a *common framework* for enabling comparability of the demographic transition and population characteristics across Member States based on the elements outlined in the content of the National Census Report. Additionally the reports are able to highlight trends in the demographic transition of the population of Member Countries from youthful to ageing populations; to make significant linkages with respect to education, training and economic activity; or economic activity with gender and fertility. The process of preparing the reports also allowed for quality checks on data, with the support of the United Nations Population Fund (UNFPA) and the United Nations Economic Commission for Latin American and the Caribbean (UNECLAC).

A major challenge that persists is that of having clean data sets for analysis. To mitigate these data challenges, a series of four training courses is being undertaken to train personnel in the Region, with the first one funded out of the CCDP and the remaining three from a multi-programme technical assistance project, with funds received from the Caribbean Development Bank (CDB). In addition, a short course for senior officials from statistical officers was also undertaken with CDB funding.

It is hoped that these Reports will benefit the countries through providing the analysis with regard to their age, sex, education, occupation, economic activity and other critical characteristics that are important to aid the formulation of policy and decision-making, both public and private, such as government officials, researchers, academics, members of the business community and civil society. Furthermore, the experience gained, together with the efforts to strengthen capacity, will equip the Region to analyse the results of the 2010 Census.

The CARICOM Secretariat takes this opportunity to thank all persons and organisations who have been associated with this Statistics project.

**EDWIN W. CARRINGTON
SECRETARY-GENERAL
CARIBBEAN COMMUNITY**

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Appreciation is also expressed to Mr. Lennox Benjamin, Chief Statistician of the Bureau of Statistics, Guyana and to the other Staff of the NSO who provided invaluable support in the preparation of this report. The CARICOM Secretariat also wishes to acknowledge the tremendous support provided by a number of persons including government officials

The support of the United Nations Population Fund (UNFPA) in contributing to the printing of the publication is highly appreciated.

The CARICOM Secretariat acknowledges the hard work and commitment displayed by the Staff of the Regional Statistics, Programme, past and present as well as by other staff of the Secretariat, throughout the preparation of this publication.

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ACRONYMS

CARICOM	Caribbean Community
CDB	Caribbean Development Bank
CEDAW	Convention on the Elimination of All Forms of Violence against Women
CSME	CARICOM Single Market and Economy
CXC	Caribbean Examinations Council
EC	Eastern Caribbean
ECLAC	Economic Commission for Latin America and the Caribbean
GCE 'O' Level	General Certificate of Education Ordinary level (Examination)
GCE 'A' Level	General Certificate of Education Advanced level (Examination)
GDP	Gross Domestic Product
HIES	Household Income and Expenditure Survey
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
NGO	Non-Governmental Organization
OECS	Organization of Eastern Caribbean States
RCCC	Regional Census Coordinating Committee
SRH	Sexual and Reproductive Health
SWAM	Singulate Mean Age at First Marriage
UWI	University of the West Indies

NOTES

1. Guyana is divided into ten Administrative regions.¹ Each Region is administered by a Regional Democratic Council (RDC) which is headed by a Chairman. In addition there are a number of Neighbourhood Democratic Councils (NDC) within each Region; these operate at the local or village council level.

Region	Location	Description
Region 1 Barima/ Waini	Located in the North-Western part of Guyana bounded by the Atlantic Ocean and Venezuela	
Region 2 Pomeroon/Supenaam	Is bordered by the Pomeroon River in the north-west and the Supenaam River in the southwest.	Anna Regina, one of the six towns in Guyana is found in this region.
Region 3 Essequibo Islands/ West Demerara	Bordered in the northern section (North West, North , North East)by the three main islands of the Essequibo River and the western bank of the Demerara River.	This Region is made up of the islands in the Essequibo River namely Leguan, Wakenaam and
Region 4 Demerara/Mahaica	Bordered by Region 3,5 and 10 (Demerara and Mahaica Rivers) and the Atlantic Ocean in the North	The population is concentrated along the coastland, particularly in Georgetown, the capital city, which has a population of 56,095.
Region 5 Mahaica/Berbice	Found be found between two rivers, Mahaica and Berbice, the Atlantic Ocean and the northern portion of Region 10 It is situated on the right bank of the Mahaica River and extends east of this river to the west bank of the Berbice River.	A large part of the region is low coastal plain. Further inland lie the Intermediate Savannahs and hilly sand and clay region. Rice farming is the main economic activity of this region, followed by sugar and coconut farming, and beef and dairy cattle ranching.
Region 6 Berbice/Corentyne	Found between the Corentyne and Berbice Rivers. The Atlantic Ocean lies to the North, the Sierra Akari Mountain range as its border. Suriname lies to the East.	The only Region with three towns: New Amsterdam, Rose Hall and Corriverton..This Region is an important rice and sugar-producing and cattle-rearing area.

¹ http://www.statisticsguyana.gov.gy/pubs/List_of_NDCs.pdf

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Region	Location	Description
Region 7 Cuyuni/ Mazaruni	Situated in the Western section of Guyana and fits between Region 1 to the North and Region 8 to the South. It has Venezuela as its border on the east and the Essequibo river on its western side.	
Region 8 Potaro/ Siparuni	North Kuribrong River, to the south are the Ireng and Echilabar Rivers to the east is the Essequibo river and to the west the upper course of the Ireng river.	This region is home to the famous Kaieteur and Orinduik Falls
Region 9 Upper Takatu/ Upper Essequibo	Largest region in Guyana. It is bordered by Brazil in the South and West. The Eastern boundary is formed by the drainage divide between the Essequibo and the Berbice Rivers and the Essequibo and New Rivers respectively.	The Kanuku and Kamoia highlands and the vast Rupununi savannahs make up the Upper Takutu-Upper Essequibo region. The forested Kanuku Mountains divide this Region in two.
Region 10 Upper Demerara/ Berbice	Bordered to the North-West by Region 7, North East and East Region 3,4,5 and 6 respectively and to the South West by Region 8.	The inland region of Upper Demerara-Upper Berbice contains the largest portion of the hilly sand and clay area. It is bounded on the West by the Essequibo River, Guyana's principal bauxite deposits are found in the White Sands area

<http://www.gecom.org.gy/ole/District10.pdf>

INTRODUCTION

The 2002 Population and Housing Census was the sixth census of a *de facto* count of the population of Guyana since the first post-war census of 1946. The conduct of each of these censuses had brought its own challenges as societal norms and values and country-specific socio-economic conditions change.

The main objectives of the Census were as follows:

- 1) to determine the present size and the distribution of the population;
- 2) to review and document the present status of the population with regard to socio-economic characteristics;
- 3) to indicate any change in the pattern of the population since the 1991 census;
- 4) to evaluate any qualitative change in selected socio-economic characteristics of the population;
- 5) to present general appraisals of some selected living and housing conditions in the country; and
- 6) to provide a comprehensive pool of information for policy-makers to be used as a tool for immediate and future planning purposes.

In keeping with the above objectives, a preliminary analysis, based on the data from the visitation record was released in March 2004, and in August 2005, the Summary Results taking the publication programme a step further was also released and can be accessed on “The Bureau of Statistics Website” at <http://www.statisticsguyana.gov.gy>.

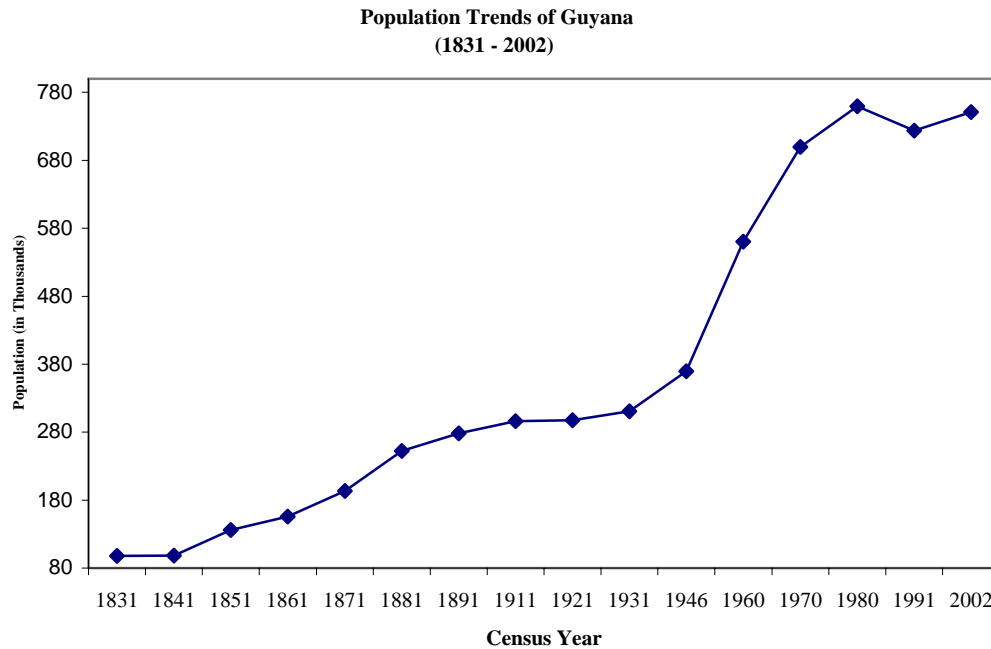
This report is a detailed expansive “Regional Analysis”, coordinated by the Caribbean Community (CARICOM) Secretariat and covers thirteen chapters, such as, national population trends: size, growth and distribution, population composition, population redistribution and internal migration, mortality and fertility patterns, education and training, economic activity, housing and living arrangements, disability and health, marriage, divorce and cohabitations, children and youths, gender and development issues and the elderly population.

EXECUTIVE SUMMARY

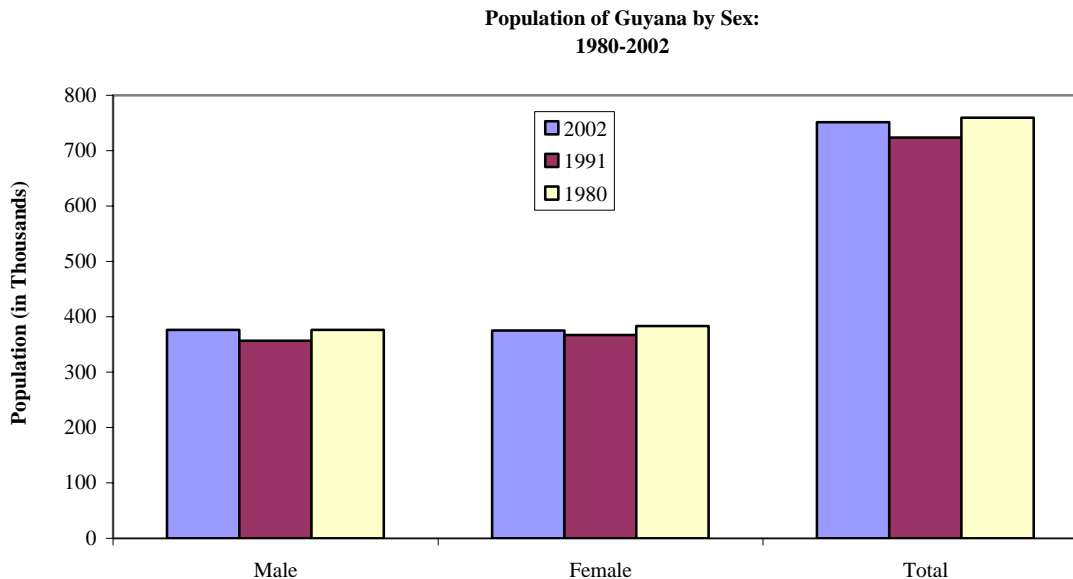
National Population Trends

Population Size: The 2002 Population and Housing Census shows that the population of Guyana has risen to 751,223 persons – higher than the 1991 census by a little more than 27,500 persons. This new count is in keeping with trends of population change for Guyana, which has shown an increase at each census, except for the 1991 census; when – for the first time in history – the count was lower than that of the previous census.

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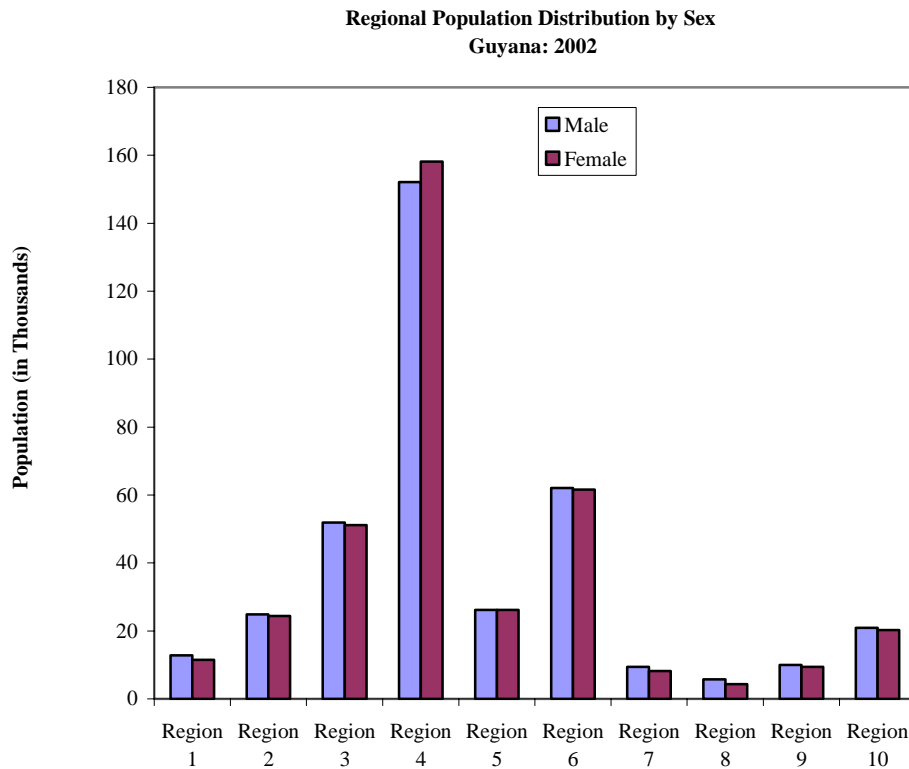


The population decline at census 1991 appeared consistent with the peak emigration flows recorded during the decade of the 1980s. The average annual rate of growth of the population has also reversed from its negative trend of the 1980s (seen in 1991), but the census survival ratios between 1980 and 2002 show a heavy influence of emigration on the distribution.



Population Distribution and Growth: Males outnumber females by a small percent (0.1), and the population is concentrated in Regions 4 and 6, with 41.3 percent located in Region 4. Region 3 is the third most populous with almost 14 percent of the population.

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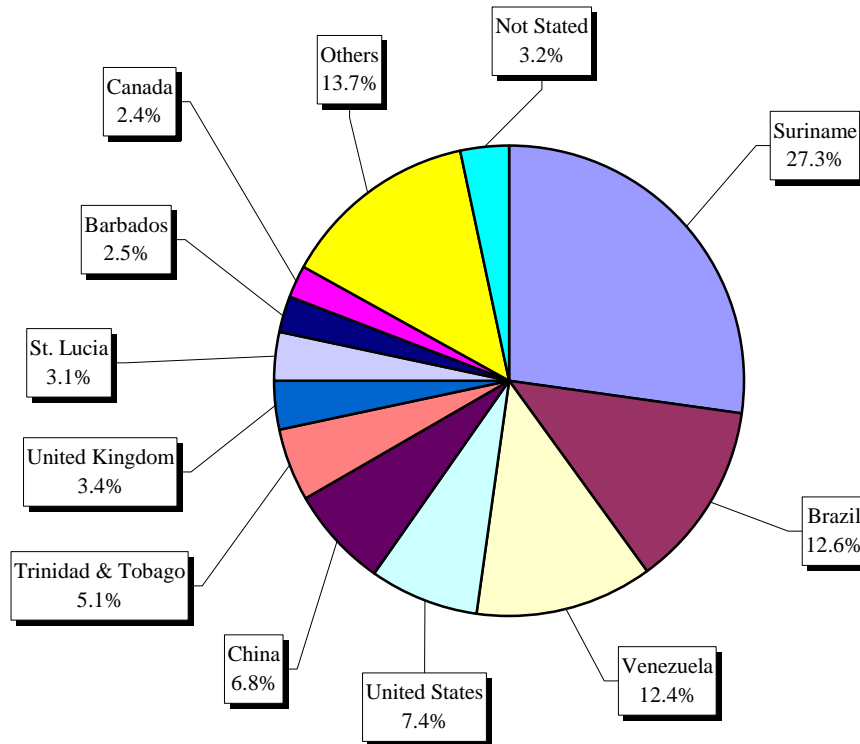


Regional growth rates are highest for Region 8 (5.2 percent per annum), followed by Regions 1 and 9 with rates of 2.4 and 2.2 percent, respectively. The other regions have lower rates of growth, although Regions 7 and 2 are the only areas that have rates above 1 percent per annum. The mining and quarrying activities in Region 8 seem to have attracted migrants to that region and to a lesser extent, Regions 9 and 1. Region 1 also has a vibrant agriculture sector and there is now road communication from the capital to Regions 8 and 9 via Region 10 that is probably promoting growth in those regions. The only region with negative growth has been Region 6 with a -1.3 average annual rate of decline in its population.

Foreign-Born Population: The growth of regional populations, particularly that of Regions 1 and 9, is also indicative of much of the increase seen in the foreign-born population. The majority of foreign-born are from neighboring countries; with Suriname contributing the highest proportion of the foreign-born population (27.3 percent), followed by Brazil with 12.6 percent and Venezuela with 12.4 percent.

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Foreign-Born Population by Country of Birth
Guyana: 2002



Population Composition

Nationality background or descent, ethnic and religious compositions introduce differentials that could be significant to demographic processes. These sub-groups are therefore identified to facilitate further research and analysis.

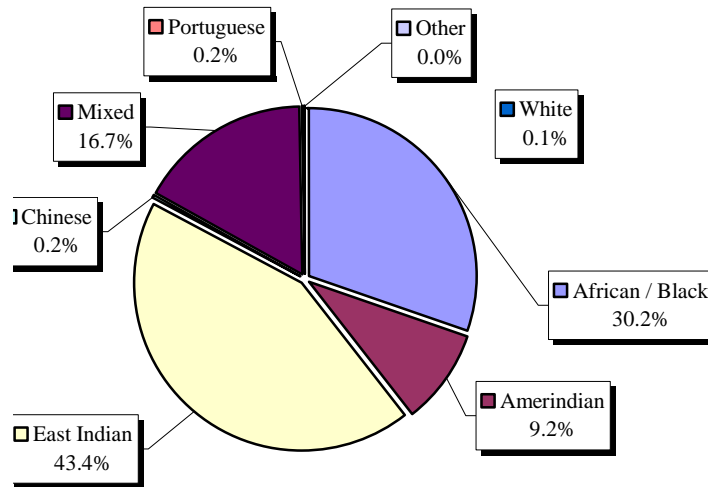
Members of the population are identified by their ethnicity which is determined by the self-description/identification of each person. Modern practices in some countries attempt a determination of ethnicity through a correlation of self-identification, spoken language and mother tongue, additional considerations which are irrelevant in Guyana's context.

Nationality Background: The distribution of the population by ethnicity shows the highest proportions are those persons of East Indian and African heritage – 43 and 30 percent respectively. Amerindians are next, comprising approximately 9 percent of the population and the others are less than 1 percent. Of note, however, has been the growth of a population of

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persons of 'Mixed' heritage. These persons could be any combination of the main nationality backgrounds found in the country, and they are larger than the Amerindian group comprising 17 percent of the population.

Population Distribution by Nationality Background/Ethnicity
Guyana: 2002

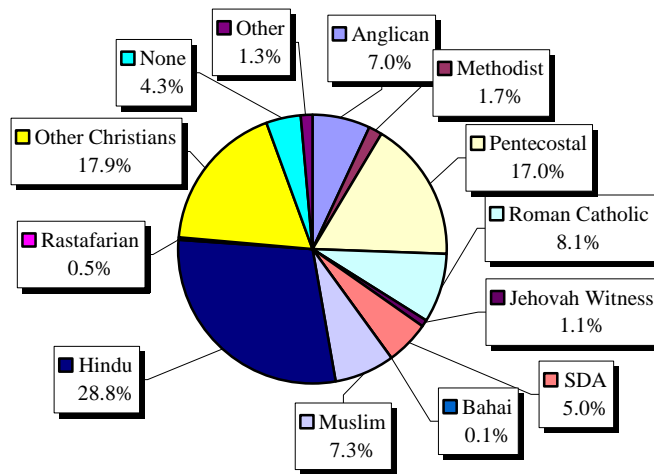


The distribution of the various groups has been examined and those of African descent are located in Regions 3, 4, 6 and 10 and to a lesser extent in Region 5. Amerindians are found in Regions 1, 7, 8 and 9 and to a lesser extent in Regions 2 and 4. This group has showed significant movement from their traditional areas of residence. Persons of East Indian descent can be found living mainly in Regions 3, 4 and 6 and to a lesser extent in Regions 2 and 5.

Religious Affiliation: The population composition by religious affiliation has also changed somewhat. The Pentecostals (17 percent) are now in the majority of all 'Christian' groups, and they are followed by the Hindus who are nearly one-third of the population. Other religions that have grown and are now identified as separate categories are the Jehovah's Witnesses, Seventh-Day Adventists and Rastafarians. Declines are seen largely in the Anglican and Roman Catholic bodies, which now attract 7 and 8 percent of the population respectively, and to a lesser extent the Methodists with affiliation from 2 percent of the population.

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Distribution of Population by Religious Affiliation
Guyana: 2002



Age-Sex Distribution: The age-sex distribution of the population of Guyana shows that it is still in the expansive phase of the demographic transition,² and this means that it is still a growing population. Nevertheless, when the 2002 distribution is compared with that of 1980, there are signs that the population is beginning to age.

The age-sex distribution also shows that the 0-4 age group is smaller than the 5-9 age group, suggesting a decline in the number of births. It must be noted, nevertheless, that the same pattern has been displayed by the age distribution of the 1991 census.

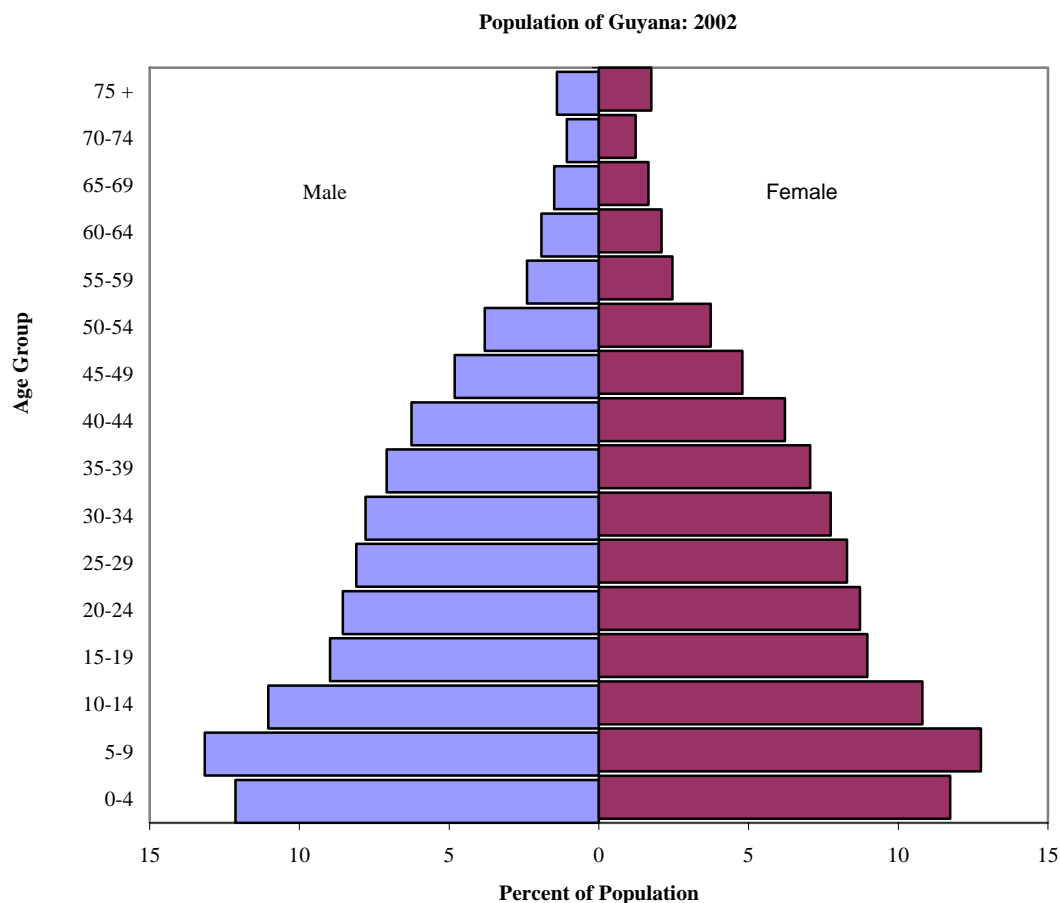
Regional Age Structures: It has been interesting to compare the national age structure of the population with that of some of the regions. These comparisons show the migration patterns of young women (particularly from Regions 1, 8 and 9) and influxes of men into Regions 7 and 8.

Age Dependency: Dependency ratios have fallen from 1980, but like other aspects of the population, have declined in 1991. The population of those not in working age groups (0-14 and 65+) is less than the working population. Age dependency has moved from 81 in 1980 to 67 in 2002. The *median age*³ of the population has also increased to 22.9 years from 18.6 in 1980 and 21.8 in 1991. These movements also support the fact that the population is ageing gradually.

² There are three phases – expansive, constrictive and stationary.

³ The *median age* divides the population into two equal groups. One-half of the population will be above the median age and one-half below that age.

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Population Redistribution

Population Density: The population density is low when the national average is considered, but diverse when considered for the regions and for rural-urban areas. Average density for the country is almost 4 persons per square kilometer. The pattern for the regions is different. Regions 7, 8 and 9 – though showing some of the highest growth rates, are still the most sparsely populated, with density levels of less than one person per square kilometer. These levels contrast with that of Region 4 which has approximately 139 persons per square kilometer.

Internal Migration: The lifetime migrants, commonly referred to as inter-regional migration for Guyana, numbered 103,191 in 2002, and were 14.2 percent of the native-born population. Also, the population redistribution due to lifetime migration streams amounted to 31,405 or 4.3 percent of the total native-born population. The migration stream was dominated by women; showing an inter-regional migration rate⁴ of 15.1 percent of the native-born female population compared to 13.2 percent for males. The corresponding population redistribution rates⁵ due to lifetime migration for females and males were 4.8 and 3.8 percent, respectively. The migratory

⁴ **Inter-regional migration rate** is equal to the total native-born population minus the sum of non-migrants across the regions divided by the same native-born population multiplied by 100.

⁵ **Population redistribution rate** is the sum of net lifetime gains (or sum of net lifetime losses) due to lifetime migration divided by the native-born population multiplied by 100.

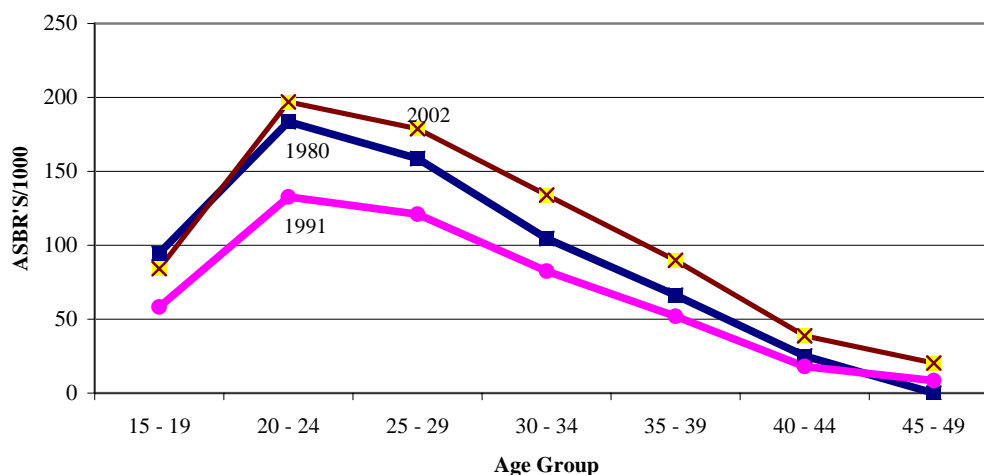
exchanges at all levels confirmed that Regions 4, 8 and 10 were migration destination areas whereas the rest were mainly sending regions.

Mortality and Fertility Pattern

Infant and Childhood Mortality: The estimates of infant and under-five mortality rates for Guyana in 2002, using Brass P/F Ratio⁶ were 54 and 52 per 1,000 live births respectively, while that of child mortality was 49 per 1,000 children surviving to the first birthday. Infant mortality ranges from as low as 37 deaths per 1,000 live births in Region 3 to as high as 74 in Region 5, while early childhood deaths were high in Regions 1 and 8, 72 and 62 deaths per 1,000 children surviving to the fifth birthday, compared to 34 child deaths per 1,000 in Region 3.

Fertility Pattern: A Guyanese woman would have on average, 3.7 children during her reproductive lifespan. The fertility rate had slightly increased from the 1980 level which was 3.2 children per woman. An Education campaign among teenage girls had reduced their contribution to fertility from 17.6 percent in 1980 to 12.6 percent in 2002. On average, 100 Guyanese women will replace⁸ themselves, plus an additional 82 daughters. This reproductive rate is high in Regions 1, 9, 8 and 7, with number of baby-girls born estimated as 472, 393, 388 and 294 per every 100 childbearing women, respectively passing through the childbearing age.

Fig.4.1: Age Specific Fertility Rates, Guyana: 1980 - 2002



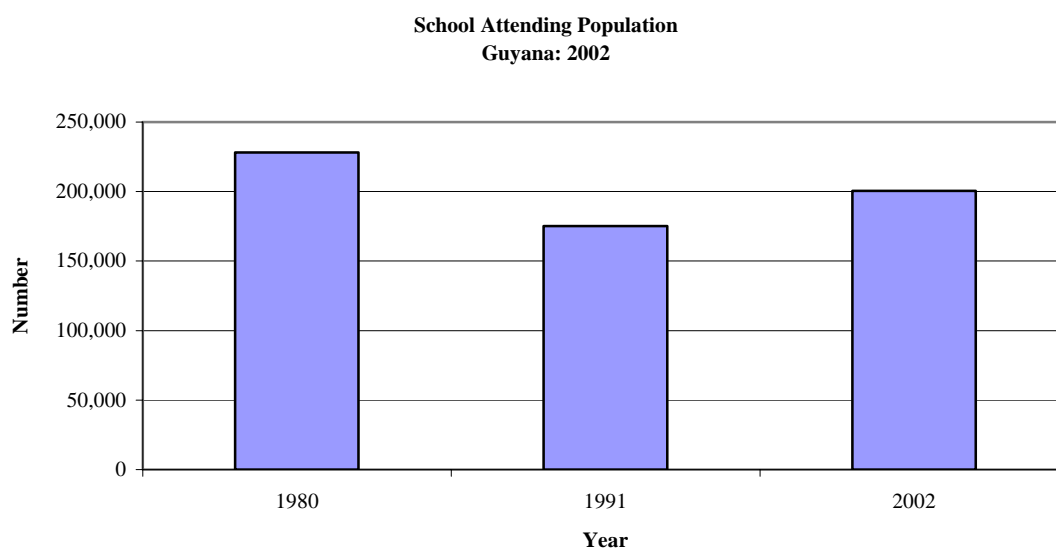
⁶ The Brass P/F Ratio is a method used to estimate the level and pattern of both fertility and mortality from limited demographic data, formulated by W. Brass. Further explanation see page 85 Chapter 4, Methods and Materials in Demography, S. Siegel. United Nations (1983) Manual X Indirect Techniques for Demographic Estimation, UN Publication, Population studies, No. 81 (P. 73)

http://www.un.org/esa/population/publications/Manual_X/Manual_X_Chapter_3.pdf

⁸**Replacement level fertility** refers to number of baby-girls that the population will have to sustain its growth. A rate of one is exact replacement, above unity indicates that the population is more than replacing itself, and a rate below unity means the population is not replacing itself.

Education and Training

School Attendance: Approximately, two-thirds of the school-age population currently attends school, up from 59 percent and 55 percent in 1980 and 1991 respectively. The highest percentages of persons of school age who actually attend school are in the 5-9 and 10-14 age-groups. A little over 90 percent of children in these age-groups attend school, which means that Guyana has surpassed the Millennium Development Goal (MDG) target for primary school enrolment. Nevertheless, attainment of the ‘MDG’ targets for enrolment is not, by itself, an indicator of the quality of education and further research is required in this area.



Moving into the late secondary school/post-secondary school level, only 30 percent of the persons in the 15-19 age-group attend school, either full-time or part-time and this percentage is even less (4 percent) in the 20-24 age-groups. This means that there is a large ‘funnel-effect’ in education, with large percentages enrolled in early childhood and primary education, fewer completing secondary school and a very small percentage of persons attaining university or technical school levels.

Economic Activity

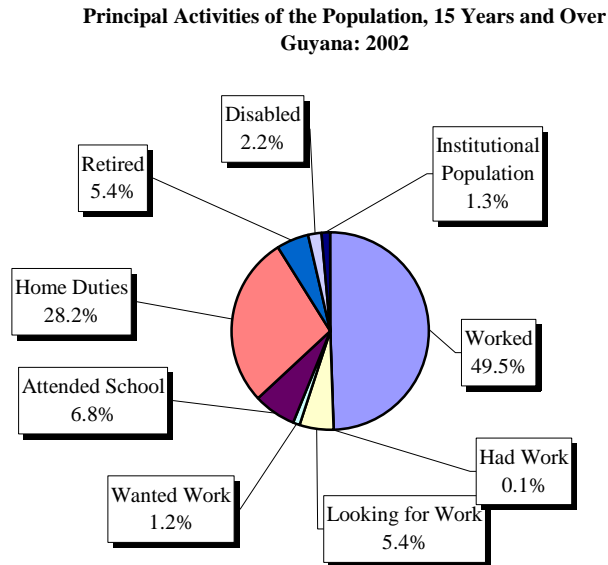
Working-Age Population: The working-age population, or persons 15 years and over contains the country’s human resources who are in a position to engage in productive activity. For a variety of reasons however, not all these persons can work. Those who are not in a position to, or are not seeking work are referred to as the economically inactive, while the others who work and available for work are referred to as the economically active.

Those not able to participate in productive work⁹ are usually further classified according to their activity, i.e., whether retired, performing home duties, unable to work – because of disability or are attending school. Institutional populations tend to be considered in this group as some sections of the institutional population, for example, the prisoners, are also not able to work.

⁹ Productive work for this purpose is defined in the System of National Accounts. It has been widely accepted that performance of home duties particularly contributes to the productivity of a country.

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However, other members of the institutional population, for instance, the soldiers in barracks are productive.



The performance of home duties is usually a category that warrants particular interest in that many persons in this 'sector' usually keep small gardens, prepare sweets, etc. for sale. Income or produce from these activities normally supplement family income earned outside the home. Ideally, these persons should be included in the economically active population, but they do not describe themselves as such. If they did, then the numbers who participate in the labor force (the labor force participation rate) would increase.

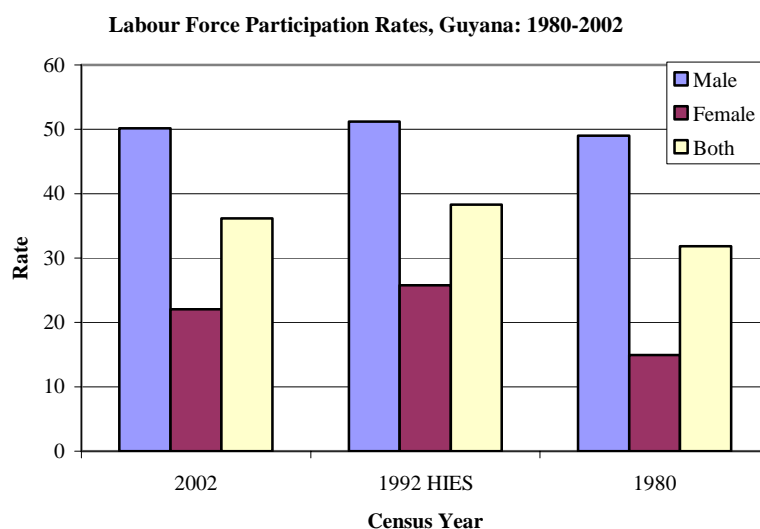
Labour Force Participation: The working-age population has grown to two-thirds of the total population but approximately 44 percent of these persons are not economically active. The remainder (approximately 56 percent) is in the work-force and is divided into those who actually work and those who are looking for a job or would like a job.

On average, 88 percent of all persons of the working population who would like to work are actually working. This is an average however, as 90 percent of the males who want to work actually do work, compared with 85 percent of the females. Persons who have no jobs but who would like to work comprise approximately 12 percent of the population.

Once again, the average unemployment levels mask the male-female differential, in that 15 percent of females are out of work, compared with 10 percent of males. The 2002 average unemployment level compares with a level of 16.8 percent in 1980 and 11.7 percent at the time of the 1992 Household Income and Expenditure Survey.¹⁰

¹⁰ Survey estimates are usually considered more accurate than those obtained by the census for certain variables. Since there was a survey near to the time of the 1991 census, these estimates of unemployment are used instead of the census estimates.

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Employment by Industries: The agricultural sector provided 22 percent of the employment in 2002, a decline by 6 percentage points of the existing level in 1991, which was approximately 28 percent of the total employment. Those who shifted went to “Service-sector”- 46.4 percent in 1991 increasing to 53.1 percent in 2002. A significant contribution to the size and growth of the ‘Service-sector’ came from commerce, particularly “the wholesale and retail trade, repair of vehicles and motor cycles, and household goods” industry group. The manufacturing-sector also contributed a large proportion to employment. It was 24 percent in 2002, having slightly declined by 2 percentage points when compared to 26 percent in 1991. The decline in the share of agricultural workers has been used as a good indicator of economic development, signifying in many ways that the economy was expanding, but whether the growth was sufficient to alleviate poverty and hunger in Guyana could be an interest of study.

Occupation and Employment Status: A large volume of the workers are paid employees followed by own account workers, with less than 4 percent engaged in unpaid family worker and employer group respectively. Also, 28.4 percent of the employees had elementary occupations, and in ranking order, craft and related trade workers service (16.3 percent), shop and market sale workers (14.8 percent), while the remaining occupations employed less than 10 percent of the labour force. The overwhelming proportion (21.6 percent) of the women’s employment was in “service, shop and market sale professions”, while “clerical” and “technical and associate” professions engaged equal proportions of women (about 16 percent).

Housing and Living Arrangement

Households: The number of households has increased to approximately 183,000 from 1991 to 2002 – an 18.5 percent increment. This means that slightly more than 2000 new households were established per year in the intercensal period. Approximately two-fifths of the households are in Region 4, just under one-fifth in Region 6 and nearly 15 percent in Region 3. It is not possible to tell where the new households are being established, but it is possible that the trend seen with

women apparently moving from rural regions means that women perhaps are heading those new households in other regions – most likely Region 4 and urban areas of those regions.

Household Headship: Nearly three-quarters of all households are headed by males, and this situation pervades the regions. Household headship is usually an indication of how wealth is distributed within the household. The preponderance of male heads probably means that men control the majority of resources within households. There is a high probability therefore that many women – though living in non-poor households - could be poor as they are denied access to resources of the household.

Overcrowding: Overcrowding within households is usually an indicator of poverty and the corollary is also true. Average household size also does not give an indication of sleeping arrangements and privacy. Average household size for 2002 is 4.1 down from 4.7 in 1991. The regional distribution of average household size is similar to the national average, except for Regions 1, 7, 8 and 9 where household size averages 5 or more persons per household (with Region 1 averaging almost 6 persons). Region 6 has slightly smaller household sizes (3.9 persons).

Water and Sanitation: The percentage of households with no toilet facilities at all has declined to 2 percent from 3.1 percent in 1991. The modernization, however, has come through the increased use of W.C linked to a Cesspit or Septic tank. The reason is that the sewer system is expensive to install and maintain and given the size of the population, it is easier for septic tanks or cesspits to be installed. Two-thirds of the households still use pit latrines, however, and nearly 2 percent still do not have any toilet facilities at all.

In terms of the distribution of households according to their access to improved water (piped into house or yard, from bore hole, spring or rainwater), nearly 80 percent of households have improved water, as defined by the MDG target for water.

Ownership Status of Dwelling: Owner-occupied dwellings constituted a significant proportion (63.8 percent) of the dwellings, and in absolute terms, increased by 19.6 percent. The number of rented dwellings, both government and private individual rented premises, dropped by 21.6 percent. The decline has been compensated for mainly by the rise in the share of rent-free households either residing on family or inherited properties. Six in every ten households in Guyana used wood to construct the outer wall of their dwellings, 90 percent used sheet metal, and about one-third of the dwellings were constructed more than thirty years ago, or before 1970.

The **undivided private** housing currently comprises 71 percent of the dwelling stock in the country- down from 74 percent in 1991 and followed by **part of private dwelling** (14 percent).

Disability and Health

Number of Disabled Persons: In 2002, there were 48,419 citizens living with some form of disability, about 6.4 percent of the total population in Guyana. Females outnumbered males - with 51.1 percent compared to 48.8 percent disabled males. Visual impairment affected about one third of the total disabled persons, followed in ranking order, by those suffering from

mobility impairment (16.4 percent), body movement (10.2 percent), hearing (9.1 percent), and mental impairment (8.3 percent). Also, there were 5,842 children under the age of 15 years living with some form of disability.

About two-fifths of the disabled persons in Guyana acquired their disability from accident, 26 percent didn't state how disability was acquired, 18 percent acquired it from birth, and 15 percent was caused by diseases.

Working Disabled Persons: Disabled people do not have the same opportunities to participate in the labour force. Of the 42,577 disabled persons in working age groups, 22 percent were in the labour force, and 86 percent who sought for work was employed, 14 percent was unemployed. In comparison, 88 percent was employed and 12 percent unemployed among the non-disabled persons.

Educational Enrolment: Only 7.4 percent (3,483) of the people with disabilities currently attended school either full time or part time, and there was no gender disparity in the enrolment rate. Despite their impairments, a large percentage of the disabled citizens had achieved some form of higher education, indicating that perhaps many of them attained their qualification prior to the unfortunate incident.

Marriage, Divorce and Cohabitation

Proportion Ever Married: In 2002, about 27.3 percent of the total marriageable population in Guyana had never married, 57.5 percent were currently married - either legally or living in common-law relationship, while 13.2 percent were either divorced, separated, widowed, or formerly common law, meaning, no longer living together.

Singulate Mean Age: The Singulate Mean Age at first Marriage (SMAM)¹¹ was estimated as 21.4 for females and 26.5 years for males, respectively in 2002 at the national level, and varied significantly at the regional level with Regions 1, 8 and 9 exhibiting the lowest for females. The lower SMAM for women in these regions requires special investigation as status and development of women are, in most instances, tied to the tradition and custom under which women take their bridegrooms.

¹¹ SMAM is the mean age at first marriage among those who ever marry (or, in practice, among those who marry by some predefined age-limit, and computed from the proportions that are never married based on the assumption that no first marriage occurs after age 50 or before age 15 years.

Children and Youth

There were 382,648 dependent children and youths in 2002, and of note, children below 15 years constituted 69 percent of this number. About 28.5 and 71.5 percent of the dependent children and youths resided in female-headed and male-headed households respectively. The proportion of dependents decreased with the age of children in male-headed households, and inversely increased in the female-headed households.

The economic dependency ratio for Guyana in 2002 was 187 dependents per 100 working persons, and dependent children contributed more than half to this ratio. The relationship between household headship either by sex, educational attainment and occupational status to enrolment of dependent children and youths in school did not show any wide margin. In each of these cross-classifications, enrolment of children in female-headed households was slightly higher compared to households headed by males.

School attendance and highest education reached are reported to exert strong influence on labour force participation of youths. School attendance rate decreased with the age of youths while labour force participation rate inversely increased with the age of youths. As such, because young school graduates seem to have a waiting period before finding their first job due to lack of work-experience, their unemployment rate was high, particularly for the teen age group.

Gender and Development Issues

Gauging labour force participation as an indicator of gender disparities is questionable, because most work done by women is linked to “home duties” which are not counted in economic terms. This was the case when major activities for Guyanese women who were not in the labour force were reported in “home duties”, with 50.7 percent of women listing this as their main activity in 2002 compared to 34.1 percent in labour force; and in contrast, 78.5 percent of the men in labour force compared to only 4.9 percent in home duties.

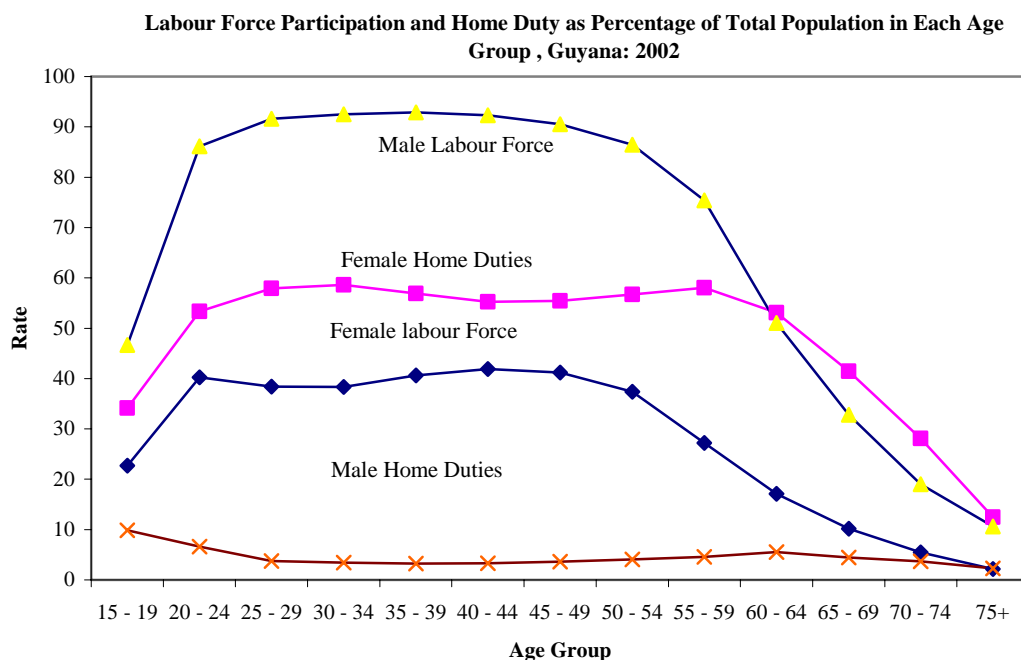
These working women were mainly in three industries, namely: a) wholesale and retail trade and related industry, b) education, and c) manufacturing industry. Also, 68.1 and 46.4 percent of the women reported as “professionals” and “technical and associate professionals” respectively were employed in “education” and “health and social work” industries; working mainly as teachers and nurses. In all, a total of 22.7 percent of women employed in the categories of “legislators, senior officials and managers”, “professionals”, “technicians and associate professionals” which had previously been male-dominated occupations was a giant step forward for women in competing with men.

Another indicator used to study the gender disparities was household headship; which revealed that female-headed households constituted 28.5 percent in 1991, and increased slightly by 0.6 percentage point in 2002. Internal migration and the dissolution of marriages were suspected the as main reasons for the rise in female-headed households.

This increase presented two postulations; firstly, it seems to offer women the opportunity to excel in decision-making in the home, and secondly, in Guyana, where in most married couple households, the male is automatically the head; the increase should be interpreted more

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cautiously as it may be that these single-parent women could be the subject of feminization of poverty.



The Elderly

The proportion of citizens 65 years and over had increased from 3.6 percent in 1970, to 4.2 percent in 2002. Females outnumbered males with 100 elderly females to 84 males, and the longevity of females was suspected to have caused this gap. There were 8 elderly persons to every 100 children in 1970, rising to 12 in 2002, while at the same time, about 7 elderly persons seemed to have depended on every 100 persons aged 15-64 years in 2002, thus accounting for an annual growth rate of elderly by 0.82 percent during the entire period.

About 65 percent of the elderly persons served as heads of households, the rest were dependents, and more than 80 percent resided in owner-occupied dwelling units. This finding indicated that the earnings during the prime life of the elderly persons were invested into providing homes, but the proportion without owner-occupied dwellings could be elderly living below minimum standards, and it would be necessary to design policies to alleviate their impoverished conditions.

A large segment (66 percent) of the elderly income receipts in 2002 came from old-age retirement schemes, with only 1.4 percent reported to have supported themselves through cumulated saving and interests. This reflection signifies that the pension industry would be required to support a greater number of pensioners for a longer period; thus, it is expected to increase pressure on the provision of pension funds.

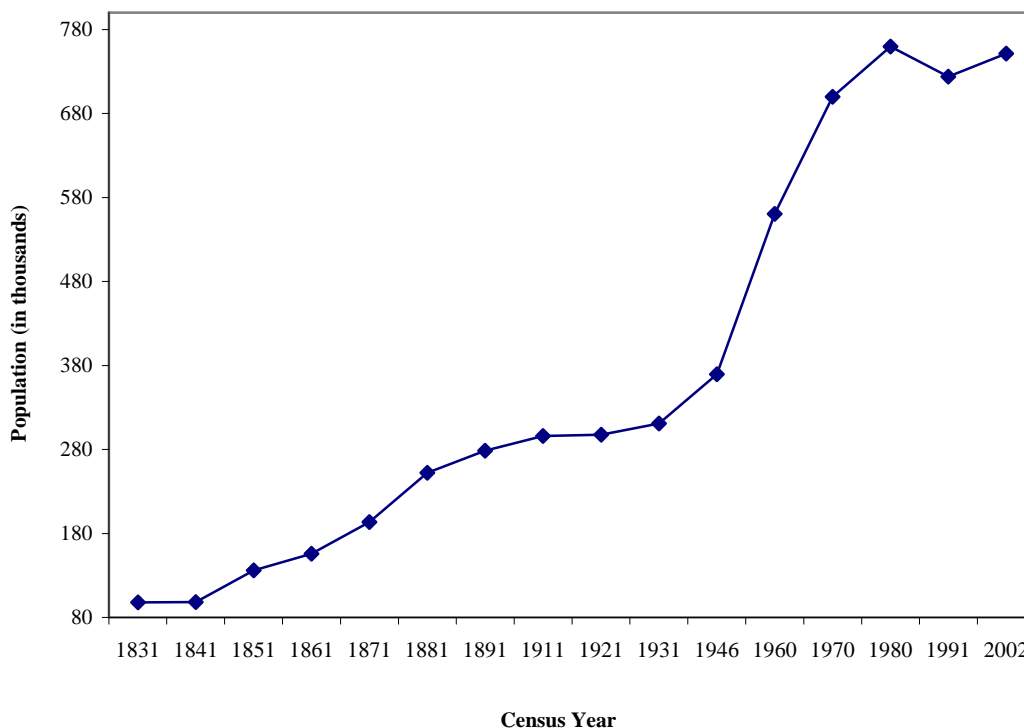
CHAPTER 1: NATIONAL POPULATION TRENDS: SIZE, GROWTH AND DISTRIBUTION

1.1 Size

The population of Guyana, obtained from the 2002 Population and Housing Census, consists of approximately 751,223 persons. This number includes persons enumerated in the households, those in institutions (7,403 persons), such as hospitals, prisons, military barracks, etc. (see Appendix A for concepts and definitions used in the census) and 5,505 persons who were not available to be enumerated after several attempts.

The population growth since the earliest censuses in the 1800s right up to the first census of the 21st century is shown in Table 1.1 and illustrated in Figure 1.1. They both show that except for census 1991, the population of Guyana increased at each census although increases in both absolute numbers and rates of growth were relatively small between 1911 and 1921. The largest increase was between 1946 and 1960, reflecting the post-war baby boom that took place worldwide. The 1991 census was the first in the history of Guyana's census-taking that recorded a population decline (of approximately 36,000 persons). The population decline at census 1991, appears to be consistent with the peak emigration flows recorded during the decade of the 1980s, as well as continuously falling fertility rates.

Fig. 1.1: Population Trends of Guyana (1831 - 2002)



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**Table 1.1: Population Trends and Growth Rate,
Guyana: 1831 - 2002**

Census Year	Population	Change	% Change	Growth Rate
1831	98,000	x	x	x
1841	98,154	154	0.2	0.02
1851	135,994	37,840	38.6	3.31
1861	155,907	19,913	14.6	1.37
1871	193,491	37,584	24.1	2.19
1881	252,186	58,695	30.3	2.69
1891	278,328	26,142	10.4	0.99
1911	296,041	17,713	6.4	0.31
1921	297,691	1,650	0.6	0.06
1931	310,933	13,242	4.4	0.44
1946	375,701	64,768	20.8	1.16
1960	560,330	184,629	49.1	3.02
1970	701,718	141,388	25.2	2.28
1980	759,567	57,849	8.2	0.80
1991	723,673	-35,894	-4.7	-0.44
2002	751,223	27,550	3.8	0.33

Note: x = not applicable

The decline in population numbers from 1980 to 1991 is reversed between 1991 and 2002, when the population shows an increase of approximately 28,000 persons. This pattern of population change between 1980 and 2002 is examined through a cohort survival analysis.

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Table 1.2: National Census Survival Ratios for Both Sexes, Guyana: 2002

Age at:		Population		
First	Second			
Census (1980)	Census (2002)	1980 (Age 0+)	2002 (Age 22+)	Survival Ratios
(1)	(2)	(3)	(4)	(5)=(4)/(3)
	Births	x	362,799	x
0-4	22-26	97,928	63,095	0.6443
5-9	27-31	106,949	61,508	0.5751
10-14	32-36	105,733	55,280	0.5228
15-19	37-41	96,939	51,172	0.5279
20-24	42-46	77,542	42,664	0.5502
25-29	47-51	57,731	32,662	0.5658
30-34	52-56	44,215	24,557	0.5554
35-39	57-61	33,708	17,011	0.5047
40-44	62-66	28,359	13,260	0.4676
45-49	67-71	25,873	10,424	0.4029
50-54	72-76	23,025	7,208	0.3131
55-59	77-81	18,280	4,567	0.2498
60-64	82-86	13,522	2,287	0.1691
65-69	87-91	12,810	1,315	0.1027
70-74	92-96	7,535	424	0.0563
75 +	97 +	9,420	137	0.0145

x = Not applicable

Note: Age not stated has been prorated.

Births refer to population 0-21 years in 2002.

ⁱ Table 1.2 shows census survival ratios between 1980 and 2002. In order to conduct this analysis, the age distribution of the population at the two census dates is made comparable. This is done by regrouping the five-year age groups from x to x + 4 identified at the 1980 census, into their respective cohorts at the second census in 2002, twenty-two years later (as age groups from x + 22 to x + 26). Thus, the survivors of those aged 0-4 in 1980 are aged 22-26 in 2002. As a further adjustment, the population distribution for 2002 is moved backward by 0.345 year (four months), that is, from the second census date of September 15, 2002 to May 12, 2002. The survival ratios are then derived from these two distributions.

The results in column 5 of Table 1.2 show low survival rates for the age group 0-4 onwards. For example, about 64 percent of those aged 0-4 years in 1980 and now 22-26 years in 2002, were

reported to have still been in the population. The rates are even much lower for 5-9 and 10-14 years; for example, about 42 and 48 percent seemed not to have reached 27-31 and 32-36 years in 2002, respectively. With the increase in life expectancy for the country, (65.5 years for both sexes combined) mortality alone cannot account for the proportions of such low survival. It is more probable that the ongoing emigration and other factors had strongly influenced the demographic processes of population change.

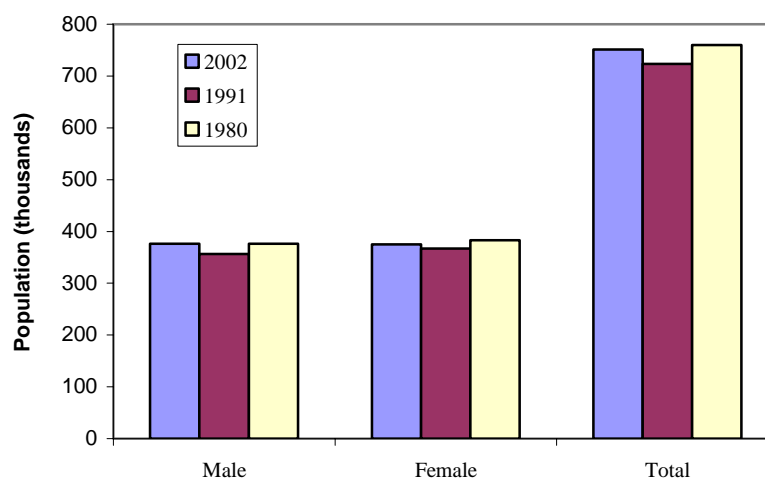
In percentage terms, the population grew by 3.8 percent between 1991 and 2002 reversing the decline (-4.7 percent) experienced between 1980 and 1991. The distribution of the 2002 population by sex indicates that males narrowly outnumber females - with 50.1 percent of the population being male and 49.9 percent female (see Table 1.3 and Figure 1.2).

Table 1.3: Total Population by Sex, Guyana: 1980, 1991 and 2002

Census Ref. Date	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Sept. 15, 2002	751,223	100	376,034	50.1	375,189	49.9
May 12, 1991	723,673	100	356,540	49.3	367,133	50.7
May 12 1980	759,567	100	376,381	49.6	383,186	50.4
Change (1991 - 2002)	27,550	3.8	19,494	5.5	8,056	2.2

This finding is different from the censuses of 1991 and 1980 when females accounted for 50.7 percent and 50.4 percent of the population, respectively. The observed numerical majority of male the population at the 2002 census, corroborates with the earlier prediction made by the Bureau in 1994 in the National Report to the International Conference on Population and Development (ICPD) in Cairo. The report predicted that because of the preponderance of females in the ongoing emigration flows, females will lose their numerical superiority in the population during the period 2001 - 2011¹².

Fig. 1.2: Population of Guyana by Sex: 1980-2002



¹² Benjamin, Lennox (1994) National Report to the Population of Guyana Prepared for the ICPD Conference Cairo 5th – 13th September 1994 (Unpublished -Available at the Bureau of Statistics)

1.2 Growth

Average annual rates of growth in the late 1870s and 1880s have been among the highest. Growth rates however, declined in the early to mid 1900s, only to accelerate again in 1960. The high growth rate observed in 1960 would have been the result of the post-war baby boom.

Average annual growth rates between 1991 and 2002 are small (0.33 percent per annum). Nevertheless it is a positive trend shown by the first census of the millennium, since it compares with a decrease of -0.44 percent per annum between 1980 and 1991. The reason for the negative growth rate between 1980 and 1991 has already been given and is suspected to be the impact of the outflow of people in their prime working ages. This is an issue for further in-depth research and analysis.

When the growth between 1991 and 2002 is disaggregated for the sexes, the female population shows an increase of 1.1 percent over the decade and the males 2.7 percent. By comparison, growth for the sexes between 1980 and 1991 shows a decrease in population by 2.1 percent for females and 2.6 percent for males. This result probably means that females have been migrating at a faster rate than males; a finding which can be substantiated by the results of the Living Condition Survey¹³ conducted during the 1990s. The results showed that in the ongoing emigration flows, 53 out of every 100 persons emigrating were females.

1.3 The Effects of International Migration on the Population Size

1.3.1 The Effect of Immigration

Changes in the size of the foreign-born population are examined in this section. As shown in Table 1.4, the contribution of foreign-born residents to the population size is still relatively insignificant in 2002, although it does show a rise over the 1980 and 1991 numbers and percentages. Foreign-born residents in 1980 were 0.8 percent of the total population, dropping to 0.5 percent in 1991, and rising to 1.3 percent in 2002 (see Table 1.4).

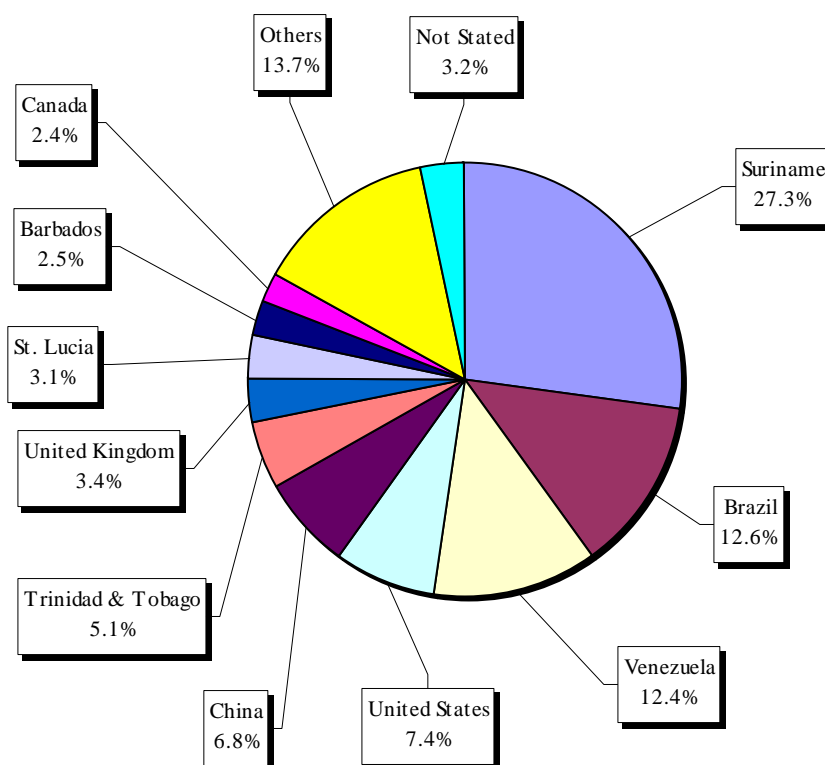
¹³Bureau of Statistics (2000) Guyana Survey of Living Conditions (Available at the Bureau of Statistics - Unpublished)

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**Table 1.4: Percentage Distribution of Local and Foreign-Born,
Guyana: 1980 - 2002**

Census Year	Guyanese		Foreign-born		Total	
	Number	Percent	Number	Percent	Number	Percent
2002	741,772	98.7	9,451	1.3	751,223	100
1991	719,733	99.5	3,940	0.5	723,673	100
1980	753,165	99.2	6,402	0.8	759,567	100

**Fig. 1.3: Foreign-Born Population by Country of Birth
Guyana: 2002**



Approximately 63 percent of the foreign-born population comes from the English-speaking Caribbean and Guyana's next-door neighbors. Suriname alone contributes 27.3 percent of the foreign-born population. Other foreign nationals found in large numbers among the foreign-born component of the resident Guyanese population include Brazil, (12.6 percent), Venezuela, (12.4 percent), United States, (7.4 percent), China, (6.8 percent) and United Kingdom, (3.4 percent). However, it is difficult to determine reciprocity of movement between Guyana and these countries because of a lack of information on Guyanese-born citizens who migrated to those countries (see Table 1.5 and Figure 1.3).

Table 1.5: Distribution of Resident Foreign-Born by Country of Birth and Sex, Guyana: 2002

Country of Birth	Number			Percentage		
	Male	Female	Total	Male	Female	Total
Suriname	1,245	1,331	2,576	13.2	14.1	27.3
Brazil	714	481	1,195	7.6	5.1	12.6
Venezuela	590	586	1,176	6.2	6.3	12.4
United States	375	328	703	4.0	3.5	7.4
China	378	268	646	4.0	2.8	6.8
Trinidad & Tobago	259	220	479	2.7	2.3	5.1
United Kingdom	174	149	323	1.8	1.6	3.4
St. Lucia	169	125	294	1.8	1.3	3.1
Barbados	123	117	240	1.3	1.2	2.5
Cnanda	115	110	225	1.2	1.2	2.4
Others	759	532	1,291	8.0	5.6	13.7
Not Stated	160	143	303	1.7	1.5	3.2
Total	5,061	4,390	9,451	53.5	46.5	100

1.3.2 The Effect of Emigration

In Table 1.1 some issues were raised regarding the trends and growth of the population, particularly the impact of ongoing emigration on the demographic change in Guyana. In furtherance thereof, the vital statistics results of the country covering the period 1988 to 2000 were presented to examine the effect of international migration on the size of the population. It is often difficult to compare both sources of data because they employ different methods in the data collection process. While vital statistics deals with registration of vital events, such as deaths, births and migration, the census employs a de facto method, that is, everybody is expected to be counted on the census night. At the same time, the porosity of the border crossing points should be borne in mind, because information collected is limited to arrivals and departures at legal and popular crossing destinations. However, in a strict sense, they enable analysts to overview the extent to which either data had suffered from coverage or omission errors and as such, it should be considered when interpreting Table 1.6.

In any case, if it is assumed that registration of births and deaths was reported with a similar degree of accuracy to that of arrivals and departures, then, it can be concluded that net migration had been the integral part of the negative growth rate realized in 1991. The net increase on account of these components of population growth as depicted in Table 1.6, shows that the population figure dropped from its 1980 level of 759,567 to as low as 740,153 in 1991, due to emigration. From there, natural increase began to exceed net migration.

As noted earlier, the difference between the census counts and the expected population estimates based on vital registration should be interpreted with caution. Probably, some vital events were unregistered due to weaknesses in the vital registration system, among them being undocumented illegal migration which may have created the difference referred to above.

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**Table 1.6: Population Estimates Derived From Net Natural Increase and Net Migration,
Guyana: 1998-2000**

Year	Births	Deaths	Natural Increase (B-D)	Arrivals	Departures	Net Migration (A-D)	Net Increase/ Decrease	Population
1988	19,568	5,967	13,601	na	na	-12,094	1,507	757,207
1989	20,521	5,605	14,916	na	na	-15,304	-388	756,819
1990	17,522	6,134	11,388	na	na	-17,559	-6,171	750,648
1991	18,229	5,170	13,059	134,272	157,826	-23,554	-10,495	740,153
1992	18,224	4,735	13,489	170,917	164,515	6,402	19,891	760,044
1993	20,027	5,063	14,964	189,461	196,441	-6,980	7,984	768,028
1994	21,810	5,328	16,482	181,876	181,626	250	16,732	784,760
1995	22,651	5,417	17,234	184,879	192,390	-7,511	9,723	794,483
1996	22,452	5,616	16,836	170,885	183,483	-12,598	4,238	798,721
1997	21,861	5,302	16,559	161,066	177,377	-16,311	248	798,969
1998	20,898	5,244	15,654	146,221	166,661	-20,440	-4,786	794,183
1999	17,950	5,102	12,848	178,982	191,146	-12,164	684	794,867
2000	18,463	5,594	12,869	191,764	202,865	-11,101	1,768	796,635

Source: General Registrar Office, Guyana

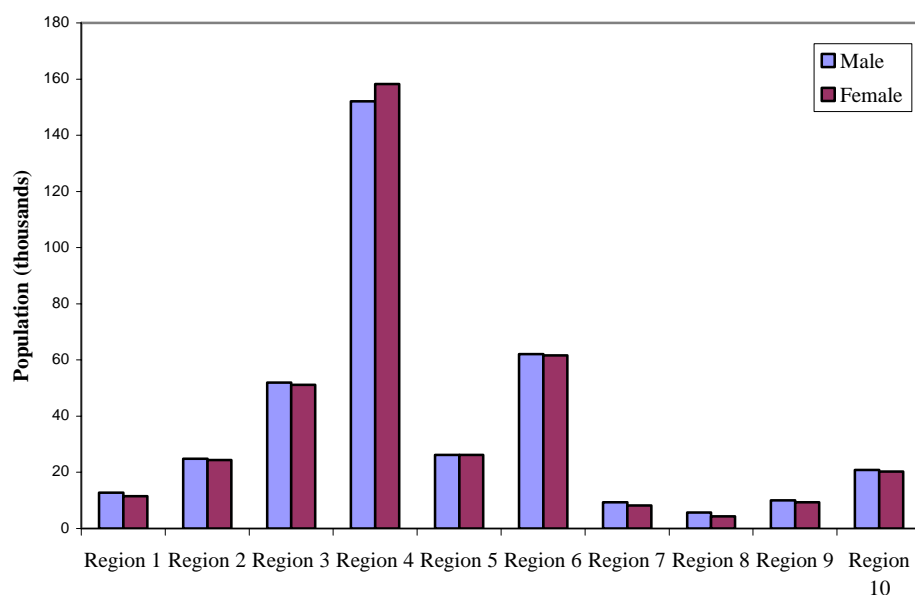
1.4 Regional Distribution

The percentage distribution of the population by region and sex for 2002 is elaborated in Table 1.7. The sex distribution of the population of the regions is similar to the national distribution. With the exception of Region 4, the proportion of males is higher than for females in 2002 census. The largest sex differentials – where men outnumber women are seen in Regions 8, 1, 7 and 9, in ranking order (see Figure 1.4).

Table 1.7: Population Distribution by Sex and Region, Guyana: 2002						
	Both Sexes		Male		Female	
Region	Number	Percent	Number	Percent	Number	Percent
Region 1	24,275	3.2	12,815	1.7	11,460	1.5
Region 2	49,253	6.6	24,847	3.3	24,407	3.2
Region 3	103,061	13.7	51,944	6.9	51,117	6.8
Region 4	310,320	41.3	152,136	20.3	158,184	21.1
Region 5	52,428	7.0	26,207	3.5	26,221	3.5
Region 6	123,695	16.5	62,079	8.3	61,615	8.2
Region 7	17,597	2.3	9,373	1.2	8,224	1.1
Region 8	10,095	1.3	5,750	0.8	4,345	0.6
Region 9	19,387	2.6	10,009	1.3	9,378	1.2
Region 10	41,112	5.5	20,874	2.8	20,238	2.7
Total	751,223	100	376,034	50.1	375,189	49.9

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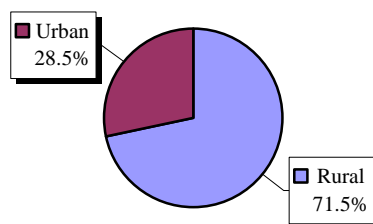
Fig.1. 4: Regional Population Distribution by Sex, Guyana: 2002



1.5 Rural and Urban Distribution

Four of the ten administrative regions have urban centers, that is, Regions 2, 4, 6 and 10. The combined population of these towns and the capital city, Georgetown, totalled 213,705 or 28.5 percent of the population in 2002. The remaining 71.5 percent of the population is clustered in villages, mainly along the coastal belt, while a few others are scattered deep in the hinterland of the country (see Figure 1.5 and Table 2.9).

Fig.2.5: Population by Rural and Urban Status, Guyana: 2002



Females account for 51.7 percent of the urban dwellers, compared to 48.3 percent for males. This situation is the reverse for the rural areas, where males account for 50.8 percent of the rural population and females 49.2 percent.

CHAPTER 2: POPULATION COMPOSITION

2.1 Race/Ethnic Composition

The present population of Guyana is ethnically heterogeneous, composed chiefly of a native Amerindian population together with the descendants of immigrants who came to the country either as slaves or as indentured labourers. The population, therefore, comprises groups of persons with nationality backgrounds from Europe/Portugal, Africa, China, and India, with the Amerindians as the indigenous population. These groups of diverse national heritage have been fused together by a common language, that is, English.

In addition to persons of at least five distinct nationalities there is the native Amerindian population. Over the centuries, there has been intermarriage between the various groups and as a result, a group of 'mixed heritage' persons has emerged. This is now a significant and growing group within the population, comprising the various combinations of groups.

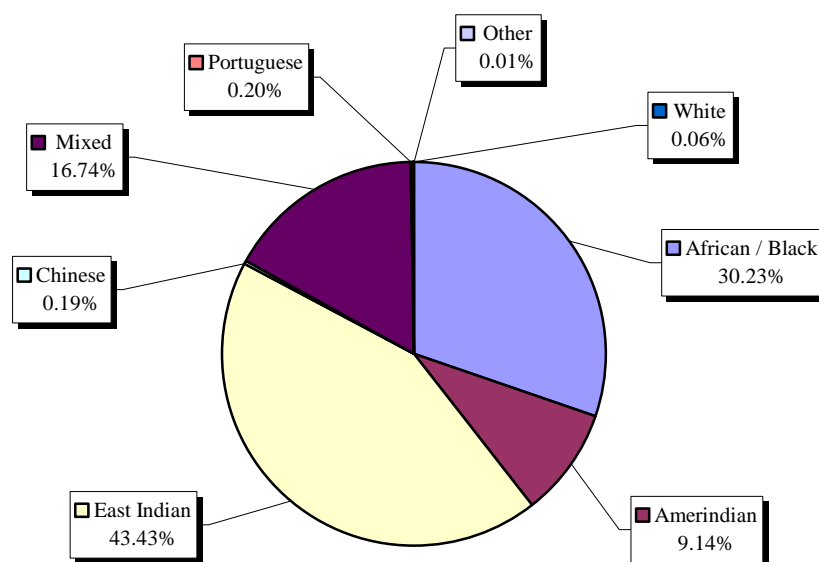
Race and ethnicity issues are important, as they are social determinants of demographic processes, particularly of fertility. The race/ethnic composition of the population also affects education, health and other socioeconomic variables. It is within this context that the race distribution of the population is analyzed for the country and for each region. Further analysis on the mortality, fertility and mobility patterns for specific ethnic groups will need to be undertaken as a separate research project.

2.1.1 Ethnic Composition

The largest nationality sub-group is that of East Indians comprising 43.5 percent of the population in 2002. They are followed by persons of African heritage (30.2 percent). The third in rank are those of Mixed Heritage (16.7 percent), while the Amerindians are fourth with 9.2 percent. The smallest groups are the Whites (0.06 percent or 477 persons), the Portuguese (0.20 percent or 1,497) and the Chinese (0.19 percent or 1,396). A small group (0.01 percent or 112 persons) did not identify their race/ethnic background. (see Figure 2.1)

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**Fig. 2.1: Population Distribution by Nationality Background/Ethnicity
Guyana: 2002**



This reported number of persons of unspecified ethnicity, though small, is significant in the sense that ethnicity is determined by self-description of all respondents. Nevertheless, it is possible that the growth in the mixed population represents a growing sense of separate and distinct identity by the majority of persons within that group.

**Table 2.1: Distribution of the Population by Nationality Background/
Ethnicity, Guyana: 1980 – 2002**

Ethnicity/ Background	Population			Percentage		
	2002	1991	1980	2002	1991	1980
African / Black	227,062	233,465	234,094	30.23	32.26	30.82
Amerindian	68,675	46,722	40,343	9.14	6.46	5.31
Chinese	1,396	1,290	1,864	0.19	0.18	0.25
East Indian	326,277	351,939	394,417	43.43	48.63	51.93
Mixed	125,727	87,881	84,764	16.74	12.14	11.16
Portuguese	1,497	1,959	3,011	0.20	0.27	0.40
White	477	308	779	0.06	0.04	0.10
Other	112	107	294	0.01	0.01	0.04
Total	751,223	723,671	759,566	100.0	100.0	100.0

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Table 2.1 shows the population distribution in 2002 by ethnicity background. The distribution pattern has been similar to those of the 1980 and 1991 censuses, but the share of the two main groups has declined. The East Indians were 51.9 percent of the total population in 1980, but by 1991, had fallen to 48.6 percent, and then 43.5 percent in 2002 census. Those of African descent increased slightly from 30.8 to 32.3 percent during the first period (1980 and 1991) before falling to 30.2 percent in the 2002 census.

With small growth in the population, the decline in the shares of the two larger groups has resulted in the relative shares of the 'Mixed' and Amerindian groups. The Amerindian population rose by 21,953 persons between 1991 and 2002. This represents an increase of 46.9 percent or an annual growth of 3.5 percent. Similarly, the 'Mixed' population increased by 37,846 persons, representing a 43.1 percent increase or an annual growth rate of 3.2 percent from the base period of 1991 census.

The Whites and Chinese populations which declined between 1980 and 1991 regained in numbers by the 2002 census by 54.9 percent (169 persons) and 8.2 percent (106 persons) respectively. However, because of their relatively small size, the increase has effectively a zero effect on the overall change. The Portuguese group has declined constantly over the decades.

2.1.2 Geographic Distribution of Nationality/Ethnic Groups

The geographic distribution of the various groups is analyzed in three dimensions viz.

- As a percentage distribution with respect to the whole country;
- As a percentage of the population of each region; and
- As a percentage of respective ethnic group residing in a region.

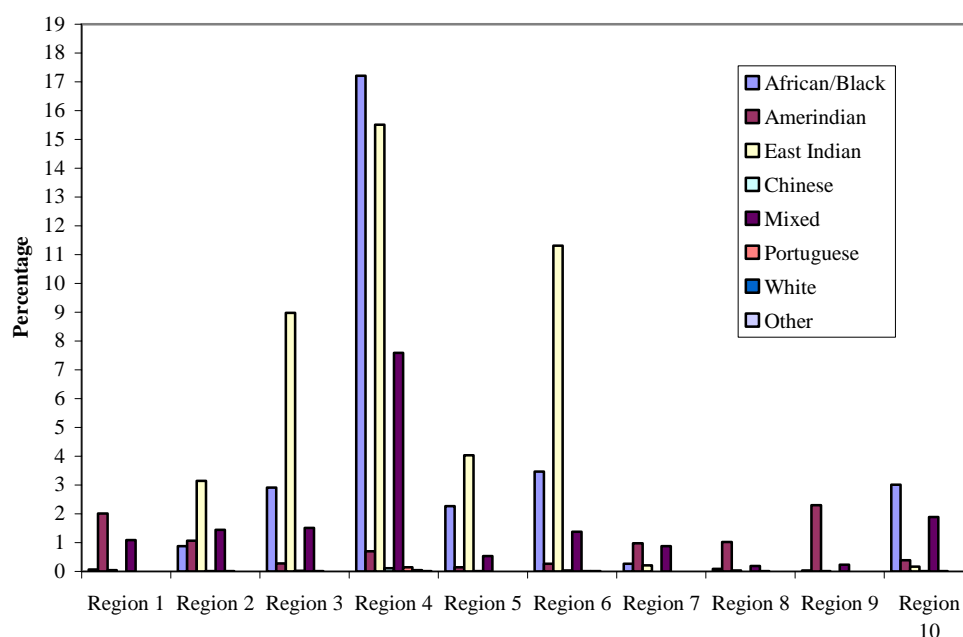
Percentage Distribution over Country: The first dimension is given in Table 2.2. With a few exceptions, the distribution shows a wide variation in the number of representatives of the various ethnic groups when they are dispersed over the whole country. Nevertheless, (with the exception of those of European descent), the heterogeneous aspect of the population is maintained, as representatives of almost every group are found in every region (see also Figure 2.2).

Table 2.2: Percentage distribution of population within a region by nationality background/ethnicity, Guyana: 2002

Background	Region1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
African/Black	2.29	13.41	21.23	41.67	32.55	21.06	11.61	7.00	1.22	54.98	30.23
Amerindian	62.24	16.27	2.01	1.69	1.95	1.63	41.69	75.91	89.20	7.10	9.14
Chinese	0.03	0.09	0.16	0.26	0.11	0.18	0.03	0.03	0.04	0.15	0.19
East Indian	1.40	47.91	65.47	37.54	57.76	68.68	8.89	2.16	0.50	3.08	43.43
Mixed	33.86	22.06	11.02	18.38	7.63	8.37	37.58	13.92	8.85	34.48	16.74
Portuguese	0.08	0.21	0.07	0.34	0.00	0.05	0.14	0.93	0.09	0.12	0.20
White	0.09	0.04	0.03	0.09	0.00	0.04	0.05	0.05	0.09	0.05	0.06
Other	0.01	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.01	0.03	0.01
Total	100	100	100	100	100	100	100	100	100	100	100
Number	24,275	49,254	103,061	310,320	52,428	123,694	17,597	10,094	19,388	41,114	751,223

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Fig. 2.2: Population by Nationality Background/Ethnicity by Region of Residence, Guyana: 2002



Percentage Distribution within Region: The second dimension of the analysis of the distribution of the population according to descent is the percentage distribution in each region (see Table 2.3).

Amerindians comprise more than three-quarters of the populations of Regions 8 and 9 (75.9 and 89.2 percent respectively) and two-thirds of the population of Region 1 (62.2 percent). East Indians make up approximately one-half of the populations of Regions 2 and 5 and a little more than two-thirds of the populations of Regions 3 (65.5 percent) and 6 (68.7 percent). Persons of African descent comprise almost one-half of the populations of Regions 4 and 10. The remaining groups are more dispersed and comprise lower percentages, but those of Mixed heritage are more than one-third of the populations of Regions 1, 7 and 10.

Table 2.3: Percentage Distribution of Population within a Region by Nationality Background/Ethnicity, Guyana: 2002

Background	Region1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
African/Black	2.29	13.41	21.23	41.67	32.55	21.06	11.61	7.00	1.22	54.98	30.23
Amerindian	62.24	16.27	2.01	1.69	1.95	1.63	41.69	75.91	89.20	7.10	9.14
Chinese	0.03	0.09	0.16	0.26	0.11	0.18	0.03	0.03	0.04	0.15	0.19
East Indian	1.40	47.91	65.47	37.54	57.76	68.68	8.89	2.16	0.50	3.08	43.43
Mixed	33.86	22.06	11.02	18.38	7.63	8.37	37.58	13.92	8.85	34.48	16.74
Portuguese	0.08	0.21	0.07	0.34	0.00	0.05	0.14	0.93	0.09	0.12	0.20
White	0.09	0.04	0.03	0.09	0.00	0.04	0.05	0.05	0.09	0.05	0.06
Other	0.01	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.01	0.03	0.01
Total	100	100	100	100	100	100	100	100	100	100	100
Number	24,275	49,254	103,061	310,320	52,428	123,694	17,597	10,094	19,388	41,114	751,223

Percentage Distribution of Population by Descent: The third dimension, presented in Table 2.4, shows the distribution of the various groups over the regions. Earlier distribution patterns are reinforced by this analysis. The majority of persons of African descent, according to Table 2.4, are located in Regions 4 and 6, and in lesser proportions in Regions 10, 3 and 5. Those of Amerindian descent are concentrated in Regions 9 and 1 and to a lesser extent in regions 2, 8, 7 and 4. East Indians are concentrated in Regions 4, 6 and 3 and to a lesser extent in Region 5. Chinese and those of Mixed heritage are concentrated in Region 4 with smaller groups of Chinese in Regions 3 and 6 and persons of mixed heritage in Regions 2, 3, 6, and 10.

To the extent that nationality background/race/ethnicity have social and economic implications, the geographic distributions observed in the analysis of Tables 2.2, 2.3 and 2.4 could be tied to a further analysis of the economic activity of the regions, training and levels of education within the groups. Such findings will be helpful in the design of national and regional plans for human resource development.

In addition, some of the social and demographic dimensions of these variables could be explored in terms of their fertility, mortality and mobility patterns. The results of such research could further the development of strategies for the reduction of poverty and the amelioration of certain morbidity conditions and their effects, particularly HIV and AIDS.

Table 2.4: Percentage Distribution of Population by Nationality Background/Ethnicity and Region of Residence, Guyana: 2002

Ethnicity/ Background	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total %	Number
African/Black	0.24	2.91	9.64	56.95	7.52	11.47	0.90	0.31	0.10	9.96	100	227,062
Amerindian	22.00	11.67	3.01	7.62	1.49	2.94	10.68	11.16	25.18	4.25	100	68,675
Chinese	0.46	3.29	12.06	58.84	4.05	15.64	0.39	0.22	0.51	4.55	100	1,396
East Indian	0.10	7.23	20.68	35.70	9.28	26.04	0.48	0.07	0.03	0.39	100	326,277
Mixed	6.54	8.64	9.03	45.36	3.18	8.23	5.26	1.12	1.36	11.27	100	125,727
Portuguese	1.29	7.02	4.61	70.77	0.07	4.09	1.59	6.26	1.15	3.16	100	1,497
White	4.46	4.07	7.45	61.74	0.00	11.35	1.80	1.07	3.61	4.45	100	477
Other	1.88	0.00	1.82	79.44	0.00	1.82	1.92	0.00	1.81	11.31	100	112
Total %	3.23	6.56	13.72	41.31	6.98	16.47	2.34	1.34	2.58	5.47	100	751,223

2.2 Religious Composition

2.2.1 Changes in the Size of Religious Groups

The distribution of the population by religious affiliation is presented in Table 2.5, both in absolute and percentage terms. As in the case of the data collected on nationality background/race/ethnicity, religious affiliation is one of perception and does not necessarily mean that persons who identify with a particular religion actively adhere to its practices. Like other descriptive variables, however, information on the religions practiced within a population, can increase understanding of the evolution of other social and demographic features within the population.

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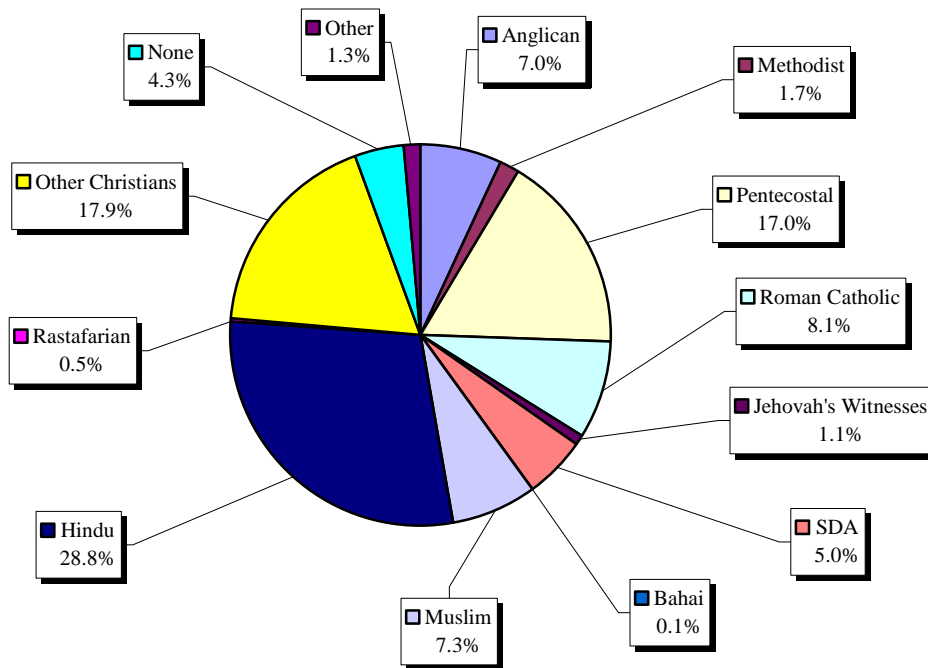
The single largest religious group is the Hindus, whose membership represents almost 28 percent of the population reporting a religious affiliation, followed by the Pentecostal faith (16.9 percent). Concomitant with the rise in the number of Pentecostals has been the diminution in the size of the Anglican and Roman Catholic populations, which are now approximately 7 and 8 percent of the population, respectively. The number of Muslims seems to have slightly declined from 8 percent in 1991, to about 7 percent in 2002.

Table 2.5: Distribution of the Population by Religious Affiliation, Guyana: 2002

Religious Group	2002 CENSUS					
	Absolute			Percentage		
	Male	Female	Total	Male	Female	Total
Anglican	25,838	26,096	51,934	3.4	3.5	6.9
Methodist	5,986	6,494	12,480	0.8	0.9	1.7
Pentecostal	57,624	69,207	126,831	7.7	9.2	16.9
Roman Catholic	30,689	29,869	60,558	4.1	4.0	8.1
Jehovah's Witnesses*	3,636	4,550	8,186	0.5	0.6	1.1
Seventh Day Adventists	17,655	19,897	37,552	2.4	2.6	5.0
Bahai*	222	278	500	0.0	0.0	0.1
Muslim	28,201	25,849	54,050	3.8	3.4	7.2
Hindu	108,270	105,012	213,282	14.4	14.0	28.4
Rastafarian*	2,970	1,035	4,005	0.4	0.1	0.5
Other Christians	65,371	67,727	133,098	8.7	9.0	17.7
None	21,195	10,738	31,933	2.8	1.4	4.2
Other	4,743	5,141	9,884	0.6	0.7	1.3
Not Stated	3,634	3,297	6,931	0.5	0.4	0.9
Total	376,034	375,189	751,222	50.1	49.9	100
Religious Group	1991 CENSUS					
	Male	Female	Total	Male	Female	Total
Anglican	49,285	50,671	99,956	6.8	7.0	13.8
Methodist	8,947	10,093	19,040	1.2	1.4	2.6
Pentecostal	24,858	29,632	54,490	3.4	4.1	7.5
Roman Catholic	35,617	36,899	72,516	4.9	5.1	10.0
Seventh Day Adventists	13,429	16,047	29,476	1.9	2.2	4.1
Muslim	29,106	28,563	57,669	4.0	3.9	7.9
Hindu	127,024	126,041	253,065	17.6	17.4	35.0
Other Christians	15,029	17,392	32,421	2.1	2.4	4.5
None	14,392	9,282	23,674	2.0	1.3	3.3
Other/Not Stated	38,854	42,511	81,365	5.4	5.9	11.3
Total	356,541	367,131	723,672	49.3	50.7	100

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Figure 2.3: Distribution of Population by Religious Affiliation
Guyana: 2002



The smallest religious groups are from the Bahai (0.1 percent or 500 members) and Rastafarian (0.5 percent or 4,005 members) faiths. In the past, the Seventh-Day Adventists would have been added to these 'small' populations and the numbers of Jehovah's Witnesses would not have been significant to warrant a category on its own. This pattern has changed in 2002, with the growth in number of persons of these religious practices. Also of note is the fact that the 'Other Christian' group, consisting in the past of Baptists, Moravians, Brethren, Methodist among others, has now grown to a significant 18 percent of the religious population.

Overall, there appears to be equal gender representation in all religions. The Pentecostals, Seventh-Day Adventists and to a lesser extent the Anglicans and Methodists, however, have significantly more women in their membership. On the other hand, the Roman Catholics, Muslims, Hindus and Rastafarians have a preponderance of men.

2.2.2 Pattern of Religious Distribution

Like the geographic distribution of nationality/ethnic groups the religious groups are analyzed in two dimensions viz.

- As a percentage distribution of total religious affiliation in each region; and
- As a percentage of the each religious affiliation in a region.

Percentage Distribution of Religious Groups within a Region: The first dimension focuses on the distribution of religious affiliate members according to their region of residence, for example, what percentage of the total population in Region 3 is Hindu, Muslim, etc.? The analysis shows that the Roman Catholic religion dominates in Regions 9, 8 and 1 and less in other regions; the Hindus are concentrated in Regions 6, 3, 5 and 2, while the Pentecostal followers make up a large percentage of the population residing in Regions 10 and 1. The remaining religious groups seem to be more spread over the regions, comprising not more than twenty percent in any one region (see Table 2.6A).

Percentage Distribution of Population by Religious Affiliation: The second dimension of the analysis is also presented in Table 2.6B. The skew population distribution in the country is exhibited by the religious groups. Region 4 alone comprises memberships of each religious group ranging from the lowest of 33.6 percent for the Hindu to as high as 64.5 percent among the Rastafarian believers. The Hindu and the Muslim religions are the two which seem to have a slightly different pattern. Besides Region 4, where the majority of either faith is found, about 24 and 23 percent of the Muslim faith followers are residing in Regions 3 and 6 respectively, likewise 21.2 and 25.4 percent of the Hindus in the same two regions, respectively.

Of note is that the significant numbers (56.9 and 30.7 percent) of those without any faith and those who didn't state their religion at all are located in Region 4.

Table 2.6A: Percent Distribution of the Population by Religious Affiliation, Guyana: 2002

Religious Affiliation	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
A). Percentage of Total Religious Affiliation in Each Region											
Anglican	6.3	9.7	3.2	7.0	7.4	4.5	19.2	8.7	18.3	7.4	6.9
Methodist	0.1	1.8	1.2	2.4	1.8	0.7	0.5	0.5	0.2	1.9	1.6
Pentecostal Roman	26.0	15.3	10.6	19.9	12.7	10.9	18.4	8.0	1.7	34.1	16.7
Catholic	40.4	6.0	2.1	7.7	1.1	1.9	6.1	46.1	58.4	2.8	8.0
Johovah											
Witness	0.6	0.8	0.9	1.2	1.0	1.0	0.7	0.4	0.6	2.0	1.1
SDA	2.7	7.6	2.5	4.1	5.0	4.3	21.1	2.2	1.3	13.4	5.0
Bahai	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Muslim	0.3	7.2	12.3	6.3	9.6	9.9	1.9	0.5	0.3	1.1	7.2
Hindu	8.1	37.3	46.5	24.4	39.0	46.4	5.6	6.4	0.5	4.7	30.0
Rastafarian	0.2	0.1	0.3	0.8	0.2	0.2	0.3	0.7	0.2	1.2	0.5
Other											
Christians	11.5	10.3	17.7	19.4	17.9	17.2	11.1	16.6	16.8	19.2	17.5
None	1.5	2.2	1.8	5.7	3.3	2.1	6.1	2.1	1.7	10.4	4.2
Other	2.4	1.6	0.8	1.0	1.0	0.8	8.9	7.7	0.0	1.6	1.3
Total %	100	100	100	100	100	100	100	100	100	100	100
Number	24,275	49,254	103,061	310,320	52,428	123,694	17,597	10,095	19,387	41,112	751,223

Table 2.6B: Percent Distribution of the Population by Religious Affiliation, Guyana: 2002

B. Percentage of Each Religious Affiliation in a Region											
Religious Affiliation	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total % Number
Anglican	3.0	9.3	6.5	42.0	7.5	10.8	6.6	1.7	6.9	5.9	100 51,536
Methodist	0.2	7.2	10.1	59.6	7.9	7.1	0.8	0.4	0.2	6.4	100 12,347
Pentecostal	5.0	6.0	8.7	49.4	5.3	10.8	2.6	0.6	0.3	11.2	100 125,331
Roman Catholic	16.4	4.9	3.7	39.7	1.0	4.0	1.8	7.8	18.9	1.9	100 59,929
Jehovah's Witness	1.7	4.8	11.1	46.6	6.5	15.8	1.4	0.5	1.3	10.2	100 8,093
SDA	1.8	10.0	6.9	34.1	7.0	14.3	10.0	0.6	0.7	14.7	100 37,361
Bahai	0.6	4.6	12.5	54.1	1.0	10.7	0.7	0.4	5.7	9.7	100 492
Muslim	0.1	6.6	23.6	36.1	9.3	22.7	0.6	0.1	0.1	0.8	100 53,781
Hindu	0.9	8.2	21.2	33.6	9.1	25.4	0.4	0.3	0.0	0.9	100 225,601
Rastafarian	1.3	0.8	7.2	64.5	2.2	7.3	1.3	1.8	0.7	12.9	100 3,939
Other											
Christians	2.1	3.8	13.9	45.7	7.1	16.1	1.5	1.3	2.5	6.0	100 131,807
None	1.2	3.5	6.0	56.9	5.4	8.1	3.4	0.7	1.0	13.7	100 31,305
Other	6.0	8.3	8.5	30.7	5.4	10.3	16.2	8.0	0.1	6.6	100 9,701
Total %	3.2	6.6	13.7	41.3	7.0	16.5	2.3	1.3	2.6	5.5	100 751,223

2.3 Age and sex composition

The age and sex structure of the population is important for policy and planning decisions regarding the provision of primary and secondary school places, adult education opportunities, health care, roads, retirement benefits, and so on. The analysis is usually done by examining gender and age differentials through the sex ratios, age dependency ratios, survival ratios and the age-sex pyramid. The analysis here is also further extended to the ten regions of the country.

2.3.1 Sex Composition

Sex Ratio: The sex ratio is defined as the number of males to every 100 females within the population. A sex ratio above 100 denotes an excess of males and below 100 denotes an excess of females. Accordingly, the greater excess of males indicates higher sex ratio, while the greater the excess of females, the lower the sex ratio.

Sex ratios for the population are shown in Table 2.7 for the 1991 and 2002 censuses. It shows an almost equal number of males and females (100). This is marginally an improvement from 1991, when there were fewer men and the ratio was 97. Differences in the sex ratios exist, however, at the regional level.

Sex Ratios for Regions: Region 4 has a low overall sex ratio, meaning that there are more females compared to males. Since Region 4 contains the central business district and a high concentration of businesses and therefore jobs, it is reasonable to assume that many women leave other regions to seek employment there. It is also possible that internal migration, particularly to the capital, has been mainly by women (see Tables 3.9 and 3.11).

The reverse is true of Region 8, which has a preponderance of men. As is expected, more men appear to have moved to that region, because of the nature of the economic activity generating that region's economic development. For Region 8, the predominant means of livelihood is mining and quarrying, which requires physical labour and generally involves the recruitment of men in their prime working years.

The remaining nine regions show higher sex ratios, some narrowly, while others diverted by a wide margin. In descending order, the proportion of men is higher in Regions 7, 1, 9 and 10 and slightly lower in the others (see Table 2.7 and Figure 2.4).

Table 2.7: Sex Ratios by Regions, 1991 & 2002

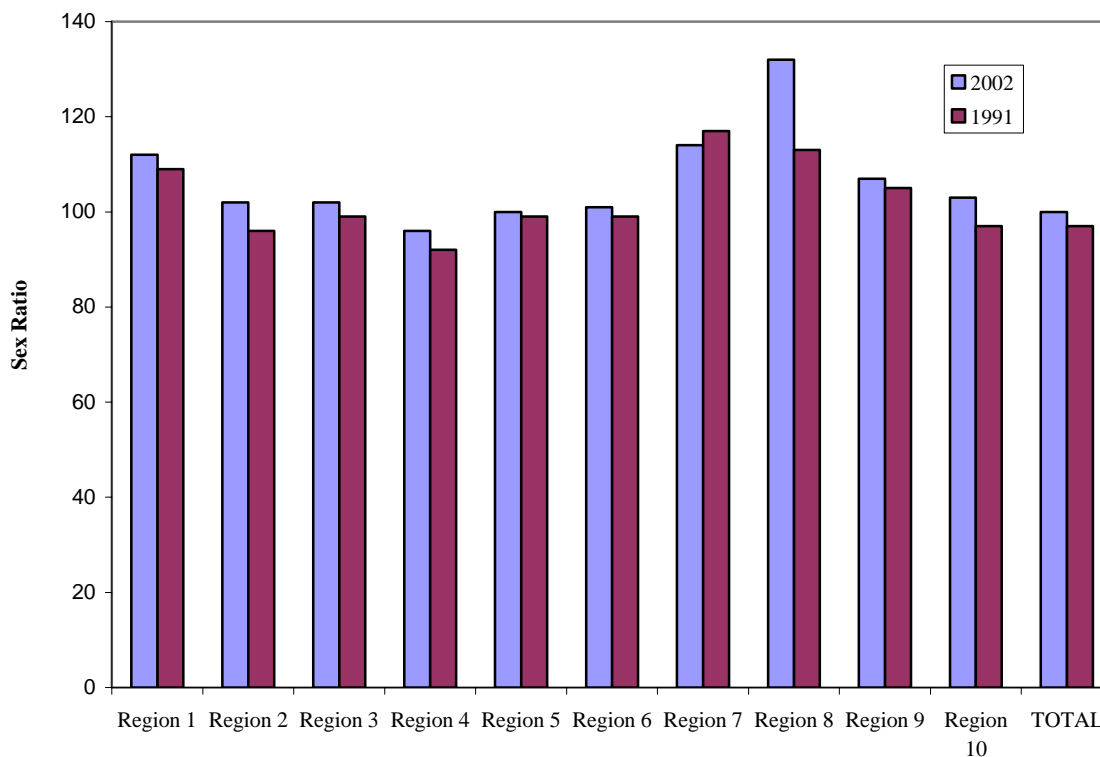
Region	Sex Ratio		Deficit/Excess	
	2002	1991	2002	1991
Region 1	112	109	5.6	4.1
Region 2	102	96	0.9	-2.3
Region 3	102	99	0.8	-0.4
Region 4	96	92	-2.0	-4.0
Region 5	100	99	0.0	-0.4
Region 6	101	99	0.4	-0.7
Region 7	114	117	6.5	7.8
Region 8	132	113	13.9	6.3
Region 9	107	105	3.2	2.3
Region 10	103	97	1.5	-1.5
Total	100	97	0.1	-1.5

Excess / Deficit = $(m - f) / (m + f) \times 100$

m = number of males & f = number of females

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**Fig. 2.4: Sex Ratio of the Population by Region
Guyana: 1991 and 2002**



Sex ratios for age groups of the populations of the ten administrative regions have one thing in common, that is, they are almost identical in the young age groups for all regions, except Region 8, which recorded extreme values for the 5 to 9 year age group (see Table 2.8). This is a finding that should be further investigated to ensure that young boys are not moving to the area to become involved in child labour.

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Table 2.8: Sex Ratio of the Population by Age and Region, Guyana: 2002

Age Group	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
0-4	100	105	107	102	105	105	104	108	103	108	104
5-9	102	103	104	103	98	105	103	116	103	105	103
10-14	108	101	103	102	105	103	100	95	103	104	102
15-19	108	103	98	100	96	100	104	119	106	98	100
20-24	117	98	96	95	96	99	120	151	106	101	98
25-29	124	96	101	92	99	100	122	148	112	100	98
30-34	118	102	102	95	103	105	121	223	113	95	101
35-39	129	105	101	93	107	100	142	193	120	102	101
40-44	142	104	104	93	98	104	136	151	120	102	101
45-49	127	106	112	92	101	100	135	173	110	109	100
50-54	142	109	100	97	91	101	136	165	125	111	102
55-59	133	104	95	94	108	97	114	169	90	104	98
60-64	120	98	95	86	98	89	118	173	113	96	92
65-69	100	88	101	85	91	85	102	106	112	110	90
70-74	126	81	95	79	89	78	118	147	98	124	86
75 & Over	127	91	79	74	86	72	123	96	94	104	80
Total	112	102	102	96	100	101	114	132	107	103	100

Note

Sex ratio = (m/f) x 100

where m = Number of Males
f = Number of Females

When sex ratios for 1991 and 2002 are compared (see Table 2.7), all regions, except for Region 8 have recorded a higher sex ratio in 2002 compared to 1991. Region 4, however, despite the increase, still has a sex ratio of less than 100 (females still outnumber males but by a smaller margin relative to 1991). Consistent with information already presented, Region 8 has the highest comparative increase in sex ratio. Nine of the ten regions therefore have an excess of males, compared with just four in 1991. There are several possible scenarios for this overall pattern. It means that either there is higher mortality among women (and there is no evidence of this), or that internally, women have moved primarily to Region 4 from other regions, or they have continued to emigrate at a higher rate. A study on the internal mobility of the population and the reasons for moving will be helpful in explaining some of these patterns.

2.3.2 Age composition

2.3.2.1 Age and Sex Pyramid

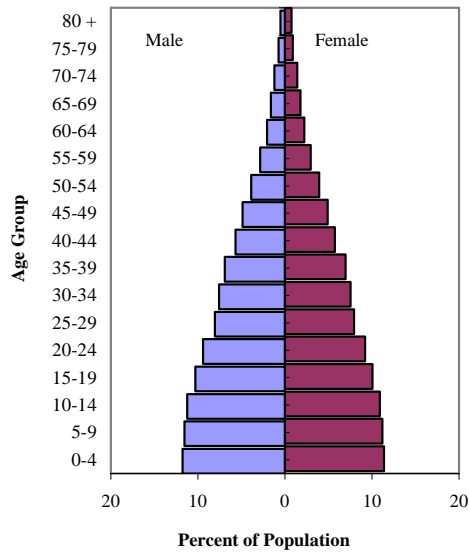
An age pyramid displays a population's age and sex composition by showing the number or proportion of males and females in each age group. Age pyramids are used to analyze many of the characteristics – past and present – of a population. The five-year age increments on the y-axis reflect the trends in birth, death and migration rates. Each year, a new cohort is born and appears at the bottom of the pyramid, while the cohorts above it move upward. As cohorts age, they lose members as a result of death, and may gain or lose due to migration. This process of attrition accelerates after age 45, causing the narrow peak of the pyramid.

As a population goes through its transition, moving from a position of high to low mortality, fertility and migration, the pyramid takes on different shapes. These shapes are now labelled to show whether the population is expanding, constrictive or is stationary and demonstrate the effects of the demographic processes on a population.

The expansive population has larger numbers of people in the younger ages, while that of the constrictive has smaller numbers in the younger ages. Unlike expansive and constrictive, the stationary population has equal numbers nearly in all age groups, and has a negative growth rate, as a result of higher death rate mostly - concentrated within the terminal age groups. Figures 2.5, 2.7 and 2.8 are examples of the three types of population pyramids and are shown for ease of comparison with the population pyramid for Guyana, shown in Figure 2.6.

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**Fig. 2.5: Population of Venezuela: 2000
(Expansive Population)**



**Fig. 2.6: Population of Guyana: 2002
(expansive)**

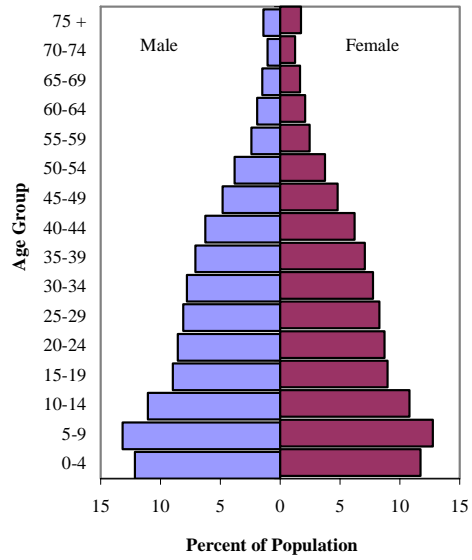


Fig. 2.7: Population of Germany: 2001 (Stationary)

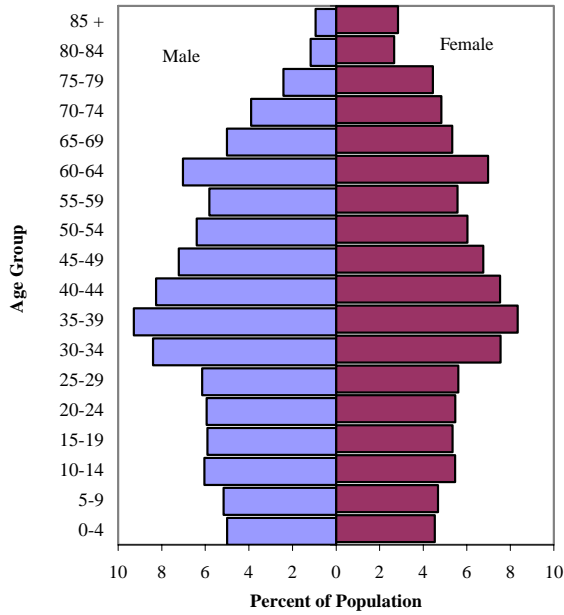
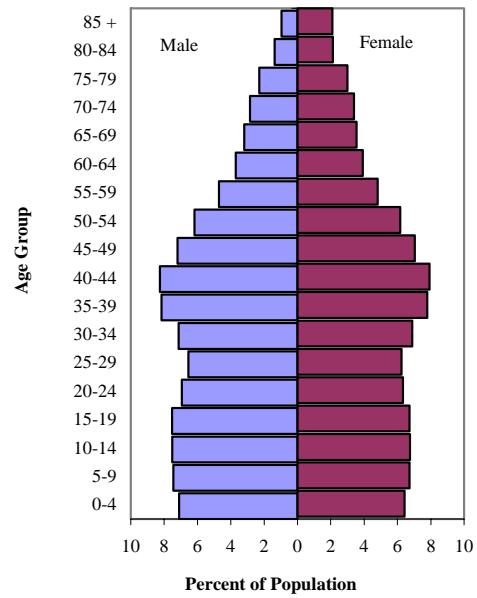


Fig. 2.8: Population of United States of America: 2000 (Constrictive)



2.3.2.2 Age Pyramid of Guyana

The trends depicted by the age pyramid for the population of Guyana are shown in Figure 2.11. Comparisons are also made with age pyramids for earlier censuses 1991 and 1980 (Figures 2.9 and 2.10) to show changes over the past two decades (see also Table 2.8). Age pyramids have also been constructed for the rural and urban populations and for selected regions (Regions 1, 7, 8 and 9).

The age pyramids indicate that there was a decline in the percentage share of the youngest age group (0-4 and 5-9 years) when comparing 1980 and 2002, while in the case of 1991 and 2002 the percentage share was identical for 0-4 years but revealed a slight increase in the 5-9 years age group. A fall in the numbers in the 0-4 age group could also be a signal of declining fertility and/or of migration of young children. The total fertility rate which was 6.0 children per child-bearing woman in 1960 had fallen to 2.6 by the 1991 census. These declines are usually difficult to account for immediately and require further research.

The census survival rates shown earlier (see Table 1.2) are also useful for understanding this phenomenon. Life expectancy is now estimated at over 60 years for the country; we expect, therefore, not less than 90 percent, particularly for the young cohorts 0-4 and 5-9 years, to have survived at least within the twenty-two year period, but this is not so. The 0-4 and 5-9 age-groups show a decline of almost 39 percent and 46 percent respectively (61 percent and 54 percent survival compared with the expected 90 percent). This speaks to either high child mortality or to emigration of very young children or other causes. Neither death registration record, nor the recent estimate of infant and child mortality rates, using Brass P/f ratio method, shows an increase in the level of infant and child mortality (see Chapter IV, Tables 4.3 and 4.4).

The age pyramids also show very different patterns for the populations in the 15–64 age-groups. For 1980, the pyramid shows very steep sides, indicating that the population has been subject to very serious effects of either mortality or migration in the preceding decades of the 1960s and early 1970s. During this time however, mortality had been declining and there were several migration waves to the United Kingdom, and then to the Canada and the USA.

The pyramids for 1991 and 2002 show a little different pattern. It can be seen that their sides are not as steep in the productive years as that of 1980, but for 1991 the effects of the steep slopes of 1980 can be seen for the age-groups of 40 and above. For 2002, the migration effects of the 1960s and early 1970s, shown dramatically in the 1980 pyramid, are petering out in the population aged 55 and over. These effects are also compounded with the higher schedules of mortality normally observed as these older ages are attained. The patterns for 1991 and 2002 for the older ages, therefore, seem to show that in addition to even lower mortality rates, their rate of international migration appeared to have slowed down in the late 1970s and early 1980s.

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Fig. 2.9: Population of Guyana: 1980

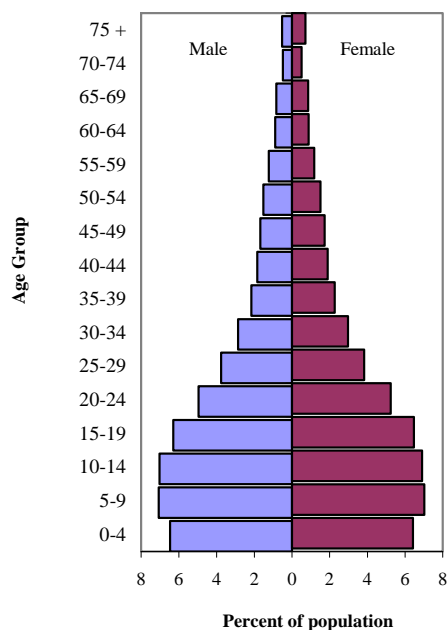


Fig. 2.10: Population of Guyana: 1991

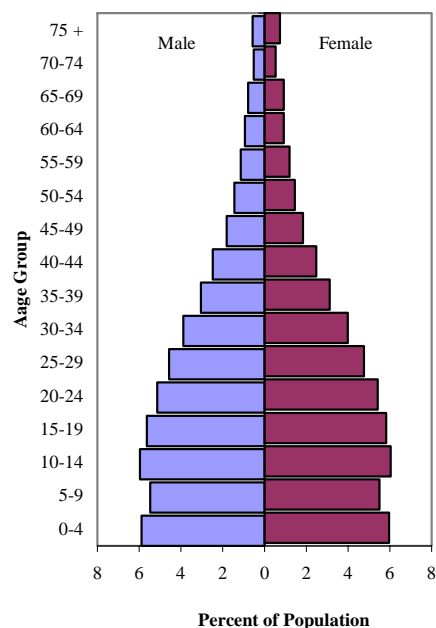
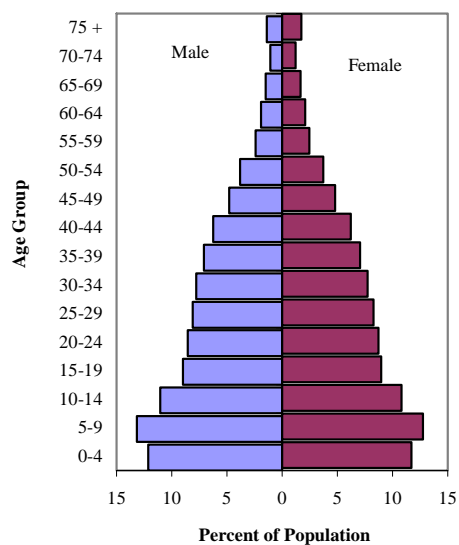


Fig. 2.11: Population of Guyana: 2002



All of the pyramids show that the numbers of those 65 years and over have risen proportionally, though small in number, that is, from 3.9 percent in 1980 to 4.2 percent in 2002 (see Table 2.9).

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In addition, it is observed that females form the majority of those in the advanced ages for the three censuses - a result of higher life expectancy for females than males or the combined effects of both higher life-expectancy and return migration (see also Table 2.9).

Table 2.9: Population Distribution by Age and Sex, Guyana: 1980 - 2002

Age group	1980			1991			2002		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	48,986	48,675	97,662	42,555	43,178	85,733	45,291	43,698	88,989
5-9	53,465	53,193	106,658	39,639	39,832	79,471	49,120	47,546	96,666
10-14	53,146	52,300	105,446	43,151	43,698	86,849	41,218	40,274	81,492
15-19	47,701	48,974	96,675	40,732	42,195	82,927	33,497	33,425	66,922
20-24	37,538	39,793	77,331	37,165	39,252	76,417	31,910	32,505	64,415
25-29	28,499	29,075	57,574	33,086	34,459	67,545	30,232	30,858	61,090
30-34	21,583	22,512	44,095	28,104	28,863	56,967	29,086	28,857	57,943
35-39	16,381	17,235	33,616	22,007	22,557	44,564	26,438	26,297	52,735
40-44	13,911	14,371	28,282	17,897	17,924	35,821	23,337	23,153	46,490
45-49	12,664	13,139	25,803	13,116	13,413	26,529	17,952	17,862	35,814
50-54	11,487	11,475	22,962	10,452	10,479	20,931	14,208	13,943	28,151
55-59	9,265	8,965	18,230	8,275	8,699	16,974	8,980	9,150	18,130
60-64	6,727	6,758	13,485	6,827	6,698	13,525	7,191	7,814	15,005
65-69	6,291	6,484	12,775	5,633	6,671	12,304	5,575	6,167	11,742
70-74	3,615	3,900	7,515	3,715	3,871	7,586	3,965	4,578	8,543
75 +	3,967	5,427	9,394	4,183	5,329	9,512	4,807	6,375	11,182
NS	1,155	910	2,065	4	16	20	3,226	2,686	5,912
Total	376,381	383,186	759,567	356,540	367,133	723,675	376,033	375,188	751,221
PERCENT									
	1980			1991			2002		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	13.0	12.7	12.9	11.9	11.8	11.8	12.0	11.6	11.8
5-9	14.2	13.9	14.0	11.1	10.8	11.0	13.1	12.7	12.9
10-14	14.1	13.6	13.9	12.1	11.9	12.0	11.0	10.7	10.8
15-19	12.7	12.8	12.7	11.4	11.5	11.5	8.9	8.9	8.9
20-24	10.0	10.4	10.2	10.4	10.7	10.6	8.5	8.7	8.6
25-29	7.6	7.6	7.6	9.3	9.4	9.3	8.0	8.2	8.1
30-34	5.7	5.9	5.8	7.9	7.9	7.9	7.7	7.7	7.7
35-39	4.4	4.5	4.4	6.2	6.1	6.2	7.0	7.0	7.0
40-44	3.7	3.8	3.7	5.0	4.9	4.9	6.2	6.2	6.2
45-49	3.4	3.4	3.4	3.7	3.7	3.7	4.8	4.8	4.8
50-54	3.1	3.0	3.0	2.9	2.9	2.9	3.8	3.7	3.7
55-59	2.5	2.3	2.4	2.3	2.4	2.3	2.4	2.4	2.4
60-64	1.8	1.8	1.8	1.9	1.8	1.9	1.9	2.1	2.0
65-69	1.7	1.7	1.7	1.6	1.8	1.7	1.5	1.6	1.6
70-74	1.0	1.0	1.0	1.0	1.1	1.0	1.1	1.2	1.1
75 +	1.1	1.4	1.2	1.2	1.5	1.3	1.3	1.7	1.5
NS	0.3	0.2	0.3	0.0	0.0	0.0	0.9	0.7	0.8
Total	49.6	50.4	100	49.3	50.7	100	50.1	49.9	100

The changing age structure has policy implications. For instance, the fact that the oldest age groups are steadily increasing proportionately within the total population, whereas the numbers and percentages in the youngest age-groups are declining, means that social resources may have to be re-allocated between these age groups in the future. It is possible that there will be a lower

demand for school places, but increased need for health, pension and national insurance provisions for the elderly, or policies governing/encouraging return migration.

2.3.2.3 Age composition at sub-national level

For additional insight on the age-sex distribution pattern, population pyramids have been prepared for the rural and urban areas and for selected regions (Regions 1, 7, 8 and 9). The pyramids for the urban and rural areas resemble those of the general population and it could safely be assumed that the same processes of declining fertility or low mortality and continued migration are the main factors (see Figures 2.12, 2.13 and Table 2.10).

Fig. 2.12: Population of Guyana (Rural)
2002

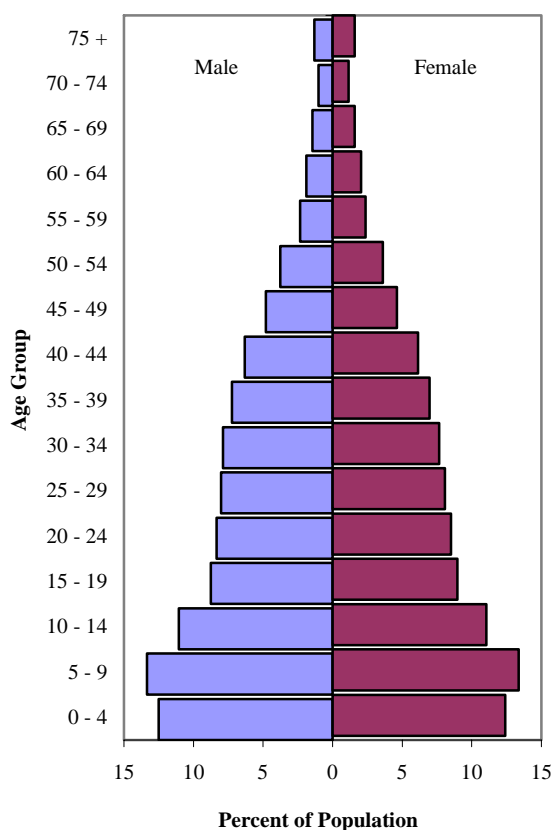
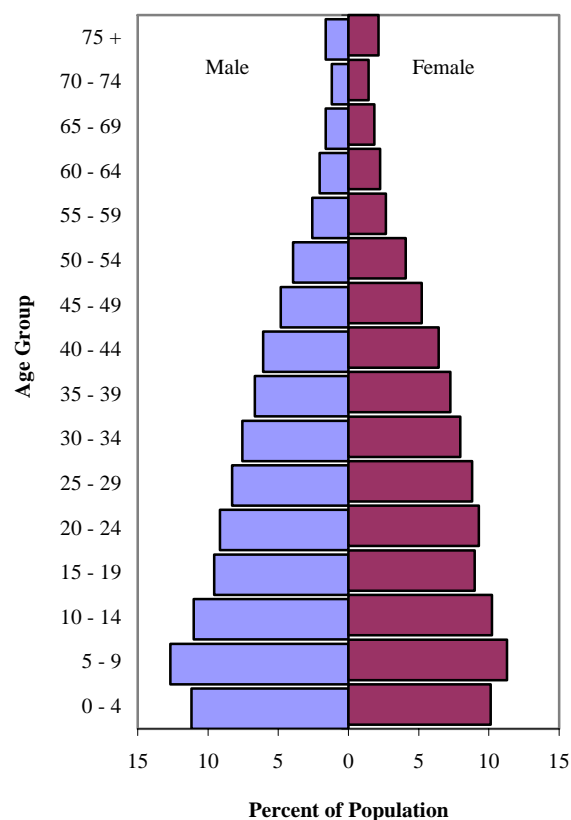


Fig. 2.13: Population of Guyana (Urban)
2002



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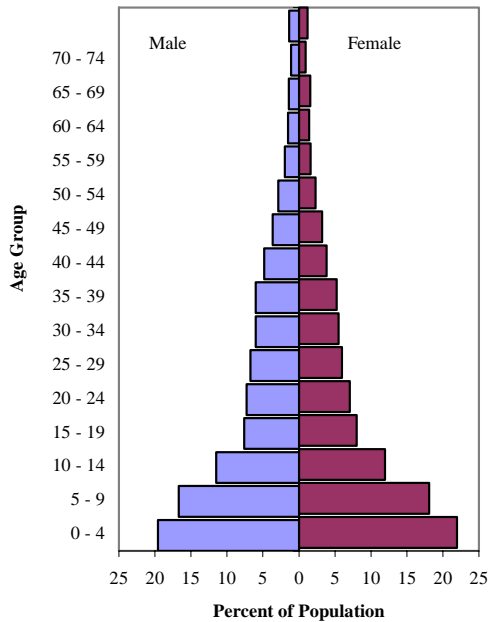
**Table 2.10: Population Distribution by Sex and Rural-Urban Sector,
Guyana: 2002**

Age Group	Rural			Urban		
	Males	Females	Total	Males	Females	Total
0-4	33,919	32,636	66,555	11,372	11,062	22,434
5-9	36,211	35,202	71,413	12,909	12,344	25,253
10-14	30,003	29,097	59,100	11,215	11,177	22,392
15 - 19	23,760	23,604	47,364	9,737	9,822	19,559
20 - 24	22,609	22,362	44,970	9,301	10,143	19,444
25 - 29	21,793	21,228	43,021	8,439	9,630	18,070
30 - 34	21,400	20,139	41,539	7,687	8,718	16,405
35 - 39	19,659	18,359	38,019	6,778	7,937	14,716
40 - 44	17,143	16,143	33,286	6,194	7,010	13,204
45 - 49	13,042	12,162	25,204	4,910	5,700	10,610
50 - 54	10,199	9,493	19,692	4,009	4,450	8,459
55 - 59	6,352	6,239	12,591	2,628	2,911	5,539
60 - 64	5,110	5,355	10,465	2,081	2,459	4,540
65 - 69	3,926	4,146	8,072	1,649	2,021	3,671
70 - 74	2,753	3,007	5,760	1,212	1,571	2,784
75 +	3,296	4,093	7,389	1,511	2,282	3,793
NS	1,630	1,304	2,934	1,596	1,382	2,978
Total	272,805	264,569	537,374	103,228	110,619	213,847
PERCENT						
0-4	12.4	12.3	12.4	11.0	10.0	10.5
5-9	13.3	13.3	13.3	12.5	11.2	11.8
10-14	11.0	11.0	11.0	10.9	10.1	10.5
15 - 19	8.7	8.9	8.8	9.4	8.9	9.1
20 - 24	8.3	8.5	8.4	9.0	9.2	9.1
25 - 29	8.0	8.0	8.0	8.2	8.7	8.4
30 - 34	7.8	7.6	7.7	7.4	7.9	7.7
35 - 39	7.2	6.9	7.1	6.6	7.2	6.9
40 - 44	6.3	6.1	6.2	6.0	6.3	6.2
45 - 49	4.8	4.6	4.7	4.8	5.2	5.0
50 - 54	3.7	3.6	3.7	3.9	4.0	4.0
55 - 59	2.3	2.4	2.3	2.5	2.6	2.6
60 - 64	1.9	2.0	1.9	2.0	2.2	2.1
65 - 69	1.4	1.6	1.5	1.6	1.8	1.7
70 - 74	1.0	1.1	1.1	1.2	1.4	1.3
75 +	1.2	1.5	1.4	1.5	2.1	1.8
NS	0.6	0.5	0.5	1.5	1.2	1.4
Total	50.8	49.2	100.0	48.3	51.7	100.0

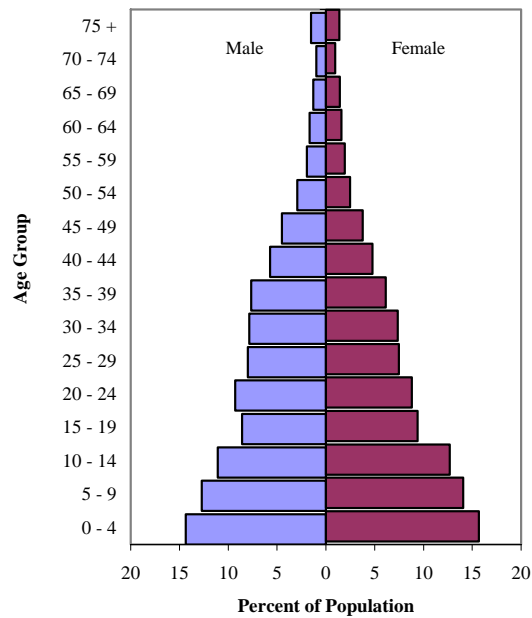
For the four regions however, the pattern is completely different. The population distribution for Regions 1 and 9 resemble that seen in 1980 with steep sides from the 15-19 until the 50-54 age groups (see also Appendix B.2.3). It is evident that young people are not remaining in these regions and appear to be leaving as soon they are finished secondary school. Once again, as noted earlier in the analysis, movers seem to be predominantly female.

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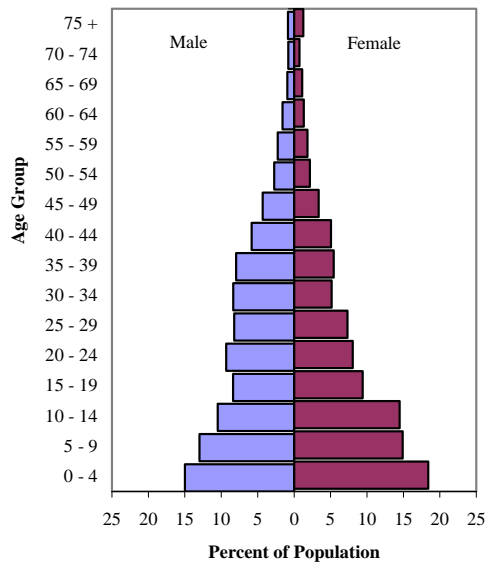
**Fig. 2.14: Population Distribution (Region 1)
Guyana: 2002**



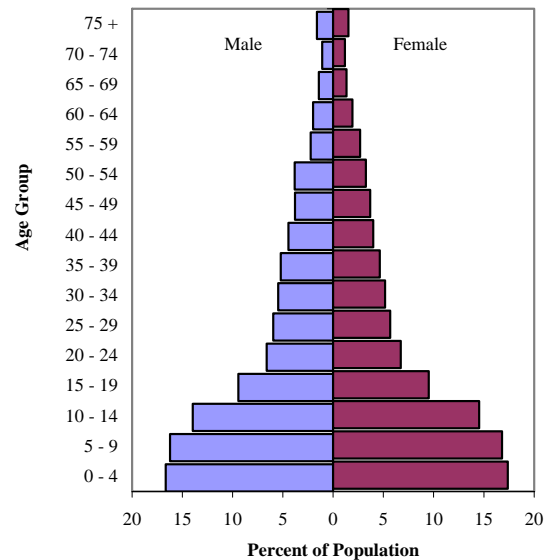
**Fig. 2.15: Population Distribution (Region 7)
Guyana: 2002**



**Fig. 2.16: Population Distribution (Region 8)
Guyana: 2002**



**Fig. 2.17: Population Distribution (Region 9)
Guyana: 2002**



Regions 7 and 8 show a slightly different pattern, with further differences observed for males and females. It is clear that males are moving into these regions, while females are moving out. For Regions 7 and 8, women in the 15-19 to 30-34 age groups appear to be movers, with older women remaining. There is some indication, however, that while men aged 20 and over are

moving in, younger women are moving out. The bases of the pyramids are also different from that of the general population in that the numbers in the 0-4 age-group are not less than those in the 5-9 ages. This is a clear sign of growing populations in these regions. However, the detailed pattern of the internal migration is shown in chapter 3.

2.3.3 Age Dependency

The age dependency ratio is an indicator of the percentage of persons in the dependent ages (under 15 years and over 64 years) in relation to those in the main working age groups (15-64 years) in the population. Age dependency ratios for the population of Guyana are shown in Table 2.11 below. The distribution shows that, on average, every 100 persons 15-64 years in 1980 were 'carrying' 81 'dependents' in the 0-14 and 65 and older age groups.

In 2002 this ratio has dropped to 67 dependent persons, implying that there were more people in the main working ages than those in the dependent ages. In a scenario of full employment, it can be assumed that the needs of persons in the dependent ages (for education, pensions etc.) could be adequately met from the contributions of the workers. It is known, however, that only a little more than one-half of the persons of working age participate in the labour force and out of this number, several are unemployed. The use of dependency ratios as a development analysis tool or indicator, therefore, has to be understood within this context.

Table 2.11: Age Dependency Ratio, Guyana: 1980 - 2002

Year	Ratio		
	Male	Female	Both
1980	82	80	81
1991	64	64	64
2002	67	66	67

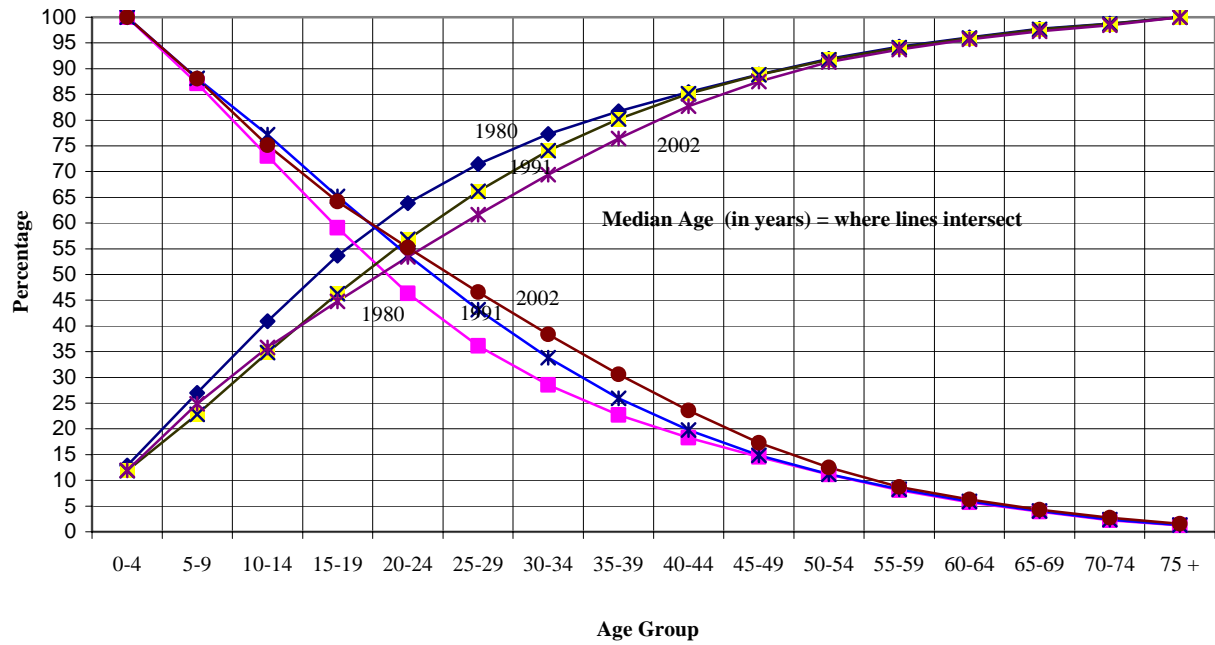
Median Age: The median age of the population is another indicator of the size of the young dependent population. The median age divides the population into two equal-sized groups, one which is younger and, the other, older than the median. It corresponds to the 50-percentile mark in the distribution. The computed median age of the population is shown in Table 2.12 and illustrated in Figure 2.18 for the past three census years. These results show that the population is gradually maturing. Fifty percent of the population was below 18.6 years in 1980; this number steadily increased to 21.8 years in 1991 and to 22.9 years in 2002, respectively. The low median age and the subsequent small increase decennially represent the level of age maturity of the population, and as such, the population can still be described as young with many dependant children, but maturing gradually.

Table 2.12: Median Age in years, Guyana: 1980 - 2002

Year	Male	Female	Total
1980	18.4	18.8	18.6
1991	21.6	21.9	21.8
2002	22.6	23.2	22.9

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Fig. 2.18: Median Age of the Population
Guyana: 1980-2002



CHAPTER 3:

POPULATION REDISTRIBUTION AND INTERNAL MIGRATION

When the size of population changes, three main factors are taken into account; first, whether the fertility rate was high, constant or low, secondly, whether the mortality pattern has also remained high, constant or reduced against whatever level of fertility, and thirdly, the pattern of net migration across the country.

One of the objectives of the 2002 census was to indicate any change in the pattern of the population distribution since the 1991 census. In furtherance of this objective, the components of these changes as stated are examined separately, in order to determine their effects on the growth of the population.

Earlier in Chapter 1, we presented the census survival ratio to support the effect of emigration on the size of the population as migration seems to be the major determinant in the decline of the population, and in chapter 4, we shall deal with the dynamics of the change regarding fertility and mortality. However, the emigration level was at the national level and doesn't explain the extent to which internal population mobility gives rise to the structural changes within the various administrative regions; thus we consider the spatial redistribution of the population in this chapter.

3.1 Regional Distribution of the Population

The pattern of the population distribution across the country, as presented in Table 1.7 for 2002 only, is further examined by ranking the population size for the three recent censuses in ascending order, that is, the region with the largest population is assigned the rank of 1, the next is ranked 2, and so on. The data confirms that the pattern and trends of the population had remained relatively constant in the past two decades, except for slight changes observed in Regions 7 and 9 (see Table 3.1).

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**Table 3.1: Ranking of Population Size,
Guyana: (1980-2002)**

Region	Ranking		
	1980	1991	2002
Region 1	7	7	7
Region 2	5	5	5
Region 3	3	3	3
Region 4	1	1	1
Region 5	4	4	4
Region 6	2	2	2
Region 7	8	9	9
Region 8	10	10	10
Region 9	9	8	8
Region 10	6	6	6

Note: Highest rank 1, second highest 2, etc.

The main areas of population concentration have not changed over the decades, although some of the sparsely populated regions have begun to grow (see Table 3.2). Region 4, where the capital city – Georgetown is located, has over 40 percent of the population and Regions 3 and 6 combined, have another 30 percent. The population of Region 8, though small, however, has risen sharply – more than doubling its size, from 4,485 in 1980 to 10,095 in 2002.

Table 3.2: Regional Distribution of the Population, Guyana: 1980 - 2002

Region	1980		1991		2002	
	Population	Percent	Population	Percent	Population	Percent
Region 1	18,329	2.4	18,428	2.5	24,275	3.2
Region 2	42,341	5.6	43,455	6.0	49,253	6.6
Region 3	104,750	13.8	95,975	13.3	103,061	13.7
Region 4	317,475	41.8	296,924	41.0	310,320	41.3
Region 5	53,898	7.1	51,280	7.1	52,428	7.0
Region 6	152,386	20.1	142,541	19.7	123,695	16.5
Region 7	14,390	1.9	14,790	2.0	17,597	2.3
Region 8	4,485	0.6	5,615	0.8	10,095	1.3
Region 9	12,873	1.7	15,057	2.1	19,387	2.6
Region 10	38,641	5.1	39,608	5.5	41,112	5.5
Total	759,568	100	723,673	100	751,223	100

The four main hinterland Regions (1, 7, 8 and 9), though covering nearly three-quarters of the total land area of the country, are sparsely populated and are home to less than 10 percent of the population.

3.2 Regional Growth Rates

Average annual rates of growth for the regions are shown in Table 3.3. Between 1991 and 2002, all regions have shown positive growth, except for Region 6. This result is different from that of the 1991 census, which showed negative growth in Regions 3, 4, 5 and 6.

The greatest increase has been for Region 8 (5.2 percent per annum), followed by Regions 1 and 9 – growing at rates of 2.4 and 2.2 percent, respectively. Populations in Regions 1 and 9 increased by approximately 32.0 percent and 29.0 percent respectively, between 1991 and 2002 (see Table 3.2). The populations of Regions 2, 7 and 10 rose as well during the same period, though modestly, when compared to the other regions.

The sharp increase in the population and growth rates for Region 8 could be explained by the increased mining and quarrying activities being carried out there and the resultant push of workers to those areas from across the country as well as high birth rate (see fertility pattern in chapter 4).

Table 3.3: Regional Population Growth Rates, Guyana: 1980 - 2002

Region	1980-1991	1991-2002
Region 1	0.05	2.43
Region 2	0.24	1.10
Region 3	-0.80	0.63
Region 4	-0.61	0.39
Region 5	-0.45	0.20
Region 6	-0.61	-1.25
Region 7	0.25	1.53
Region 8	2.04	5.17
Region 9	1.42	2.23
Region 10	0.22	0.33
Total	-0.44	0.33

3.3 Population Density

Guyana stretches over a landmass of 214,999 square kilometers or about 83,000 square miles. On average, the population density has remained constant (between 3.4 to 3.5 persons) per square kilometer from 1980 to 2002 (see Table 3.4). In reality, however, large parts of the country are still uninhabited or have a very scattered population, mainly in the hinterland areas. In contrast, there are some areas of high population concentration along the narrow coastal belt which is about 10 to 40 miles in width, and consists of about 4 percent of the total land area.

Table 3.4: Population Density, Guyana: 1980 - 2002

Region	Area (sq km)	Population			Density (population per sq km)		
		1980	1991	2002	1980	1991	2002
Region 1	20,339	18,329	18,428	24,275	0.9	0.9	1.2
Region 2	6,195	42,341	43,455	49,253	6.8	7.0	8.0
Region 3	3,755	104,750	95,975	103,061	27.9	25.6	27.4
Region 4	2,232	317,475	296,924	310,320	142.2	133.0	139.0
Region 5	4,190	53,898	51,280	52,428	12.9	12.2	12.5
Region 6	36,234	152,386	142,541	123,695	4.2	3.9	3.4
Region 7	47,213	14,390	14,790	17,597	0.3	0.3	0.4
Region 8	20,051	4,485	5,615	10,095	0.2	0.3	0.5
Region 9	57,750	12,873	15,057	19,387	0.2	0.3	0.3
Region 10	17,040	38,641	39,608	41,112	2.3	2.3	2.4
Total	214,999	759,567	723,673	751,223	3.5	3.4	3.5

Regional Population Density: Region 4 (where the capital city is located) has the highest population density, with 139 persons per square kilometer. Region 4 alone has about 41.3 percent of the population, but occupies only 1 percent of the land area. Next in rank are Regions 3, (27 per sq. km), Region 5 (13 per sq. km) and Region 6 (3 per sq. km). Regions 1, 7, 8 and 9 occupy about 68 percent of the land mass but are sparsely populated (see Table 3.4 and Figure 3.1). As shown in the Table, there have been no pronounced changes in the pattern of the population density from 1980 to 2002.

3.4 Internal Migration

In Guyana, an internal migrant is defined as someone who changes his or her region of usual residence, at least for the purpose of remaining, so that the region of destination becomes the region of usual residence. On the basis of the responses to place-of-birth questions in the 2002 census questionnaires, the streams of migration are put into categories such as:

- Migrants or persons who were enumerated in a place different from the place where they were born; and
- Non-migrants, defined as persons who were enumerated in a place where they were born.

3.4.1 Inter-regional migration

Table 3.5 shows the birth-place data cross-classified by the regions of enumeration and birth. Taking Region 4 as an example, the Table shows that Region 4 had a total of 49,849 lifetime migrants, that is, the row total of Region 4 (299,728) minus the figure in the diagonal cell. Of these lifetime migrants to Region 4, 13,963 were born in Region 3, 10,763 in Region 6, 6,822 in Region 2, 6,304 in Region 5, etc. Region 8 contributed the least number of migrants to the size of the population in Region 4, about 418 persons. Similarly, Region 4 had a total of 21,610 lifetime migrants, that is, the column total of Region 4 (271,489) minus the migrants. Also of the migrants, 7,746 were living in Region 3, 3,919 in Region 10, 3,877 in Region 6, etc. The

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highlighted figures in the diagonal cells of the Table give the number of lifetime migrants for each administrative region in 2002.

Table 3.5: Population Classified by Region of Birth and Region of Enumeration, Guyana: 2002

Enumeration Region	Region of Birth										Total
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	
Region 1	21,821	509	126	469	66	64	52	26	36	78	23,247
Region 2	1,091	43,916	1,302	1,099	95	221	299	28	29	123	48,203
Region 3	1,057	3,233	85,661	7,746	636	1,234	851	106	146	703	101,373
Region 4	3,755	6,822	13,963	249,879	6,304	10,763	2,211	418	757	4,856	299,728
Region 5	123	188	543	2,937	45,191	2,241	75	18	44	508	51,868
Region 6	256	414	1,008	3,877	2,704	111,131	148	80	124	910	120,652
Region 7	367	710	586	819	72	207	13,150	85	75	203	16,274
Region 8	116	176	129	419	93	104	166	7,971	255	186	9,615
Region 9	103	65	51	326	42	69	90	80	17,846	51	18,723
Region 10	399	796	1,051	3,919	1,297	2,085	332	85	101	29,306	39,371
Total	29,088	56,829	104,420	271,490	56,500	128,119	17,374	8,897	19,413	36,924	729,054

Note: Institutional population (7,403 persons) and No-Contact persons (5,505) are not included

The percentage distribution of figures in Table 3.5 is further categorized into two, namely:

- percent of migrants by region of birth, and
- percent of migrants by region of enumeration

Percent of Migrants by Region of Birth: The first category is given in Table 3.6 and considers non-migrants as a percentage of the total native-born resident population (non-migrants plus in-migrants or total population in a region). Except for Region 10 in 2002, where non-migrants represent about 74.4 percent of the native-born population of that region, the proportion of non-migrants was more than 80 percent in the remaining regions. For instance, non-migrants, as compared to the resident population, comprise about 95 percent of those living in Region 9, 94 percent in Region 1, 92 percent in Region 6, 91 percent in Region 2, etc. This implies that Region 10 lost more of its native-born population to other regions, and approximately, 10 percent of this went to Region 4, 5.3 percent to Region 6, etc.

Table 3.6: Percent Distribution of Migrants by Region of Birth, Guyana: 2002

Enumeration Region	Region of Birth										Total
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	
Region 1	93.9	2.2	0.5	2.0	0.3	0.3	0.2	0.1	0.2	0.3	100
Region 2	2.3	91.1	2.7	2.3	0.2	0.5	0.6	0.1	0.1	0.3	100
Region 3	1.0	3.2	84.5	7.6	0.6	1.2	0.8	0.1	0.1	0.7	100
Region 4	1.3	2.3	4.7	83.4	2.1	3.6	0.7	0.1	0.3	1.6	100
Region 5	0.2	0.4	1.0	5.7	87.1	4.3	0.1	0.0	0.1	1.0	100
Region 6	0.2	0.3	0.8	3.2	2.2	92.1	0.1	0.1	0.1	0.8	100
Region 7	2.3	4.4	3.6	5.0	0.4	1.3	80.8	0.5	0.5	1.2	100
Region 8	1.2	1.8	1.3	4.4	1.0	1.1	1.7	82.9	2.7	1.9	100
Region 9	0.6	0.3	0.3	1.7	0.2	0.4	0.5	0.4	95.3	0.3	100
Region 10	1.0	2.0	2.7	10.0	3.3	5.3	0.8	0.2	0.3	74.4	100
Total	4.0	7.8	14.3	37.2	7.7	17.6	2.4	1.2	2.7	5.1	100

Note: Calculated from Table 3.5 (highlighted figures in the diagonal cells are percent of non-migrants).

Percent of Migrants by Region of Enumeration: The second dimension of the analysis is given in Table 3.7 and seems slightly different when non-migrants are considered as a percentage of the total native-born population in a region (all native-born population in a region whether residing there or not). More citizens from Regions 1, 7, 2 and 10 were enumerated outside of their regions. Non-migrants in those regions comprised 75, 76, 77 and 79 percent, respectively, compared to 92 percent in Regions 4 and 9 separately, and 87 percent and 90 percent in Regions 6 and 8.

As expected, Region 4, being the region of the capital city, seems to be the more favourite area and has become the chief migration destination area in the country. For instance, about 13 percent of those born in Regions 1, 3, 7 and 10 are there respectively, followed by Regions 2 (12 percent) and Region 5 (11 percent), (see Table 3.7). Only Regions 8 and 9 seem to have a small proportion of their citizens residing in Region 4. The migration to Region 4 is not a strange phenomenon because the concentration of economic, educational and political institutions in Region 4 attracted migrants from other regions.

There is no one clear answer to the relatively high proportions of non-migrants in Regions 8 and 9 as compared to others. It could be that the Amerindians, who form the majority there, are less mobile, or the inaccessibility of these two regions may account for the reduced probability of the citizens moving, or they are attracted by the mining and quarrying activities being carried out there and decided to remain (see Table 3.7).

Table 3.7: Percent Distribution of Migrants by Region of Enumeration, Guyana: 2002

Enumeration Region	Region of Birth										Total
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	
Region 1	75.0	0.9	0.1	0.2	0.1	0.1	0.3	0.3	0.2	0.2	3.2
Region 2	3.7	77.3	1.2	0.4	0.2	0.2	1.7	0.3	0.1	0.3	6.6
Region 3	3.6	5.7	82.0	2.9	1.1	1.0	4.9	1.2	0.8	1.9	13.9
Region 4	12.9	12.0	13.4	92.0	11.2	8.4	12.7	4.7	3.9	13.2	41.1
Region 5	0.4	0.3	0.5	1.1	80.0	1.7	0.4	0.2	0.2	1.4	7.1
Region 6	0.9	0.7	1.0	1.4	4.8	86.7	0.9	0.9	0.6	2.5	16.5
Region 7	1.3	1.2	0.6	0.3	0.1	0.2	75.7	1.0	0.4	0.5	2.2
Region 8	0.4	0.3	0.1	0.2	0.2	0.1	1.0	89.6	1.3	0.5	1.3
Region 9	0.4	0.1	0.0	0.1	0.1	0.1	0.5	0.9	91.9	0.1	2.6
Region 10	1.4	1.4	1.0	1.4	2.3	1.6	1.9	1.0	0.5	79.4	5.4
Total	100	100	100	100	100	100	100	100	100	100	100

Note: Calculated from Table 3.5 (highlighted figures in diagonal cells are percent of non-migrants)

Also, as indicated in Table 3.8, only Regions 4, 8 and 10 had lifetime net gains respectively, that is, the number of lifetime in-migrants in those regions exceeds the number of out-migrants. For example, the number of lifetime in-migrants to Region 4 exceeded the number of lifetime out-migrants by 28,939, in Region 8 by 718, and in Region 10, by 2,448. The migratory exchanges (see Tables 3.5, 3.6 & 3.8) at all levels confirm that the three regions were migration destination areas whereas the rest were mainly sending regions.

The summary of the analogy is given in Table 3.8 and shows the numbers of in- and out-migrants, the amount of net migration, the origin and destination of each stream of the migration to and from across the regions, and the net balance for each of the streams. Accordingly, the lifetime migrants for the whole country commonly referred to as inter-regional migration, numbered 103,191 in 2002, and were 14.2 percent of the native-born population (see Tables 3.8 and 3.9).

The sum of the net lifetime gains or net lifetime losses measures the population redistribution due to lifetime migration for the entire country. These rates are shown in Table 3.9 which was obtained after summing all the net lifetime gains or net lifetime losses in Table 3.8 and dividing it by the total of native born population in 2002. As such, the amount of lifetime migration, which accounts for the population redistribution in 2002, was 31,405 or 4.3 percent of the total population.

Note that the sum of the net balances for all areas is zero, because the total sum of lifetime in-migrants for all the area units in the country is equal to the sum total of lifetime out-migrants, in that, each in-migrant to an area is an out-migrant from some area.

Table 3.8: Lifetime In-Migrants by Region of Origin/Birth, Out-Migrants by Region of Destination and Net Lifetime Streams of Migration and Migration Turn-Over, Guyana: 2002

Region	Lifetime in-migrants		Lifetime out-migrants		Net lifetime migrants		Migration Turn-over	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Region 1	1,426	6.1	7,267	25.0	-5,839	-18.8	8,693	37.4
Region 2	4,287	8.9	12,913	22.7	-8,626	-13.8	17,200	35.7
Region 3	15,712	15.5	18,759	18.0	-3,048	-2.5	34,471	34.0
Region 4	49,849	16.6	21,611	8.0	28,239	8.7	71,460	23.8
Region 5	6,677	12.9	11,309	20.0	-4,632	-7.1	17,986	34.7
Region 6	9,521	7.9	16,988	13.3	-7,467	-5.4	26,509	22.0
Region 7	3,124	19.2	4,224	24.3	-1,100	-5.1	7,348	45.2
Region 8	1,644	17.1	926	10.4	718	6.7	2,570	26.7
Region 9	877	4.7	1,567	8.1	-692	-3.4	2,444	13.1
Region 10	10,065	25.6	7,618	20.6	2,448	4.9	17,683	44.9
Total	103,182	14.2	103,182	14.2	0	0.0	206,364	28.3

Note: Calculated from Table 3.5

Table 3.9: Population Redistribution and Interregional Migration Rates, Guyana: 2002

Sex	Inter-regional migration		Redistribution	
	Number	Rate	Number	Rate
Male	47,919	13.2	13,937	3.8
Female	55,272	15.1	17,582	4.8
Both	103,191	14.2	31,519	4.3

3.4.2 Duration of Residence

Another approach to the measurement of internal migration is the duration migrants stay in one place or the length of time elapsed since the migrants left their places of origin. Persons who

have lived in the place of enumeration all their lives are treated as non-migrants and others as in-migrants. Also, persons who were born in a given area but subsequently moved out and then returned to it are treated as in-migrants or returned migrants. Here, by definition, duration-of-residence includes all persons who had ever migrated:

- Those born outside the area of the enumeration, and
- Those born in the area of enumeration that had at some time lived outside it (return migrants).

The importance of this type of analysis is that it furnishes useful information about recent migratory history of the area which may be needed by policy-makers in formulating strategies to curtail high influx of rural-urban migration which is deemed to create the problems of overcrowding in the urban area.

The population born outside of each region in Guyana in 2002 is classified by duration of residence in the region in which they were enumerated and indicated in Table 3.10 in two forms: as percentage of total in each duration, and as percentage of total in each region.

Percentage of Total in Each Duration: For Guyana as a whole, nearly 85 percent of the lifetime migrants moved to their destinations more than ten years ago. By the order of importance, 7 percent moved 5 and 9 years ago, 5 percent between 1 and 4 years ago and about 1 percent less than one year ago. Migrants for whom duration of residence was not reported, averaged 3.2 percent for the entire country (see Table 3.10).

Accordingly, the proportion of recent migrants, that is, those who moved less than one year before the census, was higher in Region 1 (1.5 percent) compared to 0.8 percent for the whole country. The pattern was nearly identical for the remaining regions, i.e., less than one percent.

The number of persons who reported the duration of their residence to be less than one year, though small for all the regions, is significant in that migrants seemed not to return to their area of origin once they arrive and settle in their area of destination. For instance, apart from Region 1, more than 80 percent of all lifetime migrants in the various regions had been there for more than ten years prior to the 2002 census.

Table 3.10A: Migrants Classified by Region of Enumeration and Duration of Residence, Guyana: 2002

A. Percentage of Total in Each Duration						
Region	All	< one yr	1-4 yrs	5-9 yrs	10 yrs +	NS
All Regions	100	0.8	4.5	6.9	84.6	3.2
Region 1	100	1.5	8.9	10.6	70.2	8.9
Region 2	100	0.9	5.4	9.6	81.9	2.1
Region 3	100	0.9	5.8	8.8	83.6	1.0
Region 4	100	0.8	3.6	6.1	84.6	4.9
Region 5	100	1.0	4.8	7.8	84.3	2.1
Region 6	100	0.9	5.3	7.5	85.5	0.7
Region 7	100	0.9	4.4	7.0	85.2	2.5
Region 8	100	0.8	4.7	5.1	87.8	1.6
Region 9	100	0.9	8.8	8.2	81.4	0.7
Region 10	100	0.6	4.6	5.4	88.3	1.0

Table 3.10B: Migrants Classified by Region of Enumeration and Duration of Residence, Guyana: 2002

B. Percentage of Total in Each Region						
Region	All	< one yr	1-4	5-9	10 +	NS
All Regions	100	100	100	100	100	100
Region 1	1.5	2.7	2.9	2.3	1.2	4.1
Region 2	4.1	4.6	5.0	5.7	4.0	2.8
Region 3	15.0	16.1	19.3	19.0	14.8	4.8
Region 4	49.0	45.6	39.2	43.3	49.0	75.5
Region 5	6.4	7.5	6.8	7.2	6.4	4.3
Region 6	9.0	9.8	10.7	9.9	9.1	2.1
Region 7	3.0	3.4	3.0	3.0	3.0	2.4
Region 8	1.6	1.6	1.6	1.1	1.6	0.8
Region 9	0.8	0.9	1.6	1.0	0.8	0.2
Region 10	9.6	7.7	9.8	7.5	10.0	3.1
Number	105,894	861	4,744	7,316	89,595	3,378

NS = not stated

Percentage of Total in Each Region: The distribution of migrants by duration of residence was not the same for all lifetime streams. For the entire country, 49 percent were found in Region 4 and 15 percent in Region 3 (see Table 3.10). As shown in Table 3.2, population size and level of urbanization seem to have positive correlation with lifetime migrants, indicating to a large extent that migration had played some important role in the growth of the cities in the past. For instance, Region 4 comprises a high proportion of migrants for all durations, followed by Regions 3, 6 and 10. These are Regions which have a large percentage of urban population.

Region 3 is just next to the capital city region where most workers commute to work on a daily basis. Besides, the new housing scheme located there may have attracted migrants from the city, Georgetown, even though the region ranks third in population size and, furthermore, has no urban towns.

3.4.3 Sex selectivity of Migration

Migration is selective on the basis of sex, age and other social and economic characteristics. This section examines sex differentials in the migratory process of Guyana in 2002. In the past, when males dominated the livelihood of the households, the male adult considered as head of the household moved first; followed by the wife and children, and other ageing members of the family.

The pattern of the population redistribution displayed in Table 3.11 indicates generally the reverse; the migration stream in the country is dominated by women. The numbers of in-and out-migrants, the amount of net migration, the origin and destination of each stream for males and females as presented in Table 3.11, support that. It reveals that the female lifetime migrants were 55,272 compared to 47,919 males, and interregional migration rates, derived separately, are 15.1 and 13.2 percent of the total female and male populations, with population redistribution rates of 4.8 and 3.8 percent (see Table 3.9). This finding disproves our assumption that the male sex dominates in migration.

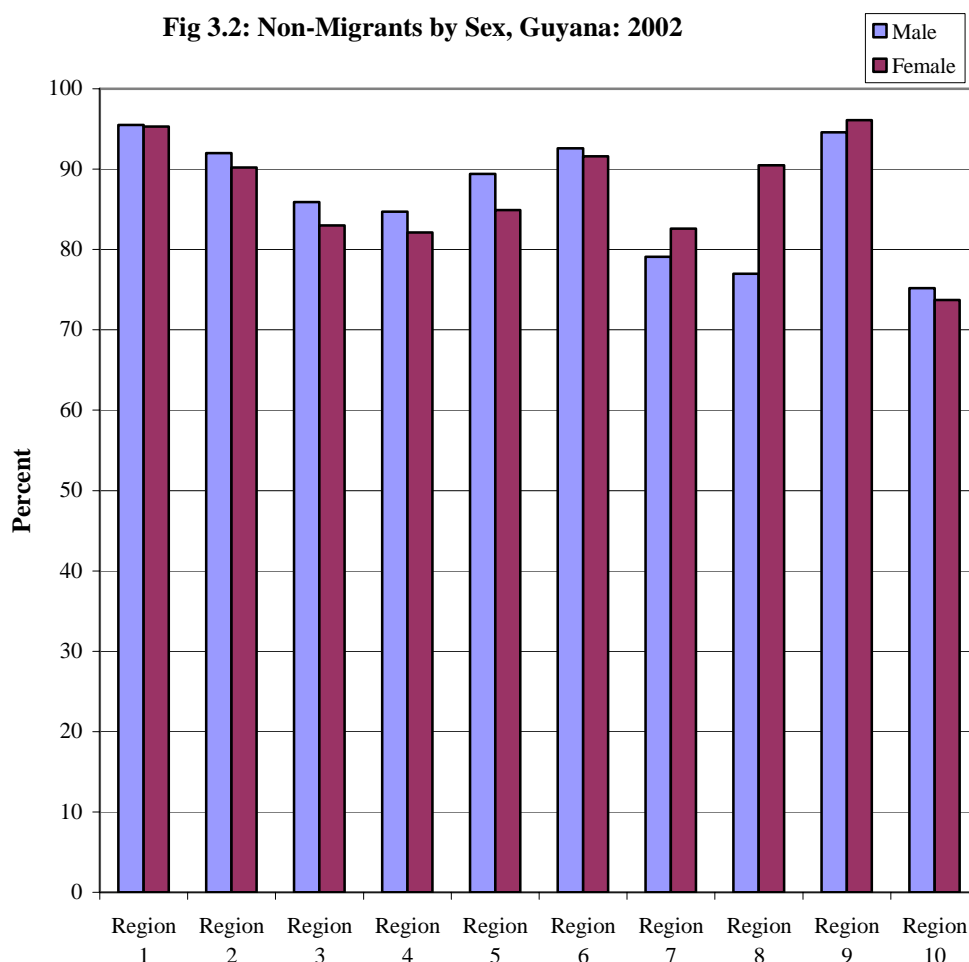
Table 3.11: Lifetime In-Migrants by Region of Origin/Birth, Out-Migrants by Region of Destination and Net Lifetime Streams of Migration and Migration Turn-Over, Guyana: 2002

Region	Lifetime in-migrants		Lifetime out-migrants		Net lifetime migrants		Migration Turn-over	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Male								
Region 1	902	7.5	3,301	22.9	-2,399	-15.4	4,203	35.0
Region 2	1,937	8.0	5,912	20.9	-3,975	-12.9	7,849	32.3
Region 3	7,183	14.1	8,527	16.3	-1,344	-2.2	15,710	30.8
Region 4	22,296	15.3	10,291	7.7	12,005	7.6	32,587	22.3
Region 5	2,750	10.6	5,187	18.3	-2,437	-7.7	7,937	30.6
Region 6	4,452	7.4	7,824	12.3	-3,372	-4.9	12,275	20.3
Region 7	1,757	20.9	1,886	22.0	-129	-1.2	3,643	43.2
Region 8	1,251	23.0	418	9.1	833	13.9	1,669	30.6
Region 9	523	5.4	805	8.1	-282	-2.7	1,328	13.8
Region 10	4,868	24.8	3,769	20.4	1,099	4.5	8,637	44.0
Total	47,919	13.2	47,920	13.2	0	0.0	95,838	26.4
Female								
Region 1	526	4.7	3,966	27.0	-3,440	-22.3	4,492	40.0
Region 2	2,350	9.8	7,002	24.5	-4,652	-14.7	9,352	39.1
Region 3	8,529	17.0	10,233	19.7	-1,704	-2.7	18,762	37.3
Region 4	27,553	17.9	11,319	8.2	16,234	9.7	38,872	25.3
Region 5	3,929	15.1	6,124	21.8	-2,195	-6.6	10,053	38.7
Region 6	5,071	8.4	9,166	14.2	-4,095	-5.8	14,237	23.6
Region 7	1,368	17.4	2,339	26.5	-971	-9.1	3,707	47.2
Region 8	394	9.5	509	11.9	-115	-2.4	904	21.7
Region 9	354	3.9	764	8.0	-410	-4.1	1,118	12.3
Region 10	5,199	26.3	3,851	20.9	1,348	5.4	9,049	45.8
Total	55,273	15.1	55,273	15.1	0		110,546	30.2

Like the females, Regions 4, 10 and 8 seem to attract the males. Male net balance of lifetime migration to those regions amounted to 12,005 net gains in Region 4, 1,100 in Region 10 and 833 in Region 8. On the whole, the migration turn-over for males was registered as 26.4 percent, less than the female counterpart, 30.2 percent (see Table 3.11).

There is no marginal difference in the pattern of male and female non-migrants. Across the regions, the proportions of non-migrants seem to be identical, except for Regions 8, 7 and 9 where females outnumbered the males among those who remained (see Figure 3.2).

Fig 3.2: Non-Migrants by Sex, Guyana: 2002



The net balance of lifetime migration of females between the ten administrative regions indicates gains for only two regions (Regions 4 and 10), which have urban cities. The remaining regions indicate net lifetime losses, as given in Table 3.11. The female net gains in Region 4 total 16,234 lifetime migrants. The preponderance of females in the migration process may be explained by the avocation of gender equality in the country, where women's traditional role mainly in home duties has been decreasing, and women are now competing with men in the work place. This is evidenced between 1980 and 2002, when the relative percentage increase in the number of employed women in 2002, exceeded the men by a wide margin (see Chapter VI Economic Activities).

CHAPTER 4: MORTALITY AND FERTILITY PATTERNS

The connections between child mortality and fertility are the root of many explanations of demographic transition and are important for population policy in less developed countries¹. In the child replacement hypothesis, high fertility is a necessary biological and behavioral response to high mortality and that parents try to replace children who die, and that couples aim to produce enough children to ensure the survival of some intended number to adulthood; in the argument that couples will not reduce their fertility until they are convinced infant mortality levels have dropped.²

One of the millennium development goals is to reduce the mortality rate among under-five year children by two-thirds between 1990 and 2015. Estimates derived from these indicators are relevant not only for demographic assessment of the population in Guyana, but also for evaluation of health policies and programmes. It is within this context that we present the levels and trends of infant and childhood mortality and fertility of the country in this chapter.

Before embarking on an examination of the data, we should bear in mind that the calculation of these parameters (fertility and mortality rates) from census data sometimes suffers from some inherent difficulty. To obtain robust estimates of these parameters, we have avoided using the direct method, because of omission of some children due to memory lapse on the part of older women in stating their fertility information or overstating by including grand children when asked to state their children ever born.

4.1 Infant and Childhood Mortality

This sub-section is intended to estimate infant and childhood mortality rates using the indirect technique commonly known as Brass P/F Ratio³. This method was developed to derive robust estimates of infant and child mortality rates because death registrations for many developing countries are incomplete at most, either for failure to cover the entire geographic regions and/or failure to register all vital events in the established area. Such under registrations are more severe for children than adults. As such, information provided by childbearing women aged 15-49 years on their fertility history of children ever born and children surviving in a survey or census, can be used to estimate infant and childhood mortality rates using Trussell Variant⁴ developed from the original Brass's P/F Ratio method.

¹ Kenneth I. Wolpin, An Estimable Dynamic Stochastic Model of Fertility and Child Mortality (Online Publication available at <http://links.jstor.org/sici?sici=0002>)

² Susan C. M. Scrimshaw, Infant Mortality and Behavior in the Regulation of Family Size (Online Publication available at <http://links.jstor.org/sici?sici=0098->

³ United Nations (1983) Manual X Indirect Techniques for Demographic Estimation, UN Publication, Population studies, No. 81 (P. 73)

http://www.un.org/esa/population/publications/Manual_X/Manual_X_Chapter_3.pdf

⁴ Ibid (P.77)

The main objectives of the section are as follows:

- **Estimate infant mortality:** the probability of dying during the first year of life;
- **Estimate child mortality:** the probability of dying between the first and the fifth birthday; and
- **Estimate under-five mortality:** the probability of dying before the fifth birthday.

As mentioned, Trussell Variant conforming to the West model mortality life table which is believed to be similar to the child mortality pattern in Guyana was selected and used to estimate the ratio of probability of dying, to the proportion of children dead. The infant and under-five mortality rates are expressed per 1,000 live births while the child mortality rate is expressed as deaths per 1,000 children surviving to the first birthday.

4.1.1 Assessment of Children Ever Born Data

The mean number of children ever born and the proportion dead, classified by current age of childbearing women aged 15 to 49 years, used to estimate the mortality level among children, are given in Table 4.1. The average parities (CEB) for all regions and the country as a whole follow an expected pattern, for instance, gradually rising from the least for 15-19 years old women, to the highest, for the women in their terminal age group of childbearing. The only deviation was Region 8, where average parity for age group 40-44 was slightly higher than 45-49 years. This is somewhat suspicious and may be due to the omission of some children ever born on account of memory lapse by 45-49 years old women. Apart from this, there was no region where the preceding average parity was reported higher than the succeeding one, thus suggesting that the quality of the data was fairly good.

Besides, the proportions of dead children gradually increase with the age of the mother except young women aged 15-19 years. This age group shows a higher proportion of dead children than the succeeding age group.

Obviously, many researches have shown a strong relationship between patterns of fertility and children's survival risk. The findings proved that the risk of death in early childhood increases among children born to mothers who are too young or too old⁵. As such, the proportion of dead children for young women 15-19 is always out of line, probably because of the stated reasons. Because this pattern is observed to be similar to the experience of the Guyanese women, the information provided by women aged 20-24 years is deemed appropriate and has been used as a correction factor in this estimation.

⁵ United Nations (1983) Manual X Indirect Techniques for Demographic Estimation, UN publication, Population studies, No. 81 (P.81) http://www.un.org/esa/population/publications/Manual_X/Manual_X_Chapter_3.pdf

Table 4.1: Mean Number of Children Ever Born (CEB) and Proportion Dead by Current Age of Mothers, and Number of Women Who Gave the Parities by Region, Guyana: 2002

Current age	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Guyana Total
Mean Number of Children Ever Born (CEB)											
15 - 19	0.5904	0.1854	0.1781	0.1525	0.1967	0.1854	0.2913	0.3980	0.2901	0.1686	0.1891
20 - 24	2.1186	1.2270	0.9788	0.8698	1.0625	1.0930	1.3778	1.5954	1.6571	1.0011	1.0265
25 - 29	3.6027	2.2911	1.8934	1.7002	2.0111	2.0030	2.3731	3.1338	3.1742	1.9755	1.9383
30 - 34	4.7537	2.9294	2.5081	2.3237	2.8070	2.5154	3.4486	4.4091	4.7464	2.7589	2.6076
35 - 39	5.7824	3.4958	2.8789	2.7285	3.1720	2.8927	4.2581	5.2436	5.8522	3.4415	3.0644
40 - 44	6.4296	3.6912	3.1142	2.9784	3.3363	2.9889	4.5881	6.0731	6.5054	3.7241	3.2860
45 - 49	6.6389	4.0973	3.3504	3.2417	3.6473	3.3939	5.3987	5.8542	6.8980	4.1321	3.6027
Proportion Dead											
15 - 19	0.0605	0.0573	0.0357	0.0425	0.0711	0.0515	0.0597	0.0833	0.0661	0.0669	0.0514
20 - 24	0.0650	0.0408	0.0294	0.0485	0.0481	0.0506	0.0722	0.0344	0.0366	0.0330	0.0459
25 - 29	0.0752	0.0427	0.0349	0.0542	0.0453	0.0511	0.0453	0.0630	0.0597	0.0457	0.0502
30 - 34	0.0888	0.0448	0.0456	0.0477	0.0520	0.0550	0.0645	0.0979	0.0727	0.0583	0.0528
35 - 39	0.0998	0.0580	0.0528	0.0600	0.0597	0.0648	0.0721	0.0668	0.0797	0.0667	0.0627
40 - 44	0.1373	0.0718	0.0647	0.0720	0.0702	0.0677	0.0858	0.1135	0.1157	0.0731	0.0751
45 - 49	0.1636	0.0975	0.0847	0.0888	0.0778	0.0806	0.1241	0.1400	0.1429	0.0885	0.0933
Number of Women											
15 - 19	896	2,260	4,558	13,734	2,288	5,232	690	392	886	1,862	32,798
20 - 24	784	1,899	4,379	14,276	2,193	5,077	704	346	627	1,785	32,070
25 - 29	657	1,697	4,251	13,924	2,063	4,950	595	314	528	1,551	30,530
30 - 34	609	1,714	4,133	12,503	1,953	4,810	593	220	481	1,547	28,563
35 - 39	579	1,656	3,790	11,198	1,744	4,632	492	234	433	1,273	26,031
40 - 44	426	1,480	3,362	9,983	1,585	3,971	386	219	372	1,138	22,922
45 - 49	360	1,079	2,463	8,046	1,188	2,909	306	144	343	848	17,686
Total	4,311	11,785	26,936	83,664	13,014	31,581	3,766	1,869	3,670	10,004	190,600

4.1.2 Early childhood mortality

The estimates of mortality among children are shown in Table 4.2. The plausible estimates of infant and under-five mortality rates for Guyana are 54 and 52 per 1,000 live births respectively, while that of child mortality is 49 per 1,000 children surviving to the first birthday at the national level.

Table 4.2 also shows some regional differences of mortality in Guyana. Infant mortality ranges from as low as 37 deaths per 1,000 live births in Region 3 to as high as 74 in Region 5. Other regions with slight as higher infant deaths include Regions 10, 9 and 8 with nearly 70 deaths per 1,000 live births, respectively.

**Table 4.2: Infant and Childhood Mortality Rates,
Guyana: 2002**

Probabilities of infant and child death (Rate Per 1,000)				
Region	Infant mortality rate (${}_1q_0$)	Infant mortality rate (${}_2q_0$)	Child mortality rate (${}_4q_1$)	Under- five mortality rate (${}_5q_0$)
Region 1	51	62	72	88
Region 2	65	42	41	44
Region 3	37	30	34	45
Region 4	45	50	53	47
Region 5	74	49	44	51
Region 6	57	52	49	54
Region 7	61	71	43	63
Region 8	71	34	62	99
Region 9	71	37	58	72
Region 10	72	34	45	59
Guyana Total	54	47	49	52

For under-five mortality, only Regions 2, 3 and 4 recorded low rates, around 45 deaths per 1,000 live births, whereas other regions have higher rates ranging from 51 deaths per 1,000 live births in Region 5 to 88 and 99 deaths also per 1,000 live births in Regions 1 and 8. Early childhood deaths were high in Regions 1 and 8, 72 and 62 deaths respectively, per 1,000 children surviving to the fifth birthday, compared to 34 child deaths per 1,000 in Region 3.

4.1.3 Time Reference Period

Since mortality is not likely to have remained constant in Guyana until September 15, 2002, it is necessary to know the time reference period to which the probabilities of dying shown in column 4 of Table 4.3 refer. The values of the time reference period imply that the estimates of $q_{(1)}$, $q_{(2)}$, $q_{(3)}$ and $q_{(5)}$ refer to mortality conditions prevalent in Guyana approximately one year, two and one-half years, four and one-half years, and seven years respectively before the census date. By this approach, the reference-date for the estimated infant, child and under-five mortality rates for the entire country are taken as 2001.6, 1998.1 and 1995.6 respectively. The reference date is calculated by subtracting the time reference period (t_x) from the average date of the census, that is, t_x from 2002.7 or September 15, 2002. The complete sets of the time reference period and reference date corresponding to each condition of child mortalities are given in columns 4 and 5 of Table 4.3.

Table 4.3: Estimates of Reference Period and Date to Which the Estimated Probabilities of Dying Refer, Guyana: 2002

Age Group	Age of Child	Parameter Estimate	Dying		
			Probabilities (${}_nq_x$)	Reference Period (tx)	Reference Date
(1)	(2)	(3)	(4)	(5)	(6)
15-19	1	q(1)	0.05394	1.06	2001.6
20-24	2	q(2)	0.04667	2.49	2000.2
25-29	3	q(3)	0.04896	4.59	1998.1
30-34	5	q(5)	0.05223	7.07	1995.6
35-39	10	q(10)	0.06319	9.78	1992.9
40-44	15	q(15)	0.07472	12.60	1990.1
45-49	20	q(20)	0.09212	15.51	1987.2

Note: Census Date Was September 15, 2002

4.1.4 Mortality Level

One way to determine whether child mortality has been falling in Guyana prior to the census date, is to convert the estimates of the probabilities of child deaths presented in Table 4.3 into mortality levels in the Coale-Demeny system, with the view of comparing them with the age pattern of the models.

Table 4.4 shows the mortality levels corresponding to child's survival probabilities reflected in column 5. These levels were derived from the West model life table by interpolating between the estimates and the model's survivorship values found in Table 238, Annex VIII, of the United Nations Manual X¹⁹.

Table 4.4: Estimates of Mortality Level Corresponding to Child's Survivorship Probabilities and Reference Period, by Age Group of Mothers, Model West: Guyana, 2002

Age Group	Age of Child	Parameter Estimate	Reference Period	Survival Ratios	West Model Level
			t_x	${}_np_x$	
(1)	(2)	(3)	(4)	(5)	(6)
15-19	1	q(1)	1.06	0.94606	19.3
20-24	2	q(2)	2.49	0.95333	20.5
25-29	3	q(3)	4.59	0.95104	20.5
30-34	5	q(5)	7.07	0.94777	20.5
35-39	10	q(10)	9.78	0.93681	20.1
40-44	15	q(15)	12.60	0.92528	19.6
45-49	20	q(20)	15.51	0.90788	19.2

By viewing the levels bracketing the estimated child survivorship probabilities (${}_np_x$), and in conjunction with the reference period, it can be concluded that child mortality was relatively constant for the past seven years prior to the September 15, 2002 census. But, beyond this reference period, however, the remaining estimates of the level decline steadily as the age of the

¹⁹ United Nations (1983) Manual X Indirect Techniques for Demographic Estimation, UN publication, Population Studies, No. 81 (P.271)

mother rises, suggesting strongly that child mortality has been falling. The only deviation is the estimate of $q_{(1)}$, which implies relatively high mortality. This, accordingly, had been noted to be associated with low levels in the Coale-Demeny models²⁰. These estimates, as shown in Tables 4.3 and 4.4, can be used to determine the trends of child mortality through time in Guyana. For instance, the child mortality conditions improving gradually from one period to another, the survivorship probability was 90.8 percent, approximately sixteen years before the census, and improving to 93.7 and 95.3 percent respectively, nearly ten years and three years accordingly, before the average date of the census (see columns 4 and 5 of Table 4.4).

4.2 Fertility

The measurement of fertility levels and trends is a major objective of this sub-section. In the census, data were collected from each woman between 15-49 years about whether they gave birth to live baby boy or girl during the past twelve months preceding the census. This information, as provided, had been used to derive the current fertility level which includes total fertility rate, general fertility rate, crude birth rate, and gross and net reproduction rates for the country. Such demographic estimates are necessary because they help to evaluate and monitor the impact of health programmes on the population and other socio-economic indicators of Guyana.

4.2.1 Current Fertility

Total fertility rate (TFR) and its corresponding age-specific fertility rates (ASFR) are the measures used widely to determine the current fertility level. By definition, total fertility rate is the number of children a woman would have by the end of her childbearing period (usually 15-49 years), if she passes through those years bearing children at the current observed age-specific fertility rates.

The total fertility rate and mean age of childbearing derived from using the age-specific fertility rates are given in Table 4.5 and graphically depicted in Figure 4.1. To show the trends, we presented the earlier fertility estimates obtained from 1980 and 1991 censuses.

Based on the current age-specific fertility rates, a Guyanese woman would have on average 3.7 children during her reproductive period. It was 3.2 children per woman in 1980, but given random variation inherent in the sources of the data, it had slightly increased.

Differences in the age pattern of childbearing are measured in terms of median or mean age of women in childbearing. An examination of the pattern of fertility in the country, reveals that the peak of childbearing in Guyana occurs between 20 and 29 years, or precisely, at age 27.2 years dropping thereafter. The mean ages shown at the bottom of Table 4.5 for the three consecutive censuses seems not to have changed much. It was 27.0 years in 1980 and increased just by 0.8 and 0.2 years in 1991 and 2002 respectively. The pattern also shows that there had been a decline in teenage fertility rate, and on the reverse, a slight increase in the births among women in their

²⁰United Nations (1983) Manual X Indirect Techniques for Demographic Estimation, UN publication, Population Studies, No. 81 (P.81)

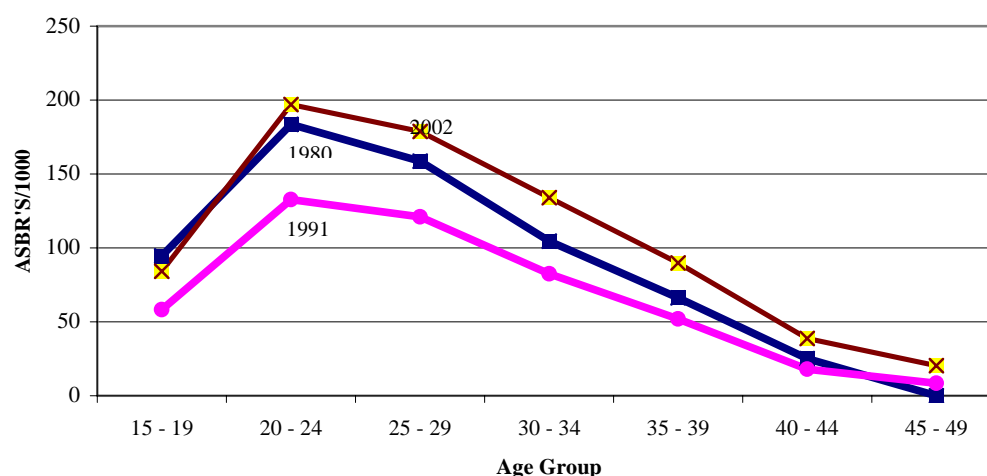
terminal age of childbearing. For instance, the rates were 95 births per 1,000 teenage girls in 1980 and declined to 58 by 1991, and 8 births per 1,000 women aged 45-49 years in 1991 and increased to 20 births per 1,000 women in 2002 (see Table 4.5 and Figure 4.1).

Table 4.5: Trends and Patterns of Fertility, Guyana: 1980-2002

Age group	Age-Specific Birth Rates Per 1000		
	1980	1991	2002
15 - 19	94.54	58.22	84.12
20 - 24	183.58	132.60	196.88
25 - 29	158.70	120.95	178.87
30 - 34	104.64	82.43	133.88
35 - 39	66.27	51.89	89.82
40 - 44	25.02	17.94	38.70
45 - 49	na	8.39	20.30
TFR	3.2	2.4	3.7
Median Age	27.0	27.8	27.2

Note = na = not available

Fig.4.1: Age Specific Fertility Rates, Guyana: 1980 - 2002



As a result of the decline, the contribution of teenage fertility to the total births which was nearly 18 percent in 1980, declined to 12.6 percent in 2002 (see Table 4.6). This is probably due to a significant increase over the years in enrolment of the girl children in school. It can be noted that the percentage of the teenage girls (15-19 years) attending school full-time or part-time against the total population in that age range rose from 27 percent in 1991 to 41 percent in 2002 (see Chapter V, Education and Training). Knowledge and use of contraceptives among the teenage population are plausible important factors but require independent enquiries.

Table 4.6: Distribution of Births 12 Months Preceding the Census by Current Age of Mothers, Guyana: 1980 - 2002

Age group	Number of Births Preceding the Census			Percent by Current Age of Mothers		
	1980	1991	2002	1980	1991	2002
15 - 19	3,344	2,445	2,759	17.6	15.5	12.6
20 - 24	7,235	5,180	6,314	38.0	32.9	28.8
25 - 29	4,600	4,148	5,461	24.2	26.4	24.9
30 - 34	2,350	2,368	3,824	12.4	15.0	17.4
35 - 39	1,140	1,165	2,338	6.0	7.4	10.7
40 - 44	359	320	887	1.9	2.0	4.0
45 - 49	na	112	359	na	0.7	1.6
Total	19,028	15,738	21,942	100	100	100

4.2.2 Fertility Differentials

The variation of current fertility level is noted almost everywhere in developing countries. The measures of aggregate fertility (TFR, GFR and CBR) by geographic regions, level of education and marital status, indicate wide variations. The GFR is the annual number of births in a population per 1,000 women age 15-49, and the CBR refers to the total number of births occurring in a given year per 1,000 within the population. As stated earlier, ASFRs, from which these aggregate estimates are based, refer to births that occurred twelve months preceding the 2002 census in Guyana.

At the national level, the GFR and CBR are 115 births per 1,000 women aged 15-49 and 29 per 1,000 persons within the total population respectively; while the TFR is estimated as 3.7 per woman as mentioned earlier (see Table 4.7).

Regional differentials: The examination of the fertility differentials, groups the ten administrative regions according to their level of variations as follows:

- High fertility regions (TFR 6.0 to 9.6 per woman); and
- Modest fertility regions (TFR 3.0 to 4.0 per woman).

The high fertility regions include Regions 1, 9, 8 and 7 in that ranking order. These regions recorded average numbers of children (TFR) as 9.6, 8.0, 7.9 and 6.0 respectively, by the time each woman there completes her childbearing, while that of general fertility rate (GFR) was registered as 303, 231, 242 and 190 children per 1,000 women aged 15-49 years. The rest are modest fertility regions, with TFR averaging less than 4 children per child-bearing woman (see Figure 4.2 and Table 4.7).

The high fertility regions, those presented earlier in Chapter 3, have experienced rapid growth rate during the intercensal period, thus concurring with our assertion that part of the increase was due to high birth rates in those areas compared to others.

The high fertility rates observed in the hinterland regions is undisputable, in that, the distance of these regions to the industrialized coastal belt is an impediment to modern birth control methods.

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Fig. 4.2: Regional Fertility Differentials, Guyana: 2002

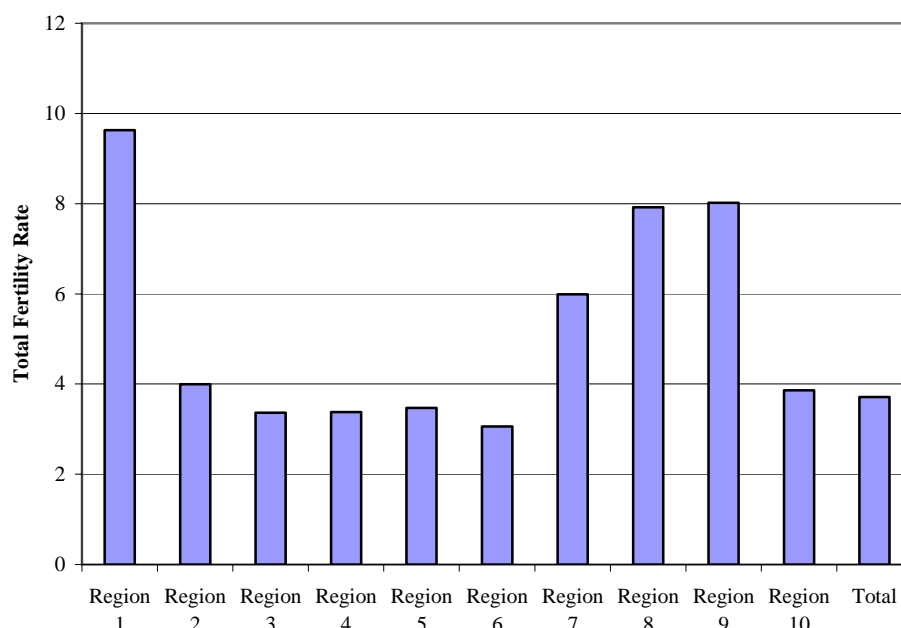


Table 4.7: Age-Specific Fertility Rates, Total Fertility Rate, General Fertility Rate, Crude Birth Rate and Mean Age of Childbearing by Region, Guyana: 2002

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Age group	1	2	3	4	5	6	7	8	9	10	Total
15 - 19	0.2567	0.0796	0.0779	0.0677	0.0909	0.0849	0.1406	0.1633	0.1106	0.0811	0.0841
20 - 24	0.4490	0.2391	0.1900	0.1678	0.2020	0.1895	0.2798	0.3237	0.3509	0.1933	0.1969
25 - 29	0.4140	0.2098	0.1517	0.1730	0.1634	0.1420	0.2874	0.3822	0.3333	0.1754	0.1789
30 - 34	0.3300	0.1237	0.1159	0.1268	0.1290	0.1015	0.2293	0.3273	0.3451	0.1493	0.1339
35 - 39	0.3195	0.1002	0.0741	0.0821	0.0728	0.0604	0.1565	0.2094	0.2818	0.1029	0.0898
40 - 44	0.1315	0.0324	0.0363	0.0363	0.0252	0.0224	0.0648	0.1370	0.1505	0.0518	0.0387
45 - 49	0.0250	0.0139	0.0268	0.0221	0.0101	0.0117	0.0392	0.0417	0.0321	0.0189	0.0203
Total	1.9257	0.7988	0.6727	0.6758	0.6935	0.6124	1.1976	1.5845	1.6043	0.7727	0.7426
Rate											
TFR	9.63	3.99	3.36	3.38	3.47	3.06	5.99	7.92	8.02	3.86	3.71
GFR	303	121	103	105	109	95	190	242	231	120	115
CBR	54	29	27	28	27	24	41	45	44	29	29
Mean Age	28.8	28.0	28.5	28.9	27.6	27.3	28.9	29.6	30.4	29.0	28.5

Note: Institutional population and No-contact persons are not included.

TFR: Total fertility rate for 15-49 years, expressed per woman.

GFR: General fertility rate (births divided by number of women 15-49 years), expressed per 1,000.

CBR: Crude birth rate, expressed per 1,000 population.

On the other hand, it seems more likely that women there have a high fertility preference. Of note, high birth rate is associated with reproductive health and status of women; hence, this finding requires an independent study to investigate the fertility behaviors in those regions and its determinants.

Besides, the more urbanized regions are said to have higher numbers of literate women, who mostly work outside of the agricultural industry; as such, there seems to be less desire for

children. The age-specific birth rates and total fertility rate classified by the level of education presented in Table 4.8, support this evidence.

Differentials by Education Level: The level of fertility is also shown to be negatively associated with educational achievement in Table 4.8. The TFR for the whole country tends to decrease by higher level of education, for example, fertility tends to gradually decrease from 5.2 children among women with primary education or less, to 2.5 and 2.2 children for women with post-secondary or university qualifications.

Table 4.8: Age-Specific and Total Fertility Rates by Level of Education, Guyana: 2002

Age group	None / Nursery	Primary	Secondary	Post Secondary	University/ Tertiary	Other	Total
15 - 19	0.1536	0.2034	0.0763	0.0391	0.0186	0.0158	0.0841
20 - 24	0.2695	0.2820	0.1998	0.1129	0.0666	0.1422	0.1969
25 - 29	0.2370	0.2167	0.1777	0.1324	0.1045	0.1341	0.1789
30 - 34	0.1816	0.1584	0.1279	0.1018	0.1198	0.1267	0.1339
35 - 39	0.1219	0.0964	0.0874	0.0743	0.0831	0.1249	0.0898
40 - 44	0.0507	0.0414	0.0382	0.0294	0.0313	0.0518	0.0387
45 - 49	0.0246	0.0214	0.0199	0.0161	0.0215	0.0444	0.0205
Total	1.0389	1.0197	0.7272	0.5060	0.4454	0.6399	0.7428
TFR	5.19	5.10	3.64	2.53	2.23	3.20	3.71

Differentials by Marital Status: Fertility differentials characterized by marital status of women are presented in Table 4.9. The findings on marital fertility are important, for fertility occurring in broken marital relationships and among those women too young to marry seems to have high correlation with infant and childhood mortality²¹. However, since, fertility is a product of timing and coital frequency, a higher proportion of ever married women is related to the number of births, which may occur within a given population in a year.

The age-specific birth rates and total fertility rates indicated in Table 4.9 reveal that stable marital status was positively related to high fertility, while broken relation status such as divorced and separated seem to negate fertility. The fertility rates of legally married couples and those in common law unions were 6.0 and 6.4 children per woman as compared to 3.9 and 2.7 among legally separated and divorced women.

²¹ Atossa Rahmanifar, Indiana Infant Mortality Report: 1999, Period Linked Birth/Infant Death Data Set, Epidemiology Resource Center, May 2001 (Online publication available at http://www.in.gov/isdh/dataandstats/mch/infant_mortality.pdf)

Table 4.9: Age-Specific Fertility Rates and Total Fertility Rate by Union Status, Guyana: 2002

Age group	Union Status and Age Specific Fertility Rates								Total
	Married	Common Law	Divorced	Legally Separated	Widowed	Married (Not in Union)	Was Common Law (Not in Union)	Never married	
15 - 19	0.3910	0.3604	0.1099	0.4397	0.8332	0.3044	0.4730	0.0000	0.0841
20 - 24	0.3058	0.3172	0.1703	0.0966	0.5249	0.1691	0.2601	0.0000	0.1969
25 - 29	0.2084	0.2250	0.1103	0.0593	0.4125	0.1312	0.1760	0.0000	0.1789
30 - 34	0.1463	0.1631	0.0599	0.0414	0.1052	0.0924	0.1200	0.0000	0.1339
35 - 39	0.0878	0.1206	0.0482	0.0734	0.0516	0.0668	0.0884	0.0000	0.0898
40 - 44	0.0372	0.0579	0.0210	0.0282	0.0204	0.0266	0.0400	0.0000	0.0387
45 - 49	0.0174	0.0263	0.0139	0.0332	0.0178	0.0231	0.0351	0.0000	0.0206
Total	1.1939	1.2705	0.5335	0.7718	1.9654	0.8136	1.1926	0.0000	0.7429
TFR	5.97	6.35	2.67	3.86	9.83	4.07	5.96	0.00	3.71

However, contrary to the assertion was “widowed” and the “was common law” women. The TFR among the “widowed” marked the highest, that is, 9.8 children per woman and followed by 6.0 children per every “was common law” woman in the child-bearing age groups. These rates are unexpected; as such, a special study is required, probably, to link the rates to their health and welfare systems.

Another area of suspicion is fertility rate among women who were never married. Accordingly, the finding shows that this group of women has no births, suggesting that fertility in Guyana only occurred within marriage. The validity of this finding needs further research.

4.2.3 Reproduction Rates

The total fertility rate as stated above is concerned only with the births of both sexes. Under reproduction, we measure the replacement of the female population that will sustain the growth of the population. For instance, a rate of 1.00 (or 100 or 1000, depending on the value of the constant ‘k’) means exact replacement, a rate above unity indicates that the population is more than replacing itself, and a rate below unity means the population is not replacing itself.²² Thus, reproduction rate has high correlation with whatever happens to the size of population over time, for example, the higher the number of girl babies, the higher the growth rate of the population and vice versa. Gross and net reproduction rates which are key indicators for study of reproduction are given below using the census data of 2002.

Gross Reproduction Rate (GRR): The gross reproduction rate (GRR) is the measure of total number of daughters a cohort of women will have and can be obtained by multiplying total fertility rate by the proportion of the total births that were females in a calendar year.²³ In the case of Guyana, we assume a constant sex ratio at birth to be 1.02; hence the proportion that was girl babies is 0.49505.

Converting the total fertility rate in Table 4.7, we arrived at the total number of girl babies expected to be born to every 100 Guyanese women by the time they complete their child-bearing, as 184. This rate, shown in Table 4.10, seems to have geographic variations. For

²² Henry S. Shryock et al (1971) *The Methods and Materials of Demography Volume 2*, U.S. Government Printing Office (P. 525)

²³ Ibid (P.524)

instance, every 100 women in Regions 1, 9, 8 and 7 have a total of 477, 397, 392 and 296 girl babies, respectively during their lifetime more than the other Regions.

Table 4.10: Gross and Net Reproduction Rates Classified by Current Age of Women and Region, Guyana: 2002

Age group	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
15 - 19	0.2567	0.0796	0.0779	0.0677	0.0909	0.0849	0.1406	0.1633	0.1106	0.0811	0.0841
20 - 24	0.4490	0.2391	0.1900	0.1678	0.2020	0.1895	0.2798	0.3237	0.3509	0.1933	0.1969
25 - 29	0.4140	0.2098	0.1517	0.1730	0.1634	0.1420	0.2874	0.3822	0.3333	0.1754	0.1789
30 - 34	0.3300	0.1237	0.1159	0.1268	0.1290	0.1015	0.2293	0.3273	0.3451	0.1493	0.1339
35 - 39	0.3195	0.1002	0.0741	0.0821	0.0728	0.0604	0.1565	0.2094	0.2818	0.1029	0.0898
40 - 44	0.1315	0.0324	0.0363	0.0363	0.0252	0.0224	0.0648	0.1370	0.1505	0.0518	0.0387
45 - 49	0.0250	0.0139	0.0268	0.0221	0.0101	0.0117	0.0392	0.0417	0.0321	0.0189	0.0203
GRR	4.77	1.98	1.67	1.67	1.72	1.52	2.96	3.92	3.97	1.91	1.84
NRR	4.72	1.96	1.65	1.66	1.70	1.50	2.94	3.88	3.93	1.89	1.82

Note: NRR based on female survival ratios based on $e_0 = 68.3$ years. (West model life table)

Net Reproduction Rate (NRR): The gross reproduction rate is limited, because it considers mortality schedule through the child bearing period to be zero, which doesn't hold because some girls will die before attaining the age of reproduction, others will die during the reproductive span, while others will live and complete the reproductive life. This refinement over GRR is net reproduction rate, and measures the net number of girl babies a cohort of women will bear during their lifetime, assuming a fixed schedule of age-specific fertility and mortality rates²⁴.

The net reproduction rate given in Table 4.10 reveals that for Guyana as a whole, every 100 women have 182 girl children, indicating that every 100 women in Guyana replace themselves plus an additional eighty-two girl children. Similar to the GRR, the regional net reproduction rates conform to the socioeconomic development of the regions. The hinterland Regions of 1, 9, 8 and 7 had corresponding NRR of 472, 393, 388 and 294 daughters per 100 childbearing women, respectively. The findings for the rest of the regions are reflected in Table 4.10.

²⁴ Henry S. Shryock et al (1971) The Methods and Materials of Demography Volume 2, U.S. Government Printing Office (P.525)

CHAPTER 5: EDUCATION AND TRAINING

Data on educational output are important parameters; not only necessary to study the productivity of the school system in Guyana, but also to relate the association between educational attainment and the characteristics of manpower supply, demographic processes of change regarding mortality, fertility and migration and other socio-economic variables.

The census module on education and training collected information on the following:

- School attendance (part-time or full-time);
- Type of school attended;
- Class completed;
- Highest level of education reached;
- Highest qualification level attained; and
- Whether training was received in specific occupation.

The intention was to determine the extent to which the population eligible to participate in education is actually enrolled, identify the type of school, highest level and qualification attained and how training for a specific occupation was received.

5.1 Age-Specific School Enrolment

Compulsory education in Guyana begins for a child who has attained the age of five years by the beginning of the school year. The intention of this module in the census is to determine the enrolment ratios or the proportion of the population attending school (full or part time) and further examine the sex disparity in school attendance.

The measurement to derive the age-specific enrolment is executed by comparing the school attending population to that of the school-going age population, expressed as a percentage of persons attending school part-time or full-time, corresponding to each five year age cohort in that group. The numerator is those students enrolled in school classified by age group while the denominator is the population of the same corresponding age group.

For easy reference, the first two tables under this section compare the absolute number of school-age population with those currently attending school, all shown in five-year age cohort, starting from the conventional school enrolment age of five years, covering the three recent censuses.

Table 5.1 shows the number of school-age population, out of which those who are attending school (both full-time and part-time) are given in Table 5.2 and graphically depicted in Figure 5.1. Ideally, at least until the age of 15 – the final age of compulsory education in Guyana– all of the school age children should be attending school. In reality, however, this is never the case.

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Table 5.1: School-Going Age Population by Age and Sex, Guyana: (1980-2002)

Age Group	1980			1991			2002		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5-9	53,388	53,136	106,524	38,406	38,801	77,207	48,651	47,142	95,793
10-14	53,070	52,244	105,314	41,803	42,572	84,375	40,545	39,569	80,114
15-19	47,632	48,922	96,554	39,400	41,033	80,433	32,616	32,798	65,414
20-24	37,484	39,750	77,234	35,923	38,085	74,008	30,925	32,061	62,986
Total	191,574	194,052	385,626	155,532	160,491	316,023	152,737	151,570	304,307

Table 5.2: School-Going Age Population Attending School Full and Part- Time by Sex, Guyana: (1980 - 2002)

Age	1980			1991			2002		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5-9	49,176	49,317	98,493	36,995	37,485	74,480	47,080	45,718	92,797
10-14	49,208	48,299	97,507	37,656	39,060	76,716	37,631	37,115	74,746
15-19	14,143	14,944	29,086	10,208	11,544	21,752	13,298	14,113	27,411
20-24	1,775	1,215	2,990	1,100	1,079	2,179	2,374	3,267	5,641
Total	114,302	113,775	228,077	85,959	89,168	175,127	100,382	100,213	200,595

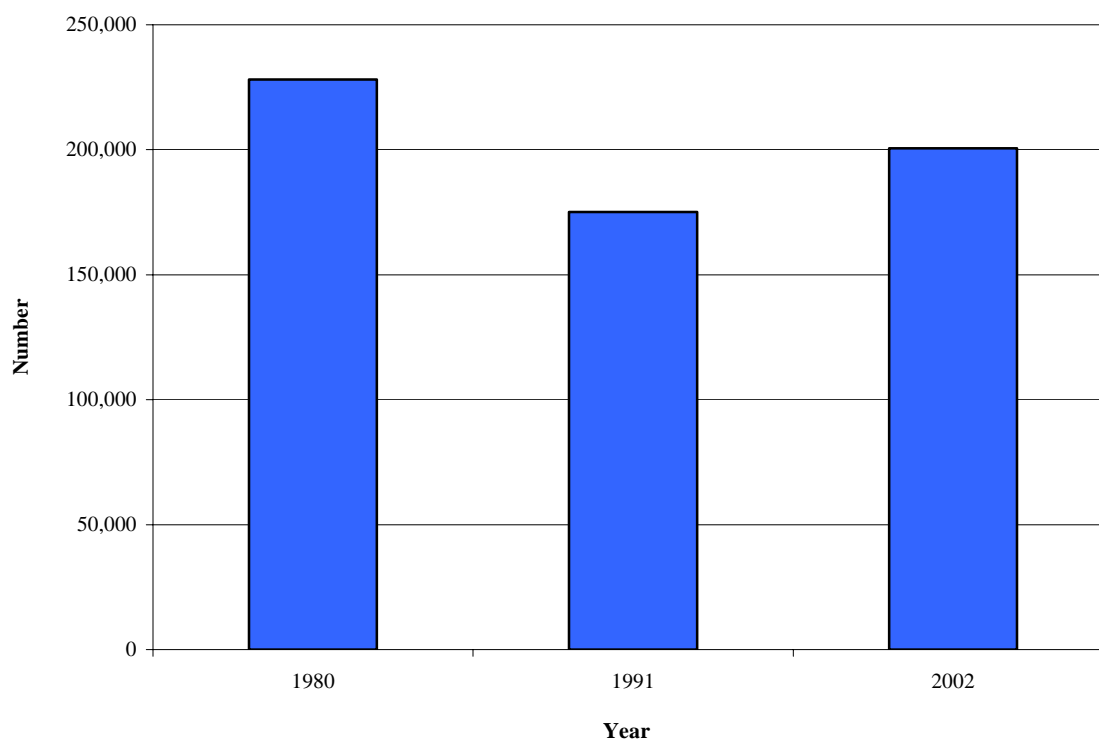
On average, about 66 percent of the school-age persons (5-24 years) interviewed reported that they were currently in school, compared to 59 percent and 55 percent in 1980 and 1991 respectively. The ratios are expectedly high for the main primary and part of secondary age groups (5-9 and 10-14 years). As the current and previous census results indicate, over 90 percent of the eligible school children of both sexes were currently attending school. The ratios, however, declined sharply to less than 10 percent for 20-24 years age group. This sharp decline is not surprising, because at these ages they would have already completed secondary school, but not all would have gone further to enroll for tertiary education (see Table 5.3).

Table 5.3: Ratio of School Attending Population to School Age Population, Guyana: (1980 -2002)

Age group	1980			1991			2002		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5-9	92.1	92.8	92.5	96.3	96.6	96.5	96.8	97.0	96.9
10-14	92.7	92.4	92.6	90.1	91.8	90.9	92.8	93.8	93.3
15-19	29.7	30.5	30.1	25.9	28.1	27.0	40.8	43.0	41.9
20-24	4.7	3.1	3.9	3.1	2.8	2.9	7.7	10.2	9.0
Total	59.7	58.6	59.1	55.3	55.6	55.4	65.7	66.1	65.9

Note: Derived from Tables 5.1 and 5.2

Fig 5.1: School Attending Population
Guyana: 1980-2002



The age-specific enrolment rates for the advanced ages were better in 2002 than for 1980 and 1991. While in 2002, 42 percent of persons in the 15-19 years age group reported that they were currently attending school, in 1980 and 1991, this was 30 and 27 percent respectively. For the 20-24 age group, the recorded enrolment rates were 4 percent in 1980 and 3 percent in 1991, improving to 9 percent in 2002. The situation presents a challenge to policymakers to facilitate both economic opportunity and education incentives for these advanced school age groups.

Also, sex disparities in enrolment for the advanced age group (20-24) seem to be significant. In 1980, the sex ratio for this group was 146 boys to every 100 girls attending school. But this later reversed in 2002 when the ratio became 100 girls to 73 boys (see Table 5.4).

The attainment of over 90 percent enrolment in the primary and secondary school-age population suggests that the MDG target for these areas has been surpassed. Further research is required however, to determine whether current education levels adequately equip the population to compete in the global economy.

**Table 5.4: Sex Ratio of School Attending Population,
Guyana: 1980 – 2002**

Age group	Sex Ratio			Excess/Deficit		
	1980	1991	2002	1980	1991	2002
5-9	100	99	103	-0.1	-0.7	1.5
10-14	102	96	101	0.9	-1.8	0.7
15-19	95	88	94	-2.8	-6.1	-3.0
20-24	146	102	73	18.7	1.0	-15.8
Total	100	96	100	0.2	-1.8	0.1

Note: Excess / Deficit = $(m - f) / (m + f) * 100$

Calculated from Table 5.2

At the regional level, there seems to be no significant variations from the national pattern. Table 5.5 and Appendix B.5.1 provided evidence of this; over 90 percent of children in the compulsory age range attending school, along with a small number attending in the advanced ages for either sex, revealed by the national total are also reflected by the regional figures.

Specifically, Region 9 recorded overall the highest enrolment rate (73 percent), followed by Region 10 (70 percent) and Region 4 (67 percent). Within the advanced age groups enrolment was better in Regions 4 and 10 (48 and 51 percent) for 15-19 years and 13 and 12 percent for 20-24 years age groups, respectively compared to 20 and 3 percent in Region 1 for the same two advanced age groups.

The higher enrolment records for the advanced age groups in Regions 4 and 10 are expected, because most of the higher training institutions are located in these two regions, and, in addition, the University of Guyana with no age requirement is located in Region 4.

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Table 5.5: Ratio of School Attending Population to School-Going Age Population by Sex and Region, Guyana: 2002

Region	5-9	10-14	15-19	20-24	Total
Both Sexes					
Region 1	85.6	82.8	19.6	2.5	60.6
Region 2	95.9	92.2	36.1	5.9	65.8
Region 3	97.3	92.1	37.8	6.5	64.2
Region 4	98.2	95.1	48.0	13.5	67.1
Region 5	97.8	92.0	37.3	4.7	65.3
Region 6	98.0	91.7	36.2	4.1	64.3
Region 7	93.9	91.8	31.8	3.7	62.2
Region 8	91.9	93.0	23.4	3.1	59.7
Region 9	93.2	96.4	49.5	3.0	72.5
Region 10	97.6	96.7	51.3	12.0	70.1
Total	96.9	93.3	41.9	9.0	65.9
Males					
Region 1	84.9	81.5	20.3	2.4	60.3
Region 2	95.8	92.1	35.3	5.6	65.8
Region 3	97.0	91.8	36.3	5.9	64.1
Region 4	98.2	94.6	46.1	11.6	66.8
Region 5	97.5	91.3	36.4	4.2	65.1
Region 6	98.0	91.0	35.8	3.0	64.4
Region 7	94.9	90.9	30.1	2.7	61.5
Region 8	92.4	92.1	24.0	3.0	57.6
Region 9	92.7	97.1	54.2	3.6	73.4
Region 10	97.7	96.1	49.8	10.4	69.8
Total	96.8	92.8	40.8	7.7	65.8
Females					
Region 1	86.3	84.2	18.9	2.6	60.9
Region 2	96.0	92.3	37.0	6.2	65.9
Region 3	97.7	92.4	39.3	7.0	64.3
Region 4	98.2	95.6	49.9	15.2	67.5
Region 5	98.1	92.7	38.1	5.2	65.5
Region 6	97.9	92.5	36.5	5.1	64.3
Region 7	93.0	92.7	33.5	4.8	62.9
Region 8	91.4	94.0	22.7	3.2	62.2
Region 9	93.6	95.7	44.6	2.2	71.5
Region 10	97.5	97.3	52.8	13.6	70.3
Total	97.0	93.8	43.1	10.3	66.1

Note: Derived from Appendix B.5.1

5.2 Gross and Net School Enrolment

The main objective of this sub-section is to derive the gross and net school enrolment rates to assess the level at which the millennium development goals' declaration on universal primary education and gender disparities in primary and secondary schools, have been achieved in Guyana.

Gross enrolment is the total school enrolment in a specific level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. On the other hand, net enrolment is more specific and measures the enrolment of the official age-group for a given level of education, expressed as a percentage of the corresponding population in that age group.

The main purpose of these two education indices is to show the general and specific level of participation in education in Guyana and to indicate the capacity of the educational system to enroll students of a particular age-group.

5.2.1 Primary School Enrolment

The defined primary school age in Guyana is between 6 to 11 years, apart from early childhood education which officially starts at age five. Table 5.6 shows the gross enrolment rates by sex and region. As reflected in the table, the gross enrolment rates are high for both national and regional levels, registering about 100 percent for the whole country and varying between 95 to 121 percent at the regional level. The highest gross enrolment is shown for region 9 (121 percent). Besides, gross enrolment exceeded 100 percent in regions 8, 6 and 1, and was nearly 100 percent in the remaining regions except region 7 which enrolled 95 percent within the primary class.

The gross enrolment rate of over 100 percent was expected because the total enrolment used as numerator took into account primary enrolment at all ages, while the denominator was restricted to a precisely defined primary age population of 6-11 years. Consequently, a rate of over 100 percent indicates an inclusion of children who enter primary school older or younger than the specified age category including as well, repeaters who are above the primary school age range.

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Table 5.6: Gross Primary Enrolment by Sex and Region, Guyana: 2002

Region	Primary Enrolment			Primary Age Population			Gross Primary Enrolment Rates		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Region 1	2,319	2,245	4,564	2,320	2,206	4,526	100.0	101.8	100.8
Region 2	4,072	3,892	7,964	4,065	3,940	8,005	100.2	98.8	99.5
Region 3	7,565	7,315	14,880	7,694	7,419	15,113	98.3	98.6	98.5
Region 4	21,455	20,808	42,263	21,761	21,216	42,977	98.6	98.1	98.3
Region 5	4,168	4,119	8,287	4,134	4,153	8,287	100.8	99.2	100.0
Region 6	9,700	9,154	18,854	9,500	9,179	18,679	102.1	99.7	100.9
Region 7	1,346	1,243	2,589	1,375	1,339	2,714	97.9	92.8	95.4
Region 8	925	785	1,710	850	804	1,654	108.8	97.6	103.4
Region 9	2,377	2,115	4,492	1,900	1,829	3,729	125.1	115.6	120.5
Region 10	3,332	3,166	6,498	3,349	3,197	6,546	99.5	99.0	99.3
Total	57,259	54,842	112,101	56,948	55,282	112,230	100.5	99.2	99.9

Note: The official primary age is 6-11 years.

The level of exacerbation shown by gross enrolment is curtailed when the net enrolment rate was used instead (see Table 5.7). The average net primary enrolment for the entire country was 89 percent for both sexes, and there seems no significant variation for either sex even at the regional level. This finding reveals that Guyana has nearly met the target of goals two and three (universal primary education and gender disparity in primary school) of the MDGs.

Table 5.7: Net Primary Enrolment by Sex and Region, Guyana: 2002

Region	Primary Enrolment			Primary Age Population			Net Enrolment Rates		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Region 1	1,915	1,862	3,777	2,320	2,206	4,526	82.5	84.4	83.5
Region 2	3,565	3,456	7,021	4,065	3,940	8,005	87.7	87.7	87.7
Region 3	6,891	6,666	13,557	7,694	7,419	15,113	89.6	89.9	89.7
Region 4	19,341	18,877	38,218	21,761	21,216	42,977	88.9	89.0	88.9
Region 5	3,697	3,710	7,407	4,134	4,153	8,287	89.4	89.3	89.4
Region 6	8,551	8,197	16,748	9,500	9,179	18,679	90.0	89.3	89.7
Region 7	1,199	1,119	2,318	1,375	1,339	2,714	87.2	83.6	85.4
Region 8	734	661	1,395	850	804	1,654	86.4	82.2	84.3
Region 9	1,680	1,615	3,295	1,900	1,829	3,729	88.4	88.3	88.4
Region 10	2,987	2,819	5,806	3,349	3,197	6,546	89.2	88.2	88.7
Total	50,560	48,982	99,542	56,948	55,282	112,230	88.8	88.6	88.7

Note: The official primary age is 6-11 years.

5.2.2 Secondary School Enrolment

After the completion of the compulsory education, between ages 5 to 15 years, young people can choose to stay on at school, attend the full senior level education and college or take part in work-based learning. As such, the secondary level is optional, though government has full interest to ensure that those who enrolled remain to complete at least their secondary education. The intention of this section is to measure the degree of secondary enrolment in Guyana.

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Gross secondary enrolment, given in Table 5.8, reveals for the whole country that about 75 percent of the eligible children were in school. As alluded in the case of primary enrolment, the rates were slightly better for girls than boys, 78 against 73 percent.

There were some undulating variations by region and sex. The highest secondary education participation rates were recorded in Regions 10 and 4, registering 88 and 81 percent, followed by Regions 5 and 6, both with 73 and 76 percent respectively. The lowest rate was among children in Region 1 (47 percent).

In terms of sex disparities, the gross enrolment for girls was better in all the regions compared to boys. About 92 percent of girls in region 10 participated, compared to 83 percent among the boys.

Table 5.8: Gross Secondary School Enrolment by Sex and Region, Guyana: 2002

Region	Enrolment			Population			Gross Enrolment Rates		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Region 1	639	689	1,328	1,433	1,394	2,827	44.6	49.4	47.0
Region 2	2,297	2,462	4,759	3,393	3,373	6,766	67.7	73.0	70.3
Region 3	4,616	4,807	9,423	6,235	6,175	12,410	74.0	77.8	75.9
Region 4	14,451	15,393	29,844	18,626	18,469	37,095	77.6	83.3	80.5
Region 5	2,301	2,515	4,816	3,179	3,196	6,375	72.4	78.7	75.6
Region 6	5,101	5,438	10,539	7,260	7,242	14,502	70.3	75.1	72.7
Region 7	706	747	1,453	1,138	1,117	2,255	62.0	66.9	64.4
Region 8	317	341	658	643	600	1,243	49.3	56.8	52.9
Region 9	726	752	1,478	1,444	1,373	2,817	50.3	54.8	52.5
Region 10	2,086	2,262	4,348	2,510	2,457	4,967	83.1	92.1	87.5
Total	33,240	35,406	68,646	45,861	45,396	91,258	72.5	78.0	75.2

Note: The official secondary age is 12-17 years.

The pattern of net secondary enrolment was similar to that of gross participation rates, with relatively higher proportion of females in school than males. The overall participation was 61 percent (59 percent for males and 63 percent for females). The hinterland regions (Regions 1, 7, 8 and 9) as expected, recorded the least secondary net enrolment rates, that is, 39, 53, 44 and 46 percent, respectively compared to the undisputable highest rates displayed by children in Regions 10 and 4, being 69 and 65 percent each (see Table 5.9).

Table 5.9: Net Secondary School Enrolment by Sex and Region, Guyana: 2002

Region	Enrolment (12-17 yrs)			Population (12-17 yrs)			Net Enrolment Rates		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Region 1	531	578	1,109	1,433	1,394	2,827	37.0	41.5	39.2
Region 2	1,934	2,039	3,973	3,393	3,373	6,766	57.0	60.4	58.7
Region 3	3,775	3,960	7,735	6,235	6,175	12,410	60.5	64.1	62.3
Region 4	11,731	12,203	23,934	18,626	18,469	37,095	63.0	66.1	64.5
Region 5	1,885	2,040	3,925	3,179	3,196	6,375	59.3	63.8	61.6
Region 6	4,193	4,459	8,652	7,260	7,242	14,502	57.8	61.6	59.7
Region 7	596	602	1,198	1,138	1,117	2,255	52.4	53.9	53.1
Region 8	276	275	551	643	600	1,243	42.9	45.8	44.3
Region 9	634	667	1,301	1,444	1,373	2,817	43.9	48.6	46.2
Region 10	1,672	1,771	3,443	2,510	2,457	4,967	66.6	72.1	69.3
Total	27,227	28,594	55,821	45,861	45,396	91,258	59.4	63.0	61.2

Note: The official secondary age is 12-17 years.

5.3 Educational Output and Literacy

The eventual educational status, such as literacy, educational attainment and qualification are often used to define educational output. Since literacy is treated as a dichotomous variable which provides one index of the minimum level of educational output, the level of literacy against educational backdrops would be measured here from the barest minimum level to quite fluent level, for example, comparing and contrasting the highest educational attainment and qualification and level of training the adult population, 15 years and above in Guyana, received.

5.3.1 Literacy and Highest Educational Attainment

Highest attainment: Fewer than three in every hundred adult population 15 years and above in Guyana have got no education or only nursery education; 26 percent primary and another 62 percent, secondary education. At the higher level, only 8.5 percent attained that, with about 3.7 percent post secondary, and 4.8 percent matriculated, attended university and obtained degrees (see Table 5.10).

Differential by sex either at the national or regional level was very small. However, while more males than females were observed to have completed primary level, more females than males completed secondary and tertiary education.

Regional variations exist as expected, with the highest proportion of the population having no education, occurring in the hinterland regions (1, 7, 8 and 9) compared to regions along the coastal belt and with urban cities (see Table 5.10).

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Table 5.10: Distribution of Population 15 Years and Over by Sex, Region and Highest Level of Education Reached, Guyana: 2002

	None/ Nursery	Primary	Secondary	Secondary	Post University/ Tertiary	Other	Total	Number
Both sexes								
Region 1	12.9	38.0	47.4	0.8	0.8	0.1	100	11,278
Region 2	3.0	32.4	60.7	1.5	2.0	0.4	100	29,788
Region 3	3.5	32.1	58.9	1.7	3.4	0.5	100	66,887
Region 4	1.7	20.7	63.5	5.9	7.5	0.7	100	199,833
Region 5	2.2	27.1	65.1	2.4	3.0	0.2	100	32,731
Region 6	3.4	33.2	58.5	2.0	2.8	0.1	100	78,693
Region 7	7.6	27.0	61.5	1.4	2.0	0.4	100	9,595
Region 8	10.7	24.6	62.8	1.1	0.7	0.0	100	5,709
Region 9	10.3	28.6	59.0	1.3	0.8	0.0	100	10,033
Region 10	0.9	13.8	75.7	5.8	3.6	0.2	100	24,306
Total (%)	3.0	26.0	62.1	3.7	4.8	0.5	100	x
Number	13,803	120,118	286,506	17,183	22,011	2,086	x	468,853
Males								
Region 1	10.8	39.7	47.5	0.9	1.0	0.1	100	5,947
Region 2	2.6	33.3	60.5	1.3	2.0	0.4	100	14,929
Region 3	3.1	34.1	57.2	1.7	3.5	0.4	100	33,473
Region 4	1.6	21.6	63.2	5.5	7.4	0.7	100	95,690
Region 5	2.1	29.8	62.3	2.4	3.2	0.2	100	16,247
Region 6	2.9	35.1	56.7	2.0	3.1	0.1	100	38,960
Region 7	6.5	28.7	61.2	1.4	1.8	0.4	100	5,047
Region 8	8.4	26.8	62.8	1.1	0.9	0.0	100	3,479
Region 9	8.5	28.3	60.8	1.4	1.0	0.0	100	5,256
Region 10	0.9	15.1	74.0	6.3	3.5	0.2	100	11,904
Total (%)	2.7	27.5	61.0	3.6	4.8	0.4	100	x
Number	6,094	62,431	138,124	8,043	10,739	995	x	230,932
Females								
Region 1	15.3	36.0	47.3	0.7	0.6	0.1	100	5,331
Region 2	3.3	31.6	61.0	1.6	2.1	0.4	100	14,859
Region 3	3.8	30.0	60.7	1.6	3.4	0.5	100	33,414
Region 4	1.8	19.8	63.9	6.2	7.6	0.7	100	104,143
Region 5	2.3	24.4	68.0	2.3	2.8	0.2	100	16,484
Region 6	3.9	31.2	60.4	2.0	2.5	0.1	100	39,733
Region 7	8.7	25.2	61.9	1.4	2.3	0.5	100	4,548
Region 8	14.2	21.2	62.9	1.2	0.5	0.1	100	2,230
Region 9	12.4	29.0	57.0	1.1	0.5	0.0	100	4,777
Region 10	1.0	12.5	77.3	5.3	3.7	0.2	100	12,402
Total (%)	3.3	24.5	63.1	3.9	4.8	0.5	100	x
Number	7,709	57,687	148,382	9,140	11,272	1,091	x	237,921

Note: Age not stated (5,341) was excluded and highest education reached not stated (7,146) was prorated.

Literacy rate: The standard practice in obtaining literacy data is to ask the respondent if he or she can read and write and the answer to the question is accepted at face value, but this question was not asked in the 2002 census. Here, an illiterate person is any adult 15 years and over who never completed primary education.

By this definition, only 8 percent is illiterate, meaning, 92 percent of the adult population 15 years and over can read and write or have completed at least primary education in Guyana. Differential by sex is very small, but at regional level, there is variation in the magnitude. The hinterland regions (1, 9, 8 and 7) exhibited the highest illiteracy rates, for instance, ranking from 27 percent illiterate in Region 1 to 15 percent in Region 7; and at each level the female illiteracy rate was higher than the male (see Figure 5.2 and Table 5.11).

However, the high literacy rate is impressive but there is still need to augment the relatively large percentage (26 percent) of the population who has only got primary education along with 3 percent who have none in order to ensure a higher sustainable development level (see Table 5.10).

Fig. 5.2: Percent Illiterate by Region and Sex, Guyana: 2002

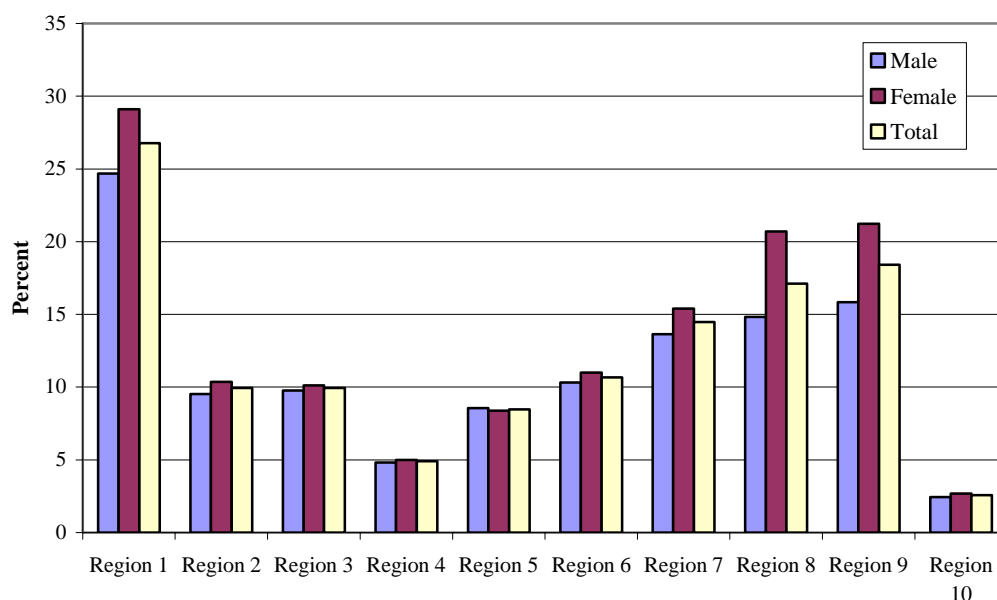


Table 5.11: Distribution of Population 15 Years and Over by Literacy Status, by Region and Sex, Guyana: 2002

Region	Population 15 Years and Over*			Completed Less Than Primary Education			Illiteracy rate (%)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Region 1	5,947	5,331	11,278	1,468	1,552	3,020	24.7	29.1	26.8
Region 2	14,929	14,859	29,788	1,423	1,538	2,961	9.5	10.4	9.9
Region 3	33,473	33,414	66,887	3,269	3,383	6,652	9.8	10.1	9.9
Region 4	95,690	104,143	199,833	4,605	5,195	9,800	4.8	5.0	4.9
Region 5	16,247	16,484	32,731	1,389	1,383	2,772	8.5	8.4	8.5
Region 6	38,960	39,733	78,693	4,024	4,373	8,397	10.3	11.0	10.7
Region 7	5,047	4,548	9,595	688	700	1,388	13.6	15.4	14.5
Region 8	3,479	2,230	5,709	516	462	978	14.8	20.7	17.1
Region 9	5,256	4,777	10,033	833	1,014	1,847	15.8	21.2	18.4
Region 10	11,904	12,402	24,306	291	334	625	2.4	2.7	2.6
Total	230,932	237,921	468,853	18,506	19,934	38,440	8.0	8.4	8.2

Note: Illiterate person is any adult 15 years and above who never completed primary.

*Total age not stated, 2,813 males and 2,528 females were excluded.

5.3.2 Highest Educational Qualification

Guyana is a member of the Caribbean Community (CARICOM) and the educational specifications and assessment procedures are therefore bound by the regional guidelines. The accreditation is done by the qualification and curriculum authority of CARICOM which serves as an independent governance council and oversees the examinations and ensures that the curricula and qualifications meet required standards.

After compulsory primary school age level, the first qualification test is administered to students between the ages of 12 to 17 years, but the age range for these examinations are not fixed, apparently because of enrolment of older students from private institutions.

Of the total of 468,853 persons 15 years and above in 2002, 69.0 percent have no qualification, 7.9 percent are school leavers and 12.2 percent gained “GCE” O level or CXC. Of special note is that only 0.4 percent of the resident population has “GCE” A level qualification, along with 7.2 percent certificate or diploma holders in tertiary education (see Table 5.12).

In Guyana, the percentage with a Bachelor’s Degree has not changed, and is exactly the same as in the 1991 census (1.8 percent). Significantly, almost at all levels females perform slightly better than males (see Table 5.12).

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Table 5.12: Distribution of Population 15 Years and Over by Highest Level of Qualification and Region, Guyana: 2002

Table 512: Distribution of Population 15 Years and Over by Highest Level of Qualification and Region, Guyana, 2002												
Highest Qualification												
Region	None	School Leaving	Junior Cambridge	GCE O/L or CXC	GCE A/L or CAPE	Higher Sch Cert	Cert/Dip Tertiary	Bachelor Degree	Post Graduate	Other	Total	Number
Both Sexes												
Region 1	84.5	9.4	0.1	3.1	0.1	0.0	2.0	0.2	0.0	0.5	100	11,278
Region 2	77.0	7.5	0.3	10.7	0.2	0.1	3.3	0.4	0.0	0.6	100	29,788
Region 3	76.2	5.3	0.3	11.8	0.3	0.1	4.2	1.0	0.3	0.6	100	66,888
Region 4	62.8	8.1	0.5	14.0	0.6	0.4	9.2	3.2	0.4	0.8	100	199,833
Region 5	76.8	5.8	0.2	10.9	0.2	0.1	4.9	0.6	0.1	0.5	100	32,731
Region 6	75.5	3.1	0.2	12.4	0.3	0.1	7.4	0.7	0.0	0.3	100	78,693
Region 7	69.2	11.8	0.3	6.4	0.1	0.0	11.4	0.3	0.0	0.3	100	9,595
Region 8	79.0	14.5	0.1	4.1	0.1	0.0	1.3	0.5	0.0	0.2	100	5,709
Region 9	38.4	54.2	0.0	3.8	1.8	0.0	1.3	0.5	0.0	0.0	100	10,033
Region 10	61.9	10.1	0.6	13.8	0.4	0.1	10.5	1.7	0.0	0.9	100	24,306
Total %	69.0	7.9	0.4	12.2	0.4	0.2	7.2	1.8	0.2	0.6	100	x
Number	323,489	37,143	1,721	57,251	2,072	981	33,667	8,450	1,083	2,996	x	468,853
Males												
Region 1	84.4	9.3	0.1	2.9	0.2	0.1	2.2	0.3	0.1	0.5	100	5,947
Region 2	78.7	7.3	0.2	9.6	0.2	0.1	3.0	0.5	0.0	0.3	100	14,929
Region 3	77.8	5.1	0.3	10.3	0.3	0.1	4.1	1.1	0.4	0.5	100	33,473
Region 4	65.3	7.7	0.5	12.6	0.6	0.4	8.4	3.4	0.5	0.6	100	95,690
Region 5	79.1	5.6	0.2	8.8	0.2	0.1	4.8	0.7	0.2	0.4	100	16,247
Region 6	77.3	2.9	0.2	11.0	0.3	0.1	7.0	1.0	0.0	0.3	100	38,960
Region 7	71.7	11.1	0.4	5.7	0.1	0.0	10.2	0.4	0.0	0.3	100	5,047
Region 8	79.9	14.1	0.2	3.7	0.1	0.0	1.2	0.6	0.0	0.2	100	3,479
Region 9	36.3	55.9	0.0	3.9	1.9	0.0	1.5	0.5	0.0	0.0	100	5,256
Region 10	64.8	9.8	0.6	10.8	0.4	0.2	10.4	2.2	0.0	0.8	100	11,904
Total %	71.1	7.8	0.4	10.7	0.5	0.2	6.6	2.0	0.3	0.5	100	x
Number	164,294	17,923	830	24,720	1,052	470	15,329	4,530	695	1,087	x	230,932
Females												
Region 1	84.5	9.5	0.1	3.4	0.1	0.0	1.7	0.2	0.0	0.6	100	5,331
Region 2	75.3	7.7	0.3	11.8	0.2	0.1	3.6	0.3	0.0	0.8	100	14,859
Region 3	74.5	5.4	0.3	13.3	0.2	0.1	4.3	1.0	0.2	0.7	100	33,414
Region 4	60.5	8.4	0.5	15.2	0.6	0.4	9.9	3.0	0.3	1.1	100	104,143
Region 5	74.6	6.0	0.1	13.0	0.2	0.0	5.0	0.4	0.1	0.5	100	16,484
Region 6	73.7	3.3	0.2	13.8	0.3	0.1	7.8	0.4	0.0	0.4	100	39,733
Region 7	66.4	12.7	0.3	7.1	0.1	0.0	12.6	0.2	0.0	0.4	100	4,548
Region 8	77.7	15.3	0.0	4.8	0.0	0.0	1.5	0.4	0.0	0.3	100	2,230
Region 9	40.8	52.3	0.0	3.8	1.7	0.0	1.0	0.4	0.0	0.0	100	4,777
Region 10	59.1	10.3	0.5	16.6	0.5	0.1	10.6	1.3	0.0	0.9	100	12,402
Total %	66.9	8.1	0.4	13.7	0.4	0.2	7.7	1.6	0.2	0.8	100	x
Number	159,195	19,220	891	32,531	1,020	511	18,338	3,920	387	1,909	x	237,921

Note: Age not stated (5,341) was excluded and qualification not stated (11,533) prorated.

5.3.3 Work-related Training

Both the government of Guyana and the private sectors have several initiatives aimed at assisting people to train for work and to achieve occupationally specific qualifications. In the 2002 census, a question was posed to all persons aged 15 years and over as to whether they had acquired any skills training, and the result indicates that 31,741 persons, constituting barely 6.8 percent of the resident population, have some form of training, with 7.4 percent among males and 6.2 percent for females. Region 10 being the main bauxite mining sector, which requires specialized training, possesses the majority of trained citizens (11 percent) along with 9 percent in Region 4, where the major industries and professional occupations are located (see Table 5.13).

Formal “institutions” in Guyana were shown to have shouldered the training process (66 percent) followed by “apprenticeship” and “correspondence courses” (24.3 and 5.0 percent respectively). Those who sought other means to acquire a profession, accounted for nearly 4.5 percent (Table 5.14).

More females were trained (78.4 percent) in formal institutions compared to 55.6 percent for their male counterpart, while more males (34.5 percent) were trained under the apprenticeship system than females (12.5 percent). Apprenticeship training predominated second to formal institutional learning in Regions 1 and 8, as it was the major mean available there due to accessibility of modern training facilities (see Table 5.14).

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Table 5.13: Percent Distribution of Population 15 Years and Over by Training Status, Guyana: 2002

Region	Number		Total	Percent		Total
	Yes trained	Not trained		Yes trained	Not trained	
Both Sexes						
Region 1	410	10,868	11,278	3.6	96.4	100
Region 2	1,080	28,708	29,788	3.6	96.4	100
Region 3	3,481	63,406	66,887	5.2	94.8	100
Region 4	18,190	181,643	199,833	9.1	90.9	100
Region 5	1,511	31,220	32,731	4.6	95.4	100
Region 6	3,300	75,393	78,693	4.2	95.8	100
Region 7	386	9,209	9,595	4.0	96.0	100
Region 8	325	5,384	5,709	5.7	94.3	100
Region 9	381	9,652	10,033	3.8	96.2	100
Region 10	2,677	21,629	24,306	11.0	89.0	100
Total	31,742	437,111	468,853	6.8	93.2	100
Males						
Region 1	244	5,703	5,947	4.1	95.9	100
Region 2	585	14,344	14,929	3.9	96.1	100
Region 3	2,070	31,403	33,473	6.2	93.8	100
Region 4	9,281	86,409	95,690	9.7	90.3	100
Region 5	854	15,393	16,247	5.3	94.7	100
Region 6	1,962	36,998	38,960	5.0	95.0	100
Region 7	209	4,838	5,047	4.1	95.9	100
Region 8	229	3,250	3,479	6.6	93.4	100
Region 9	230	5,026	5,256	4.4	95.6	100
Region 10	1,399	10,505	11,904	11.8	88.2	100
Total	17,063	213,869	230,932	7.4	92.6	100
Females						
Region 1	166	5,165	5,331	3.1	96.9	100
Region 2	495	14,364	14,859	3.3	96.7	100
Region 3	1,411	32,003	33,414	4.2	95.8	100
Region 4	8,909	95,234	104,143	8.6	91.4	100
Region 5	658	15,826	16,484	4.0	96.0	100
Region 6	1,338	38,395	39,733	3.4	96.6	100
Region 7	177	4,371	4,548	3.9	96.1	100
Region 8	97	2,133	2,230	4.3	95.7	100
Region 9	150	4,627	4,777	3.1	96.9	100
Region 10	1,278	11,124	12,402	10.3	89.7	100
Total	14,679	223,242	237,921	6.2	93.8	100

Note: Age "not stated" (5,341) excluded and training status "not stated" (3,794) prorated.

National Census Report 2002, Guyana

Table 5.14: Distribution of Adult Population 15 Years and Over by How Training Was Received, by Sex and Region, Guyana: 2002

Region	Number					Percent				
	Corresp ondence	Apprent ice-ship	Institut ion	Others	Total	Corresp ondence	Apprenti ce-ship	Instit ution	Others	Total
Both Sexes										
Region 1	35	156	212	6	409	8.6	38.1	51.8	1.5	100
Region 2	63	219	752	45	1,079	5.8	20.3	69.7	4.2	100
Region 3	168	976	2,156	181	3,481	4.8	28.0	61.9	5.2	100
Region 4	814	4,163	12,412	801	18,190	4.5	22.9	68.2	4.4	100
Region 5	64	357	1,031	59	1,512	4.2	23.6	68.2	3.9	100
Region 6	187	869	2,071	173	3,300	5.7	26.3	62.8	5.2	100
Region 7	31	100	217	38	386	8.0	25.9	56.3	9.8	100
Region 8	35	131	145	14	325	10.8	40.3	44.6	4.3	100
Region 9	59	72	216	34	381	15.5	18.9	56.7	8.9	100
Region 10	130	677	1,784	86	2,677	4.9	25.3	66.6	3.2	100
Total	1,586	720	20,995	1,437	31,739	5.0	2.3	66.1	4.5	100
Males										
Region 1	17	108	117	1	243	7.0	44.4	48.2	0.4	100
Region 2	42	174	340	29	585	7.2	29.7	58.1	5.0	100
Region 3	90	824	1,036	121	2,071	4.3	39.8	50.0	5.8	100
Region 4	409	3,015	5,387	471	9,282	4.4	32.5	58.0	5.1	100
Region 5	33	279	511	31	854	3.9	32.7	59.8	3.6	100
Region 6	117	721	1,019	104	1,961	6.0	36.8	51.9	5.3	100
Region 7	14	80	97	19	210	6.7	38.1	46.2	9.0	100
Region 8	23	107	92	6	228	10.1	46.9	40.4	2.6	100
Region 9	31	42	138	19	230	13.4	18.3	60.0	8.3	100
Region 10	74	535	746	43	1,398	5.3	38.3	53.4	3.0	100
Total	850	5,885	9,483	844	17,062	5.0	34.5	55.6	4.9	100
Females										
Region 1	18	48	95	5	166	10.8	28.9	57.2	3.0	100
Region 2	21	46	412	16	495	4.2	9.3	83.2	3.2	100
Region 3	78	152	1,120	60	1,410	5.5	10.8	79.4	4.3	100
Region 4	405	1,149	7,025	330	8,909	4.5	12.9	78.9	3.7	100
Region 5	32	78	521	27	658	4.8	11.9	79.2	4.1	100
Region 6	70	147	1,051	69	1,337	5.2	11.0	78.6	5.2	100
Region 7	17	20	120	19	176	9.7	11.4	68.1	10.8	100
Region 8	12	24	53	8	97	12.4	24.7	54.6	8.3	100
Region 9	28	30	78	15	151	18.5	19.9	51.7	9.9	100
Region 10	57	142	1,037	43	1,279	4.4	11.1	81.1	3.4	100
Total	738	1,836	11,512	592	14,678	5.0	12.5	78.4	4.0	100

CHAPTER 6: ECONOMIC ACTIVITY

One of the key indicators of improvement in the economic environment is that of the ability of people to obtain work so as to meet their daily needs. The demographic focus on economic activity is on the population 15 years and over, and more specifically those 15-64 years. The census determines the characteristics of this population, who in the week preceding the Census Day, were either economically active or inactive.

The *economically active* population consists of all persons of either sex who furnish the supply of labour for the production of economic goods and services. They include, (a) the regular employed people (“worked” and “had a job” but were on leave/vacation), and (b) the unemployed consisting of: (1) those who were looking for work or who wanted and were available for work, but because they believed no jobs were open were not actively searching or (2) those who had become disillusioned. On the other hand, the *economically inactive* population includes students, homemakers, retired persons and persons whose disability prevented them from working. It is from these categorizations of the working age population that measures of labour force participation are determined.

Many countries routinely (on a quarterly or yearly basis) collect information on the working-age population and their activities, as it is an important aspect of development planning. For other countries, however, the decennial population census or a labour force survey is the means of collecting these data. Another means is through the household income and expenditure surveys, conducted to monitor cost of living and more recently to determine levels of poverty. A household income and expenditure survey (HIES) was last conducted in Guyana in 1992 and a labour force survey in 1997. Because surveys are more closely monitored, survey estimates are considered more reliable than census results in most cases. Where a survey date is close to that of the census, it is more useful to use the survey data. Since the HIES was close to the census year 1991, its estimates of the size and activity status of the working-population are considered more reliable than those of the census. In comparison tables over time, therefore, the 1992 survey estimates of the working population and labour force participation rates are used instead. For the census years of 1980 and 2002 there were no comparable surveys, hence the census estimates are used. The analysis of the working-population and their economic activity follows.

6.1 Working Age Population

The size of the working age population has grown steadily over the decades (Table 6.1). In 2002 it was two-thirds of the total population (475,218 persons), up from 417,771 in 1980 and approximately 467,173 in 1992²⁵. On average, 28 percent of the working age population is involved in home duties, approximately 5 percent are retired and 7 percent attend school. The institutional population is only 1.3 percent of the working-age population (Table 6.1 and Figure 6.1).

²⁵Figure taken from the 1992 Household Income and Expenditure Survey.

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Table 6.1: Principal Activities of the Population 15 Years and Over, Guyana: 1980 - 2002

Principal Activities	2002			1992 (HIES)			1980		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Worked	165,659	69,083	234,742	170,861	78,959	249,820	156,656	44,703	201,359
Had Work	258	94	352	*	*	*	*	*	*
Looking for Work	15,139	10,276	25,415	15,693	17,451	33,144	22,344	9,146	31,490
Wanted Work	3,586	2,072	5,658	*	*	*	4,391	1,142	5,533
Sub-total	184,642	81,525	266,167	186,554	96,410	282,964	183,391	54,991	238,382
Attended School	15,732	16,559	32,291	17,920	20,269	38,189	3,016	4,443	7,459
Home Duties	11,643	123,405	135,048	5,688	108,263	113,951	2,373	142,979	145,352
Retired	12,955	11,962	24,917	10,961	12,405	23,366	11,191	4,903	16,094
Disabled	5,959	4,470	10,429	4,542	4,163	8,705	5,029	4,893	9,923
Inst. Population	4,848	1,518	6,366	n/a	n/a	n/a	317	244	561
Sub-total	51,137	157,914	209,051	39,111	145,100	184,211	21,926	157,462	179,389
Grand Total	235,779	239,439	475,218	225,665	241,510	467,175	205,317	212,453	417,771
Percentage									
Worked	70.3	28.9	49.4	75.7	32.7	53.5	76.3	21.0	48.2
Had Work	0.1	0.0	0.1	n/a	n/a	n/a	n/a	n/a	n/a
Looking for Work	6.4	4.3	5.3	7.0	7.2	7.1	10.9	4.3	7.5
Wanted Work	1.5	0.9	1.2	n/a	n/a	n/a	2.1	0.5	1.3
Sub-total	78.3	34.0	56.0	82.7	39.9	60.6	89.3	25.9	57.1
Attended School	6.7	6.9	6.8	7.9	8.4	8.2	1.5	2.1	1.8
Home Duties	4.9	51.5	28.4	2.5	44.8	24.4	1.2	67.3	34.8
Retired	5.5	5.0	5.2	4.9	5.1	5.0	5.5	2.3	3.9
Disabled	2.5	1.9	2.2	2.0	1.7	1.9	2.4	2.3	2.4
Inst. Population	2.1	0.6	1.3	n/a	n/a	n/a	0.2	0.1	0.1
Sub-total	21.7	66.0	44.0	17.3	60.1	39.4	10.7	74.1	42.9
Grand Total	100	100	100	100	100	100	100	100	100

Note: *Included with "worked category" in 1980 and 1992 and "age not stated category" (5,341) was excluded.

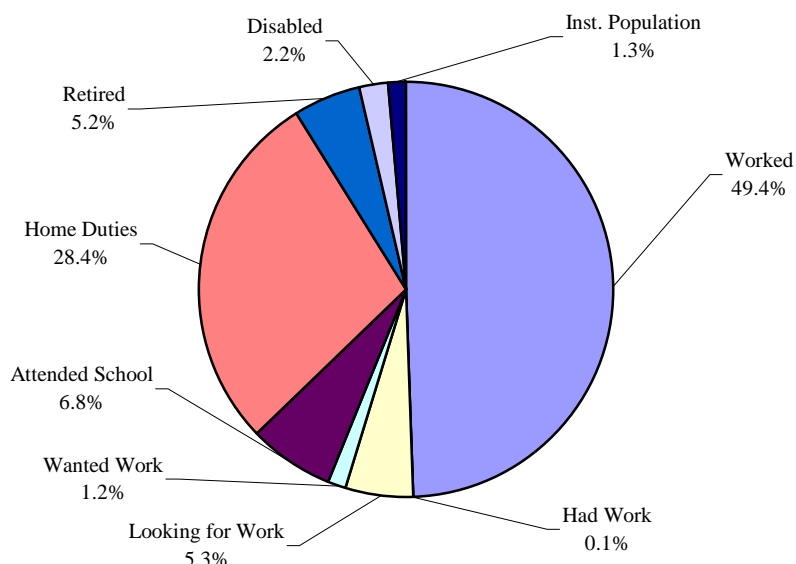
Activity "Not stated" (4,430) and "Other" (3,356) categories were prorated. **na** = not available.

Reference period used is "past week"

The growth of the retired population is notable. This group increased from 3.9 percent in 1980 to 5.2 percent in 2002. This is another indication that the population is maturing. The proportion of retired citizens is expected to rise due to increase in life expectancy, hence the need for re-training programme so that the skills and expertise of the ageing population could still be utilized. The rate of growth of this group also signals the need for effective social programmes and national insurance for the elderly so that they could enjoy their later years.

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Fig. 6.1: Principal Activities of the Population 15 Years and Over, Guyana: 2002



Although males comprise a little over one-half of the total population, they only account for 49.6 percent of the working-age population (see Table 6.1). Of males of working-age, approximately 7 percent are still attending school, another 6 percent are retired, 5 percent perform home duties and 2 percent are part of the institutional population. By contrast, for females of working age, a little over one-half perform home duties, 7 percent attend school and 5 percent are retired. The female institutional population is also very small compared to males (0.6 percent).

In sum, only 22 percent of the male working-age population is not engaged in any type of activity to earn an income, compared with 66 percent of females. On average, for the whole population, 44 percent of the persons of working-age are not engaged in any economic activity. This means that the national average is heavily weighted by the number of women who do not perform any activity for pay (Table 6.1).

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Table 6.2: Percent Distribution of Population 15 Years and Over by Principal Activities One Week Preceding the Census, by Sex and Region, Guyana: 2002

Principal Activities	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Both sexes											
Worked	48.8	46.0	49.1	52.2	41.2	44.1	58.6	49.2	56.0	49.1	49.2
Had Work	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1
Looked for work	5.3	6.5	3.4	6.1	5.9	4.2	4.6	6.3	2.1	7.4	5.3
Wanted work	4.4	1.9	0.9	0.9	1.2	0.8	1.9	5.4	2.2	1.4	1.2
Attended School	3.2	5.9	5.9	7.9	6.0	5.4	5.2	3.9	8.8	8.9	6.8
Home Duties	30.0	31.3	32.0	23.5	36.3	35.9	22.7	27.5	21.7	24.6	28.4
Retired/Too Old	4.4	4.5	5.5	5.3	5.1	6.0	3.3	3.0	2.8	5.0	5.2
Disabled	2.0	2.5	2.2	2.1	2.8	2.5	1.6	1.6	0.9	1.7	2.2
Other Activity	0.5	0.6	0.4	0.9	0.9	0.5	0.7	1.0	0.5	0.7	0.7
Not Stated	1.4	0.8	0.5	1.0	0.4	0.6	1.1	2.2	4.9	1.1	0.9
Total	100	100	100	100	100	100	100	100	100	100	100
Males											
Worked	69.4	70.5	74.5	69.8	66.2	69.4	78.9	66.4	75.2	66.5	70.3
Had Work	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.1
Looked for work	7.3	7.5	4.4	7.0	7.5	5.9	4.4	8.5	2.8	8.0	6.4
Wanted work	4.1	2.0	1.3	1.2	1.8	1.4	1.7	5.8	2.3	1.7	1.5
Attended School	3.2	6.0	5.6	7.8	5.8	5.4	4.7	3.5	9.6	8.9	6.7
Home Duties	6.8	4.8	4.0	4.1	6.8	7.0	3.0	8.9	3.7	4.6	4.9
Retired/Too Old	4.6	4.5	6.1	5.4	6.2	6.4	3.0	2.2	2.5	5.7	5.5
Disabled	2.2	2.7	2.7	2.4	3.4	3.0	1.8	1.5	0.9	1.9	2.5
Other Activity	0.9	0.9	0.7	1.4	1.4	0.8	1.1	1.4	0.6	1.0	1.1
Not Stated	1.7	1.0	0.7	0.8	0.6	0.8	1.3	1.8	2.4	1.5	0.9
Total	100	100	100	100	100	100	100	100	100	100	100
Females											
Worked	25.7	21.4	23.6	36.0	16.5	19.3	36.2	22.4	35.0	32.4	28.7
Had Work	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Looked for work	3.1	5.5	2.5	5.2	4.2	2.5	4.8	3.0	1.3	6.8	4.3
Wanted work	4.7	1.8	0.5	0.7	0.6	0.3	2.1	4.8	2.2	1.0	0.9
Attended School	3.3	5.9	6.1	7.9	6.2	5.4	5.8	4.4	8.0	8.9	6.9
Home Duties	55.9	57.8	60.1	41.4	65.4	64.2	44.6	56.4	41.4	43.8	51.2
Retired/Too Old	4.3	4.4	4.9	5.2	4.1	5.6	3.8	4.2	3.1	4.3	5.0
Disabled	1.9	2.2	1.6	1.8	2.3	2.0	1.5	1.6	0.9	1.5	1.9
Other Activity	0.2	0.2	0.2	0.5	0.4	0.2	0.4	0.4	0.5	0.3	0.4
Not Stated	1.0	0.7	0.4	1.2	0.3	0.5	0.8	2.9	7.6	0.9	1.0
Total	100	100	100	100	100	100	100	100	100	100	100

Note: Institutional popn. (6,366), and Age "not stated" (5,341) were excluded.

Derived from Appendix B.6.2

Reference period used is "past week"

Principal activities at the regional level only, for 2002 shown in Table 6.2, did not reveal a marked difference from the national figures. But in descending order, Regions 7, 8, 9 and 4 have a little higher proportion of economically active population than the national average; and while only one third of the females in other regions were reported to be active, the proportion of active females in Regions 4, 7, 9 and 10 was slightly higher, about two-fifths. In order of significance, in Regions 5, 6, 3, 2, 8 and 1, house-keeping duties ranked first among women in the inactive category (Table 6.2).

The high proportion of women in what would be called non-economic activity (not for pay) is generally misleading as many women who report doing 'home duties' are usually involved in some small activity, for example, making sugar-cakes, mitai, etc. or tend a garden to supplement family income or to have a small income of their own. Additionally, some other non-economic activities performed by women such as cooking or caring for the family are usually chores that normally have to be paid for in cases where women work and should be costed as a contribution to the household budget. Costing the contribution of women to reproductive activity is a subject for further research.

The apparent concentration of women in the areas of work that are considered non-productive, also raises other concerns that warrant further research. It is probable that males control most of the resources of households and women are left to negotiate their share. This finding deserves further enquiry into intra-household power relations between men and women and into issues such as domestic violence and even women's power over their own bodies, particularly their ability to avoid the contraction of diseases such as HIV/AIDS.

Disability: Disability levels within the working age population are generated from data collected from all households which were questioned about disabilities which prevented members from being economically active. This section of the report therefore, only identifies disabilities within the economically inactive population to sensitize the policymakers to the magnitude of this phenomenon.

The 2002 census shows that 2.2 percent (10,429 persons) of the working-age population suffer from some form of disability and presumably cannot perform to their maximum capability (Table 6.1). Fifty-seven percent are males. The number of persons who are impaired and cannot work has increased slightly from 1980 (9,923). The percentage of males who are disabled also increased by 7 percent for the same period. There are also social implications for persons with a disability. In addition to the need for government to allocate resources for their upkeep, there is the issue of care-giving. Care-givers for the most part, tend to be women, regardless of the sex or even marital status of the disabled person. The burden of care-giving is one that could be the subject of further investigation.

6.2 Labour Force Participation ²⁶

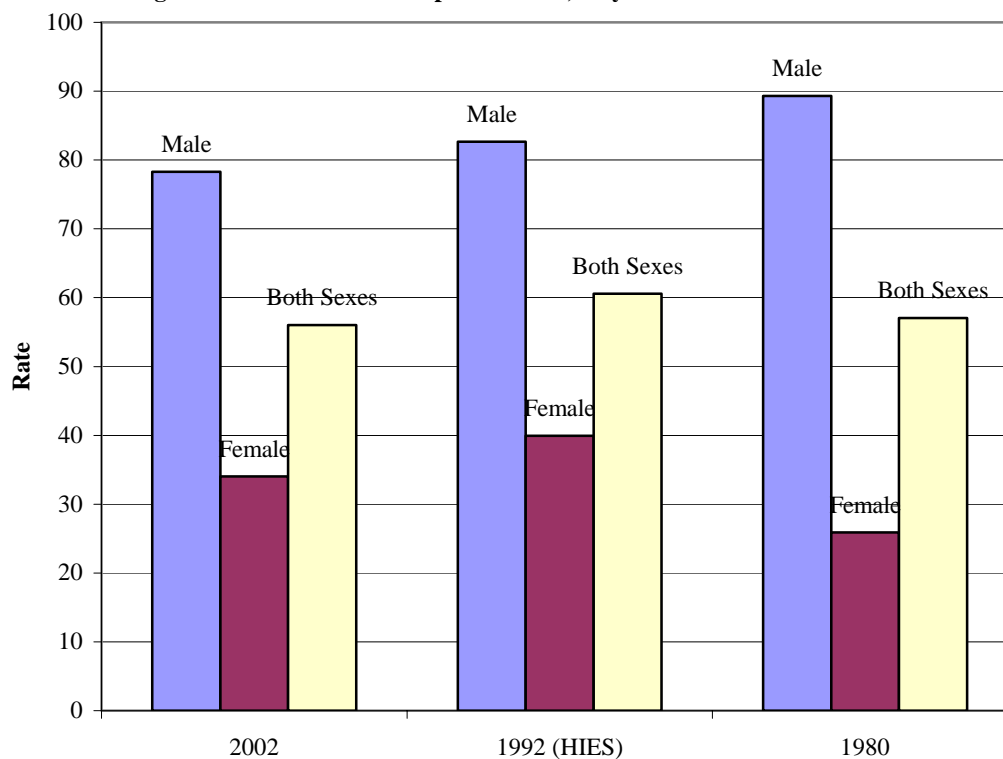
6.2.1 Labour force size

The size of the economically active population is distilled from the population in the working ages of 15 years and over. The level of involvement of members of the working-age population in the labour force is described as *the participation rate*. A little over one-half of the working-age population (56 percent) participates in the labour force. This 2002 labour force participation rate has been constant as it compares with participation rates of 61 percent found by the 1992 Household Income and Expenditure Survey (HIES)²⁷ and 57 percent by the 1980 census (Table 6.3 and Figure 6.2).

²⁶ Reference period used is past week.

²⁷ Figures taken from 1992 Household Income and Expenditure Survey. Data from this HIES for this variable is more reliable. The survey was also conducted close to the 1991 census, but with greater controls for this variable. (Tables 6.1 and 6.3)

Fig.6.2: Labour Force Participation Rates, Guyana: 1980 - 2002



Sex Differentials: Seventy-eight percent, or a little over three-quarters of the male working-age population carried out economic activities for pay or are economically active. On the other hand, only 34 percent or just over one-third of the women of working age were involved in economic activities for pay (Figure 6.2 and Table 6.3). Further analysis that compares the type of occupations undertaken by males with those of the females is required. Such analysis would reveal whether females are in lower-paying and more insecure jobs than males and therefore, more at risk for living in, or falling into situations of poverty.

When comparisons are made with the earlier years, we see higher participation rates for males in 1980 (89 percent) and 1992 (83 percent) and fluctuating rates for females, i.e., lower (26 percent) in 1980 and higher (40 percent) in 1992.

The reducing participation rates for males from 1980 to 2002, indicated in Table 6.3, are of some concern. It could mean that some men are genuinely disillusioned. On the other hand, it could be only a slight dip that would correct itself with the coming on stream of new initiatives, such as the mining and quarrying activities on the rise in Region 8 and, which would be reflected in the HBS (Household Budget Survey) in 2006.

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Table 6.3: Employment Status by Sex, Guyana: 1980 - 2002

Employment Status	2002		1992 (HIES)*		1980	
Both Sexes	Number	Percent	Number	Percent	Number	Percent
Total: 15 years and over	475,219	100	467,175	100	417,770	100
Labor force	266,167	56.0	282,964	60.6	238,382	57.1
Employed	235,094	88.3	249,820	88.3	201,359	84.5
Unemployed	31,073	11.7	33,144	11.7	37,023	15.5
Not in labor force	209,051	44.0	184,211	39.4	179,388	42.9
Male						
Total: 15 years and over	235,779	100	225,665	100	205,317	100
Labor force	184,642	78.3	186,554	82.7	183,391	89.3
Employed	165,917	89.9	170,861	91.6	156,656	85.4
Unemployed	18,725	10.1	15,693	8.4	26,735	14.6
Not in labor force	51,137	21.7	39,111	17.3	21,926	10.7
Female						
Total: 15 years and over	239,439	100	241,510	100	212,453	100
Labor force	81,525	34.0	96,410	39.9	54,991	25.9
Employed	69,177	84.9	78,959	81.9	44,703	81.3
Unemployed	12,348	15.1	17,451	18.1	10,288	18.7
Not in labor force	157,914	66.0	145,100	60.1	157,462	74.1

Note: Derived from Table 6.1 and *HIES = Household income and expenditure survey.
Unemployment Rate = (unemployed/total labour force) x 100.

Comparison at the regional level in Table 6.4, indicates higher participation rates for the hinterland regions (7, 8 and 9) in 2002, about 60 percent compared to the others which are identical to the national average for either sex. The higher rates in these regions could be because workers there are mostly self-employed unpaid family workers who may be engaged in small scale agricultural activities (see employment status in section 6.3.3) as opposed to employment in non-agricultural industries in regions with urban cities where employees work for paid jobs.

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Table 6.4: Employment Status of the Population 15 Years and Over, by Region and Sex, Guyana: 2002

Employment status	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Both Sexes											
Total Popn 15 yrs+	11,278	29,788	66,887	199,833	32,731	78,693	9,595	5,709	10,033	24,306	468,853
Labour Force	6,596	16,230	35,770	118,420	15,828	38,654	6,258	3,479	6,056	14,096	261,387
Employed	5,504	13,719	32,913	104,429	13,514	34,748	5,632	2,809	5,626	11,960	230,854
Unemployed	1,092	2,511	2,857	13,991	2,314	3,906	626	670	430	2,136	30,533
Not in Labour Force	4,529	13,310	30,751	79,403	16,760	39,531	3,232	2,103	3,486	9,931	202,338
Not Stated	153	248	366	2,010	143	508	105	127	491	279	9,862
Males											
Total Popn 15 yrs+	5,947	14,929	33,473	95,690	16,247	38,960	5,047	3,479	5,256	11,904	230,932
Labour Force	4,805	11,959	26,879	74,681	12,311	29,894	4,295	2,806	4,221	9,095	180,946
Employed	4,131	10,536	25,000	66,877	10,788	27,083	3,985	2,310	3,955	7,931	162,596
Unemployed	674	1,423	1,879	7,804	1,523	2,811	310	496	266	1,164	18,350
Not in Labour Force	1,043	2,825	6,370	20,202	3,843	8,754	685	610	909	2,636	47,877
Not Stated	99	145	224	807	93	312	67	63	126	173	2,109
Females											
Total Popn 15 yrs+	5,331	14,859	33,414	104,143	16,484	39,733	4,548	2,230	4,777	12,402	237,921
Labour Force	1,791	4,271	8,891	43,739	3,517	8,760	1,963	673	1,835	5,001	80,441
Employed	1,373	3,183	7,913	37,552	2,726	7,665	1,647	499	1,671	4,029	68,258
Unemployed	418	1,088	978	6,187	791	1,095	316	174	164	972	12,183
Not in Labour Force	3,486	10,485	24,381	59,201	12,917	30,777	2,547	1,493	2,577	7,295	155,159
Not Stated	54	103	142	1,203	50	196	38	64	365	106	2,321
PERCENT											
Both Sexes											
Total Popn 15 yrs+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Labour Force	58.5	54.5	53.5	59.3	48.4	49.1	65.2	60.9	60.4	58.0	55.8
Employed	83.4	84.5	92.0	88.2	85.4	89.9	90.0	80.7	92.9	84.8	88.3
Unemployed	16.6	15.5	8.0	11.8	14.6	10.1	10.0	19.3	7.1	15.2	11.7
Not in Labour Force	40.2	44.7	46.0	39.7	51.2	50.2	33.7	36.8	34.7	40.9	43.2
Not Stated	1.4	0.8	0.5	1.0	0.4	0.6	1.1	2.2	4.9	1.1	2.1
Males											
Total Popn 15 yrs+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Labour Force	80.8	80.1	80.3	78.0	75.8	76.7	85.1	80.7	80.3	76.4	78.4
Employed	86.0	88.1	93.0	89.6	87.6	90.6	92.8	82.3	93.7	87.2	89.9
Unemployed	14.0	11.9	7.0	10.4	12.4	9.4	7.2	17.7	6.3	12.8	10.1
Not in Labour Force	17.5	18.9	19.0	21.1	23.7	22.5	13.6	17.5	17.3	22.1	20.7
Not Stated	1.7	1.0	0.7	0.8	0.6	0.8	1.3	1.8	2.4	1.5	0.9
Females											
Total Popn 15 yrs+	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Labour Force	33.6	28.7	26.6	42.0	21.3	22.0	43.2	30.2	38.4	40.3	33.8
Employed	76.7	74.5	89.0	85.9	77.5	87.5	83.9	74.1	91.1	80.6	84.9
Unemployed	23.3	25.5	11.0	14.1	22.5	12.5	16.1	25.9	8.9	19.4	15.1
Not in Labour Force	65.4	70.6	73.0	56.8	78.4	77.5	56.0	67.0	53.9	58.8	65.2
Not Stated	1.0	0.7	0.4	1.2	0.3	0.5	0.8	2.9	7.6	0.9	1.0

Note: Derived from Appendix B.6.2.

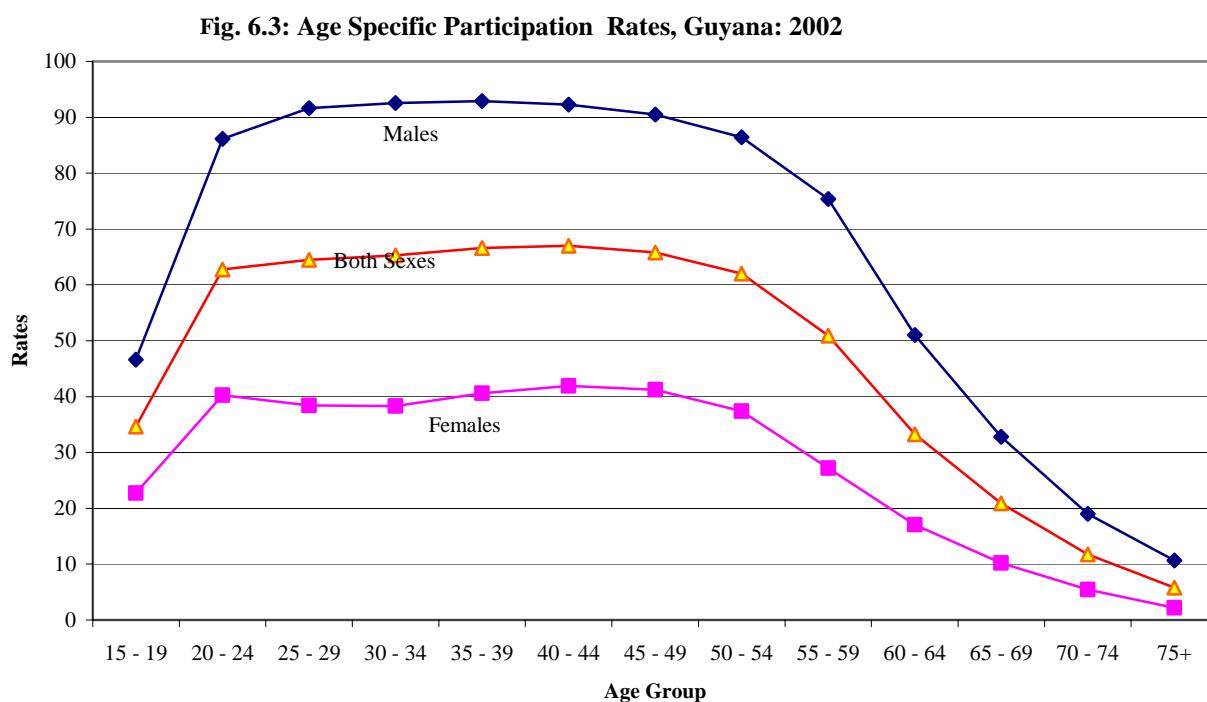
6.2.2 Age-sex pattern

Within the employable age groups, economic activity is not distributed randomly, either for males or females. The universal differential pattern in the labour force, where the economically active proportion rises from near 100 percent in some categories and down to zero in others, is reflected in Figure 6.3 and Table 6.5.

In Guyana, males enter the labour force from age 15 and their activity rate rises sharply to 86 percent by age 20-24, and after that rises sharply to more than 90 percent until the 45-49 age group. From age 50, we notice a progressive attrition from the labour force because of retirement and death.

The female specific participation rates are much lower than the males, but both of them form a similar dome shaped curve (Figure 6.3). Like the males, a small proportion of the females enters the labour force from age 15 which is the legal age at work entry in Guyana, and then the rate rises and remains high in the main working age groups, and reaching the maximum average in the 40-44 year age group (42 percent) before declining.

There was a slight undulation within the participation of women. The seesaw pattern is congruent with the unusual way in which women enter and exit from labour force participation, sometimes at most, due to child-bearing and rearing, or marriage. At times, some women enter the labour force for the first time in their thirties, forties, or even later, while others are retiring, and then move into and out again several times in the course of their lives.



**Table 6.5: Age-Specific Activity
Rates of Males and Females,**

Age group	Males	Females	Both Sexes
15 - 19	46.6	22.7	34.7
20 - 24	86.2	40.3	62.8
25 - 29	91.6	38.4	64.5
30 - 34	92.5	38.3	65.3
35 - 39	92.9	40.6	66.6
40 - 44	92.3	41.9	67.0
45 - 49	90.5	41.2	65.8
50 - 54	86.4	37.4	62.0
55 - 59	75.4	27.2	50.9
60 - 64	51.0	17.1	33.3
65 - 69	32.8	10.2	20.9
70 - 74	19.0	5.5	11.7
75+	10.6	2.2	5.8
NS	15.5	6.2	11.1
Total	77.6	33.5	55.2

6.2.3 Unemployment

Unless there is full employment within the country, not all persons who participate in the labour force will have jobs. In 2002, 88 percent of persons participating in the labour force had jobs (Table 6.6). The others, (approximately 12 percent), were unemployed. This 2002 census unemployment figure compares with a level of 16.8 percent in 1980 and 11.7 percent in 1992.²⁸ In reality, employment and unemployment rates have remained fairly constant between 1992 and the present.

Employment levels were higher for males than for females (90 percent for males compared with 85 percent for females) participating in the labour force (Table 6.6). As a result, unemployment rates were higher for women (15 percent compared with 10 percent for males).

At the regional level, the highest unemployment rates by order of significance are shown among persons in Regions 8, 1, 2, 10 and 5 (19.3, 16.6, 15.5, 15.2, and 14.6 percent) respectively. The unemployment rate was higher for females, nearly twice that of males (Table 6.6). Again, while unemployment rates in other regions were moderate and identical to the national total, women in Regions 1, 2, 5, 8 and 10 experienced the worst, with about a quarter of them reported being unemployed in 2002.

²⁸ Figure taken from the 1992 Household Income and Expenditure Survey-see Table 6.3.

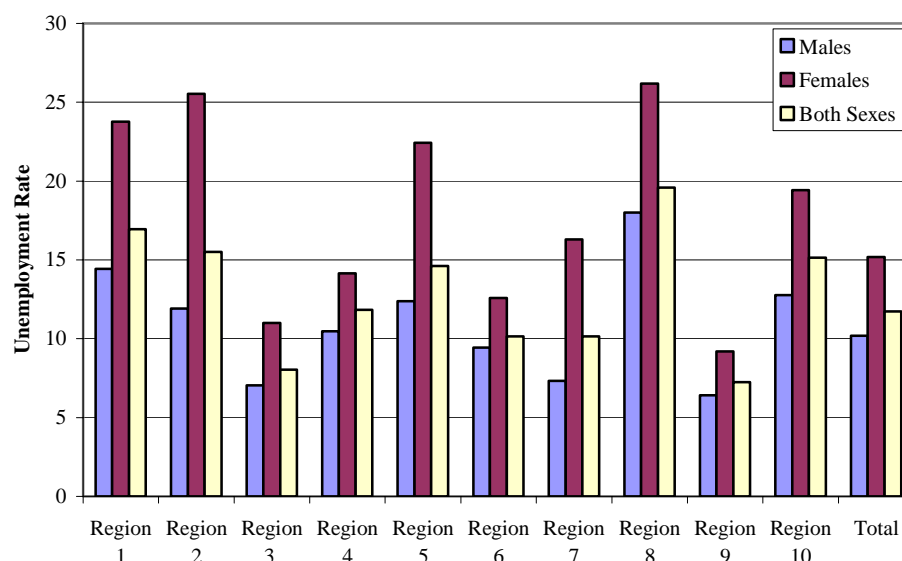
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Table 6.6: Employment and Unemployment Rates by Region and Sex, Guyana: 200

Region	Number			Rates		
	Employed	Unemployed	Total	Employed	Unemployed	Total
Both Sexes						
Region 1	5,504	1,092	6,596	83.4	16.6	100
Region 2	13,719	2,511	16,230	84.5	15.5	100
Region 3	32,913	2,857	35,770	92.0	8.0	100
Region 4	104,429	13,991	118,420	88.2	11.8	100
Region 5	13,514	2,314	15,828	85.4	14.6	100
Region 6	34,748	3,906	38,654	89.9	10.1	100
Region 7	5,632	626	6,258	90.0	10.0	100
Region 8	2,809	670	3,479	80.7	19.3	100
Region 9	5,626	430	6,056	92.9	7.1	100
Region 10	11,960	2,136	14,096	84.8	15.2	100
Total	230,854	30,533	261,387	88.3	11.7	100
Males						
Region 1	4,131	674	4,805	86.0	14.0	100
Region 2	10,536	1,423	11,959	88.1	11.9	100
Region 3	25,000	1,879	26,879	93.0	7.0	100
Region 4	66,877	7,804	74,681	89.6	10.4	100
Region 5	10,788	1,523	12,311	87.6	12.4	100
Region 6	27,083	2,811	29,894	90.6	9.4	100
Region 7	3,985	310	4,295	92.8	7.2	100
Region 8	2,310	496	2,806	82.3	17.7	100
Region 9	3,955	266	4,221	93.7	6.3	100
Region 10	7,931	1,164	9,095	87.2	12.8	100
Total	162,596	18,350	180,946	89.9	10.1	100
Females						
Region 1	1,373	418	1,791	76.7	23.3	100
Region 2	3,183	1,088	4,271	74.5	25.5	100
Region 3	7,913	978	8,891	89.0	11.0	100
Region 4	37,552	6,187	43,739	85.9	14.1	100
Region 5	2,726	791	3,517	77.5	22.5	100
Region 6	7,665	1,095	8,760	87.5	12.5	100
Region 7	1,647	316	1,963	83.9	16.1	100
Region 8	499	174	673	74.1	25.9	100
Region 9	1,671	164	1,835	91.1	8.9	100
Region 10	4,029	972	5,001	80.6	19.4	100
Total	68,258	12,183	80,441	84.9	15.1	100

Note: Institutional population (6,366) and age "not stated" (5,341) of the entire popn. were excluded.

Fig. 6.4: Unemployment Rate by Region, Guyana: 2002



Age-Related Unemployment Levels: Traditionally, school leavers have a waiting period before they find their first job, due to the fact that they have no work-experience. Unemployment levels for them therefore, are usually high. It is no exception for Guyana. The 15-19 age-group for both sexes has unemployment levels that are almost five times as high as the 35-39 and 40-44 age groups. For the 20-24 age-group, unemployment levels are high, but only twice as high as for the older ages (Table 6.7 and Figure 6.5).

There is a sex differential in unemployment however, as female unemployment levels are still high into the 30-34 age group, while male unemployment levels off by age 20-24. A possible reason for early abatement in male unemployment could be that males at all ages are more likely than females to accept 'odd jobs' as a means of ending their unemployment.

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Fig. 6.5: Unemployment by Age and Sex, Guyana: 2002

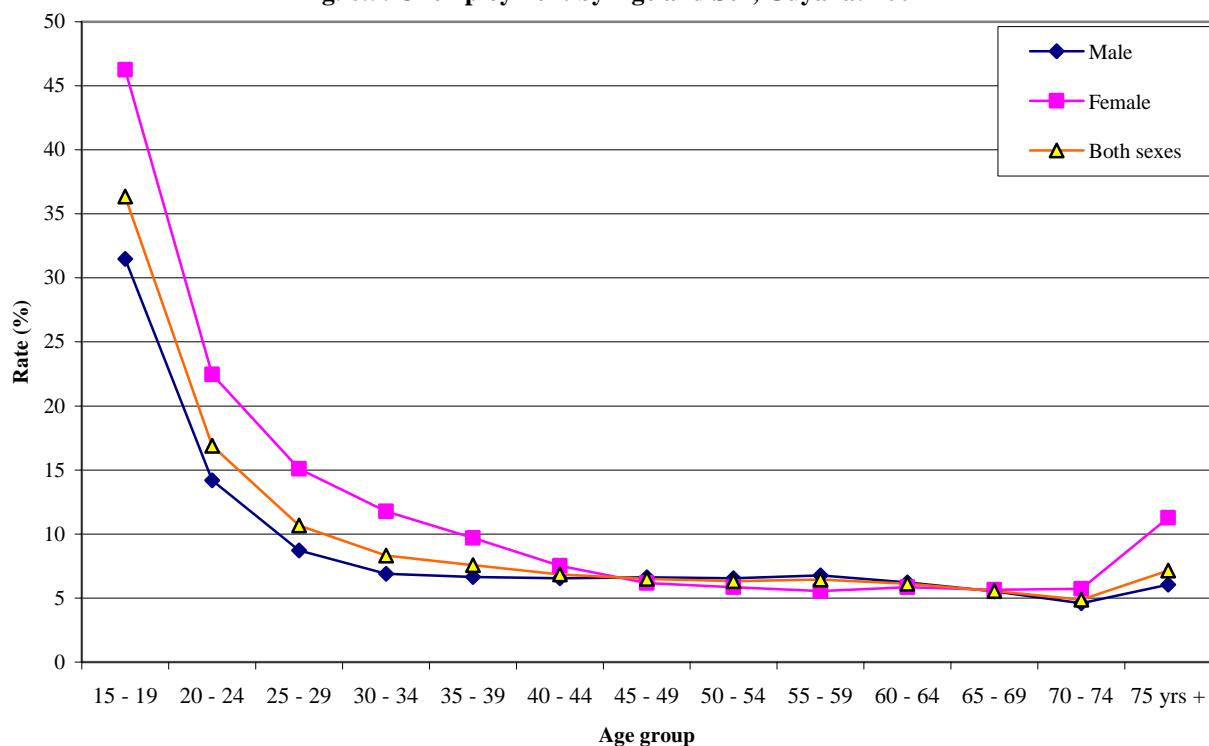


Table 6.7: Unemployment Rates by Age and Sex, Guyana: 2002

Age group	Number Employed			Number Unemployed			Unemployment Rate (%)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15 - 19	10,423	4,006	14,429	4,792	3,448	8,240	21.1	15.2	36.3
20 - 24	22,866	10,010	32,876	3,780	2,899	6,679	9.6	7.3	16.9
25 - 29	24,523	9,960	34,483	2,344	1,770	4,114	6.1	4.6	10.7
30 - 34	24,352	9,655	34,007	1,801	1,289	3,090	4.9	3.5	8.3
35 - 39	22,291	9,548	31,839	1,584	1,026	2,610	4.6	3.0	7.6
40 - 44	19,642	8,881	28,523	1,374	722	2,096	4.5	2.4	6.8
45 - 49	14,845	6,838	21,683	1,054	450	1,504	4.6	1.9	6.5
50 - 54	11,234	4,857	16,091	786	301	1,087	4.6	1.8	6.3
55 - 59	6,175	2,329	8,504	448	137	585	4.9	1.5	6.4
60 - 64	3,378	1,241	4,619	224	77	301	4.6	1.6	6.1
65 - 69	1,696	584	2,280	99	35	134	4.1	1.5	5.6
70 - 74	705	231	936	34	14	48	3.5	1.4	4.9
75 yrs +	466	118	584	30	15	45	4.8	2.4	7.2
Total	162,596	68,258	230,854	18,350	12,183	30,533	7.0	4.7	11.7

Note: Unemployment rate = (unemployed/total labour force) x 100

What is notable is the fact, that, a significant percentage of elderly persons (7 percent) report themselves as seeking or wanting work at ages 75 and over. The percentage is also higher among women than men – signalling perhaps the loss of a male main income-provider. The observance

that some persons well into their retirement ages reported that they still have the need for work, suggests that pensions and other welfare support mechanisms may be insufficient to maintain them. Unemployment rates by age and sex are given in Table 6.7 and Figure 6.5.

6.3 Types of Economic Activities

The size and changes of the labour force along with its composition in terms of sex, age and regional differentials in the preceding sections, presented the aggregate dimension of economic functionaries of the population in Guyana, but information on the types of economic activities in which the labour force is engaged is needed to determine the levels and trends of structural changes over time. These types of economic activities described by three primary classifications of workers include:

- Industry – the activities of the establishment or enterprise in which the individual works;
- Occupation – the kind of work done by the individual; and
- Status – whether the individual works as an employer, employee and so on²⁹.

Ideally, the interrelation between the industry and occupation distribution and between each of these and the status distribution of the employed labour force in Guyana are necessary and worth examination, in order to determine how the use of manpower in production is organized and to gain knowledge of factors and processes of change in the structure of the labour supply and demand in the country. The data would provide the basis for economic policy and development plans; in particular, because they relate to the problem of improving the quality of manpower, raising productivity, minimizing unemployment and underemployment, and serve as a foundation for projection of the labour force and employment in various categories of economic activities.

In the following sections, the analysis would focus on grouped classifications of industry, occupation and status. This grouping does not include some 30,533 unemployed persons (Table 6.7) some of whom had never worked in any industry nor acquired any occupational skill, but were available for employment.

6.3.1 Employment by Industries

The seventeen major industrial groups in which the labour force in Guyana was engaged are given in Tables 6.8 and broken down into three industrial sectors at both national and regional levels in Table 6.9 and Table 6.10. The three-sector analysis is adopted for easy reference to deal with the changes in the classification between 1991 and 2002. While in 1991, the industries were classified into twelve major groups, the 2002 census adopted the revised 1992 standard international classification (SIC) of industries which gave seventeen major groups, apart from people who did not state industries where they worked.

For instance, in 2002 new categories such as: a) financial intermediation, b) real estate, renting and business activities; c) education, d) private household with employment and e) extra territorial organization and bodies, have been added or renamed, while fishing, operators of fish

²⁹ United Nations (1968) Methods of Analysing Census Data on Economic Activities of the population (UN DESA, Population studies, No. 43)

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hatchery and fish farms, added to agriculture, hunting and forestry category in 1991, have been given separately in 2002.

Firstly, we narrowed the major groups into agricultural and non-agricultural industries. The Agricultural-sector (1 and 2 in Table 6.8) comprises agriculture itself, hunting and forestry, fishing, operators of fish hatchery and fish farms, while the non-agricultural sector is sub-divided into manufacturing or “M”-Sector and services or “S” sector. The “M” sector comprises (3-5) or manufacturing itself, mining and quarrying, and construction industries, and services or “S”-sector, consists of industry groups from number 6-17 (see detail in Table 6.8).

Table 6.8: Distribution of Employed Labour Force 15 Years and Over by Major Industrial Groups Where They Work One Week Preceding the Census by Sex, Guyana: 2002

No.	Major Industry Group	Number			Percent		
		Males	Females	Both	Males	Females	Both
1	Agriculture, Hunting & Forestry	40,639	4,739	45,378	25.0	6.9	19.7
2	Fishing, Operators of Fish hatchery & Fish farms	5,273	260	5,533	3.2	0.4	2.4
3	Mining and Quarrying	8,690	684	9,374	5.3	1.0	4.1
4	Manufacturing	23,369	7,114	30,483	14.4	10.4	13.2
5	Construction	1,752	494	2,246	1.1	0.7	1.0
6	Electricity, Gas, Steam & Water Supply	15,795	305	16,100	9.7	0.4	7.0
7	Wholesale & Retail Trade; Repair of Vehicles, Motor & Hh.goods	22,192	15,498	37,690	13.6	22.7	16.3
8	Hotel and Restaurants	1,962	3,596	5,558	1.2	5.3	2.4
9	Transport Storage and Communication	14,859	1,931	16,790	9.1	2.8	7.3
10	Financial Intermediation	1,343	1,731	3,074	0.8	2.5	1.3
11	Real Estate, Renting & Business Activities	4,554	2,830	7,384	2.8	4.1	3.2
12	Public Admin & Defense; Compulsory Social Services	8,630	6,365	14,995	5.3	9.3	6.5
13	Education	3,101	9,914	13,015	1.9	14.5	5.6
14	Health & social Work	1,275	4,238	5,513	0.8	6.2	2.4
15	Other Community, Soc & Personal Activities	6,442	3,157	9,599	4.0	4.6	4.2
16	Private Households with Employment	1,332	4,824	6,156	0.8	7.1	2.7
17	Extra Territorial Organisation & Bodies	213	264	477	0.1	0.4	0.2
18	Not Stated	1,175	314	1,489	0.7	0.5	0.6
	Total	162,596	68,258	230,854	100	100	100

The agricultural sector, comprising commercial and subsistence agriculture workers, provided 22 percent (50,911) of the employment in 2002, a decline of 6 percentage points of the existing level in 1991, which engaged 61,845 or approximately 28 percent of the total employment (Table 6.9).

Next in the order of importance, is the Service-sector, which revealed a definite trend towards expansion, with a workforce of 103,356 (46.4 percent) in 1991, and increased to 122,497 (53.1 percent) in 2002. A significant contribution to the size and growth of the Service-sector came from commerce, particularly, “wholesale and retail trade, repair of vehicles and motor cycles,

and household goods” industry (16.3 percent). Relative contributions were also made, but in reducing order, by the following industries: transport and communication (7.3 percent), public administration and defense, compulsory social services (6.5 percent) and education (5.6 percent). The remaining “S”-sector industries accounted for less than 5 percent each with the smallest size being among those engaged in extra territorial organization and bodies (Table 6.8).

Significantly, the M-sector contributed a considerably degree of employment in the country, 26 percent in 1991, slightly declining by 2 percent in 2002. Those who shifted, moved into the “S” sector which rose from 46 percent in 1991 to 53 percent in 2002, as reflected in the share of workers there in Table 6.9. Apparently, they were mainly transferred to “wholesale and retail trade, repair of vehicles and motor cycles, and household goods”.

In all industries combined, just over a quarter of the workers employed were females in 1991 which rose to nearly one-third during the intercensal period. The sector with the highest proportion of female workers was Services (80.4 percent), and these were mainly involved in wholesale and retail trade businesses (22.7 percent), compared to males with 13.6 percent in 2002 (Tables 6.8 and 6.9). Education and manufacturing industries also engaged a significant number of women, 14.5 and 10.4 percent, respectively, against males with only 1.9 percent and 14.4 percent (Table 6.8).

Notably as elaborated, both agriculture and manufacturing industries simultaneously declined over the period, although the drop in the share of the latter was insignificant. But, the decline in the share of agricultural workers has been used as a good indicator of economic development, signalling in many ways, that the economy was expanding, but whether the growth was sufficient to alleviate poverty and hunger in Guyana is a topic for more research.

Table 6.9: Changes in Industrial Distribution of Employed Labour Force, Guyana: 1991 - 2002

Industrial Sector	1991			2002		
	Males	Females	Both Sexes	Males	Females	Both Sexes
Agricultural Sector	56,143	5,702	61,845	45,912	4,999	50,911
Non-Agricultural Sector	107,430	53,191	160,621	115,509	62,945	178,454
Manufacturing Sector (3 - 5)	47,566	9,699	57,265	33,811	8,292	42,103
Services Sector (6 - 17)	59,864	43,492	103,356	81,698	54,653	136,351
Not Stated	211	235	446	1,175	314	1,489
All Industries	163,784	59,128	222,912	162,596	68,258	230,854
Industrial Sector	Percent					
Agricultural Sector	34.3	9.6	27.7	28.2	7.3	22.1
Non-Agricultural Sector	65.6	90.0	72.1	71.0	92.2	77.3
Manufacturing Sector (3 - 5)	29.0	16.4	25.7	20.8	12.1	18.2
Services Sector (6 - 17)	36.6	73.6	46.4	50.2	80.1	59.1
Not Stated	0.1	0.4	0.2	0.7	0.5	0.6
All Industries	100	100	100	100	100	100

Note: Grouping based on major indutry groups in Table 6.8

In Table 6.10, an overwhelming proportion of workers in Regions 4 and 10 are in the non-agriculture sector, suggesting the pronounced differences in regions with cities and towns with regard to the kinds of functions performed by workers within the agricultural sector. For instance, only 9 percent of the workforce in Region 4 was in the agricultural sector, compared to 70 and 40 percent in Regions 9 and 1, respectively.

Table 6.10 also revealed that the economic functions of the hinterland and coastal belt regions are to large extent complementary, the former being related mainly to primary production, while processing, distribution, and service functions are concentrated in the cities, with a substantial number of workers in Regions 4, 10 and 3 in the service sector (65.6, 50.9 and 49.0 percent), respectively. Region 8, though part of the hinterland region, has nearly one half of its workers in manufacturing – mainly mining and quarrying.

One striking finding of Table 6.10 is that nearly all working women (92.7 percent) at the regional level were engaged in non-agricultural activities; of these, 80.7 percent were in services and another 11.9 percent in manufacturing activities, except Region 9, in which agriculture served as the main source of employment.

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Table 6.10: Percent Distribution of Employed Labour Force by Agricultural and Non-Agricultural Sector, Guyana: 2002

Region	Agri. Sector (1 - 2)	Non-Agricultural Sector				Number All Industries	Non-Agricultural Sector				Percent All Industries
		Agri. Non-Agri.	"M" Sector (3 - 5)	Sector- Services (6 - 17)	Number		Agri. Non-Agri.	"M" Sector (3 - 5)	Sector- Services (6 - 17)	Number	
Both Sexes											
Region 1	2,197	3,307	1,374	1,934	5,504	39.9	60.1	25.0	35.1	100	
Region 2	3,707	10,012	3,513	6,499	13,719	27.0	73.0	25.6	47.4	100	
Region 3	8,921	23,992	7,878	16,114	32,913	27.1	72.9	23.9	49.0	100	
Region 4	9,850	94,579	26,062	68,517	104,429	9.4	90.6	25.0	65.6	100	
Region 5	5,060	8,454	3,052	5,402	13,514	37.4	62.6	22.6	40.0	100	
Region 6	13,076	21,672	6,843	14,829	34,748	37.6	62.4	19.7	42.7	100	
Region 7	1,538	4,094	1,904	2,189	5,632	27.3	72.7	33.8	38.9	100	
Region 8	812	1,997	1,369	628	2,809	28.9	71.1	48.7	22.4	100	
Region 9	3,957	1,669	474	1,195	5,626	70.3	29.7	8.4	21.2	100	
Region 10	1,973	9,987	3,901	6,086	11,960	16.5	83.5	32.6	50.9	100	
Total	51,092	179,762	56,370	123,393	230,854	22.1	77.9	24.4	53.5	100	
Males											
Region 1	1,754	2,377	1,250	1,128	4,131	42.5	57.5	30.3	27.3	100	
Region 2	3,361	7,175	3,118	4,057	10,536	31.9	68.1	29.6	38.5	100	
Region 3	8,415	16,585	6,730	9,855	25,000	33.7	66.3	26.9	39.4	100	
Region 4	8,842	58,035	21,324	36,711	66,877	13.2	86.8	31.9	54.9	100	
Region 5	4,878	5,910	2,755	3,155	10,788	45.2	54.8	25.5	29.2	100	
Region 6	12,448	14,635	6,222	8,413	27,083	46.0	54.0	23.0	31.1	100	
Region 7	1,037	2,948	1,777	1,170	3,985	26.0	74.0	44.6	29.4	100	
Region 8	663	1,647	1,291	356	2,310	28.7	71.3	55.9	15.4	100	
Region 9	2,906	1,049	393	656	3,955	73.5	26.5	9.9	16.6	100	
Region 10	1,779	6,152	3,368	2,784	7,931	22.4	77.6	42.5	35.1	100	
Total	46,083	116,513	48,228	68,285	162,596	28.3	71.7	29.7	42.0	100	
Females											
Region 1	443	930	124	806	1,373	32.3	67.7	9.0	58.7	100	
Region 2	346	2,837	395	2,442	3,183	10.9	89.1	12.4	76.7	100	
Region 3	506	7,407	1,148	6,259	7,913	6.4	93.6	14.5	79.1	100	
Region 4	1,008	36,544	4,738	31,806	37,552	2.7	97.3	12.6	84.7	100	
Region 5	182	2,544	297	2,247	2,726	6.7	93.3	10.9	82.4	100	
Region 6	628	7,037	621	6,416	7,665	8.2	91.8	8.1	83.7	100	
Region 7	501	1,146	127	1,019	1,647	30.4	69.6	7.7	61.8	100	
Region 8	149	350	78	272	499	29.9	70.1	15.7	54.4	100	
Region 9	1,051	620	81	539	1,671	62.9	37.1	4.9	32.3	100	
Region 10	194	3,835	533	3,302	4,029	4.8	95.2	13.2	82.0	100	
Total	5,008	63,250	8,142	55,108	68,258	7.3	92.7	11.9	80.7	100	

Note: Industries "not stated" have been prorated and grouping based on major industry groups in Table 6.8

6.3.2 Employment by Occupations

For the purpose of occupational analysis, the labour force was classified under nine main occupation groups in 2002, besides the "not stated category", which accounted for less than one percent in the two censuses. While in 1991, the occupations were classified by eleven major groups, during the 2002 census, "defense force" and "managers and hospitality" had been dropped and the workforce expected there spread across the new classification plan, based on

their professions. For instance, a mechanic or driver in the defense force was placed under “plant and machine operators and assemblers”, while top ranking officers were placed under “legislators, senior officials and managers occupation group”, etc. Adjustment for comparison has been ignored because the effect of change of the two categories combined is very insignificant.

In Table 6.11, occupation groups are given but the patterns followed by men and women are somehow different in Guyana, and also clearly indicate the relation between industries and occupations.

Overwhelmingly, the situation in 2002 was that a fifth of the women’s employment was in service, shop and market sale professions” and another 16 percent in “clerical” and “technical and associate” professions, respectively, and in reverse, the men were mainly in the production occupations such as, craft and related trades (20.8 percent), agricultural and related occupations (13.7 percent) and plant and machine operators and assemblers (12.2 percent) (see Tables 6.11 and 6.12).

As displayed in Table 6.11, there have been structural changes within the occupational groups. These shifts are a reflection of the changes in industrial distribution discussed earlier, that is, the share of agriculture and related occupations shrank, simply because the proportion of agriculture in the industry distribution diminished, during the intercensal period.

Although there have been shifts from one occupation group to the other, the main observation is, that the patterns of the occupational distribution between 1991 and 2002 have remained unchanged. For example, apart from the elementary workers which comprise an unspecified number of minor occupations and consisted overall of the largest number of the labour force, occupations which absorbed a higher number of workers in 1991 census had likewise retained their rank in the later census, such that, shop and market sale workers, clerical, and technical and associate professions, which attracted women in 1991, continued to play the same dominant role in 2002, while craft and related trades, agricultural and related occupations, plant and machine operators and assemblers continued to be the main areas for the men as well (Table 6.11).

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**Table 6.11: Percent Distribution of the Employed Persons 15 Years and Over by Major Occupation Groups
One Week Preceding the Census by Sex, Guyana: 1991 - 2002**

No. Occupation Groups	1991			2002		
	Males	Females	Both	Males	Females	Both
1 Defense Force	0.6	0.3	0.5	na	na	na
2 Legislators, Senior Officials & Managers	3.5	3.3	3.4	2.9	2.4	2.8
3 Managers hospitality	0.0	0.0	0.0	na	na	na
4 Professionals	2.3	4.5	2.9	1.7	4.2	2.4
5 Technicians & Associate Professionals	3.0	13.5	5.8	4.3	16.1	7.8
6 Clerks	3.7	20.7	8.2	3.3	15.9	7.0
7 Service Workers, Shop & Market Sales Workers	9.7	15.9	11.3	12.0	21.6	14.8
8 Agricultural & Fishery Workers/Farmers	17.9	5.5	14.6	13.7	4.9	11.1
9 Craft and Related Trades Workers	19.4	6.9	16.1	20.8	5.6	16.3
10 Plant & Machine Operators & Assemblers	8.5	1.3	6.6	12.2	1.4	9.0
11 Elementary Occupation	31.0	27.5	30.1	28.8	27.6	28.4
12 Not Stated	0.3	0.5	0.3	0.3	0.3	0.3
Total	100	100	100	100	100	100
Number	163,784	59,128	222,912	162,596	68,258	230,854

Note: na = not available/ was changed in 2002 and emerged with either of the groups.

In the regional distribution given in Tables 6.12 and 13, nevertheless, there are variations which occurred as a result of the degree of polarization of economic functions within these regions, but one thing seemingly sure is, the pattern of occupational employment was identical to the national average. What is also obvious regarding the distribution of specific occupation within each region (Table 6.12) is the high degree of concentration of almost every profession, particularly white-collar workers such as professional and legislators, senior officials and managers in Region 4, in contrast to the share of agriculture and elementary workers. The disproportionate distribution of these occupations in favour of Region 4, is due to the presence of the country's capital and the main body of the civil service being there. This region also has the highest percentage and concentration of the population in the country.

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Table 6.12: Percent Distribution of the Employed Persons 15 Years and Over by Major Occupation Group One Week Preceding the Census, by Region, Guyana: 2002 (Both Sexes Only)

Occupation No. Groups	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total % Number
A. Percent of Specific Occupation Within Each Region											
Legislators, Senior Officials & Managers	0.8	4.1	9.4	62.2	4.2	10.2	2.1	1.4	2.0	3.6	100 6,422
2 Professionals	0.4	2.3	9.8	72.8	2.9	6.5	0.7	0.2	1.6	2.8	100 5,626
Technicians & Associate Professionals	2.3	6.2	12.0	47.0	5.8	14.0	1.9	1.1	2.1	7.6	100 18,012
4 Clerks	0.6	3.1	13.8	63.6	3.0	9.5	1.1	0.1	0.4	4.8	100 16,268
Service Workers, Shop & Market Sales Workers	1.5	5.0	12.1	54.9	4.7	12.2	2.1	0.8	0.6	6.2	100 34,229
6 Skilled Agricultural & Fishery Workers/Farmers	6.7	9.1	13.9	17.5	8.2	17.7	5.2	3.1	14.8	3.7	100 25,579
Craft and Related Trades Workers	2.4	5.1	13.8	50.4	4.9	11.8	2.5	1.8	0.9	6.6	100 37,570
8 Operators & Assemblers	1.5	7.1	15.6	42.2	6.3	14.8	2.1	0.9	0.7	8.8	100 20,714
9 Elementary Occupa	2.3	6.5	17.0	39.5	7.2	20.5	2.3	0.9	0.7	3.1	100 65,640
10 Not Stated	0.9	1.2	1.6	91.0	0.9	1.2	0.2	0.9	0.6	1.4	100 794
Total	2.4	5.9	14.2	45.3	5.9	15.0	2.4	1.2	2.4	5.2	100 230,854
B. Percent of Occupations by Region											
Legislators, Senior Officials & Managers	1.0	1.9	1.8	3.8	2.0	1.9	2.4	3.1	2.3	1.9	2.8
2 Professionals	0.4	0.9	1.7	3.9	1.2	1.1	0.7	0.3	1.6	1.3	2.4
Technicians & Associate Professionals	7.4	8.1	6.6	8.1	7.8	7.3	6.2	6.9	6.7	11.5	7.8
4 Clerks	1.6	3.7	6.8	9.9	3.6	4.5	3.1	0.8	1.3	6.5	7.0
Service Workers, Shop & Market Sales Workers	9.1	12.5	12.6	18.0	11.9	12.0	12.8	9.4	3.9	17.8	14.8
6 Skilled Agricultural & Fishery Workers/Farmers	31.2	17.1	10.8	4.3	15.5	13.0	23.7	28.1	67.4	8.0	11.1
Craft and Related Trades Workers	16.1	14.0	15.8	18.1	13.6	12.8	16.4	23.8	5.7	20.6	16.3
8 Operators & Assemblers	5.5	10.7	9.8	8.4	9.6	8.8	7.9	6.3	2.6	15.3	9.0
9 Elementary Occup.	27.6	31.0	34.0	24.8	34.8	38.7	26.9	21.0	8.4	17.0	28.4
10 Not Stated	0.1	0.1	0.0	0.7	0.1	0.0	0.0	0.2	0.1	0.1	0.3
Total %	100	100	100	100	100	100	100	100	100	100	100
Number	5,504	13,719	32,913	104,429	13,514	34,748	5,632	2,809	5,626	11,960	230,854

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**Table 6.13: Percent Distribution of the Employed Persons 15 Years and Over by Major Occupation Group
One Week Preceding the Census, by Region and Sex, Guyana: 2002**

No.	Occupation Groups	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Both Sexes												
	Legislators, Senior Officials &											
1	Managers	1.0	1.9	1.8	3.8	2.0	1.9	2.4	3.1	2.3	1.9	2.8
2	Professionals	0.4	0.9	1.7	3.9	1.2	1.1	0.7	0.3	1.6	1.3	2.4
	Technicians & Associate											
3	Professionals	7.4	8.1	6.6	8.1	7.8	7.3	6.2	6.9	6.7	11.5	7.8
4	Clerks	1.6	3.7	6.8	9.9	3.6	4.5	3.1	0.8	1.3	6.5	7.0
	Service Workers, Shop & Market											
5	Sales Workers	9.1	12.5	12.6	18.0	11.9	12.0	12.8	9.4	3.9	17.8	14.8
	Skilled Agricultural & Fishery											
6	Workers/Farmers	31.2	17.1	10.8	4.3	15.5	13.0	23.7	28.1	67.4	8.0	11.1
	Craft and Related											
7	Trades Workers	16.1	14.0	15.8	18.1	13.6	12.8	16.4	23.8	5.7	20.6	16.3
	Plant & Machine Operators &											
8	Assemblers	5.5	10.7	9.8	8.4	9.6	8.8	7.9	6.3	2.6	15.3	9.0
9	Elementary Occupation	27.6	31.0	34.0	24.8	34.8	38.7	26.9	21.0	8.4	17.0	28.4
10	Not Stated	0.1	0.1	0.0	0.7	0.1	0.0	0.0	0.2	0.1	0.1	0.3
	Total %	100	100	100	100	100	100	100	100	100	100	100
	Number	5,504	13,719	32,913	104,429	13,514	34,748	5,632	2,809	5,626	11,960	230,854
Males												
	Legislators, Senior Officials &											
1	Managers	1.1	2.1	2.0	4.1	2.3	2.0	2.9	3.5	2.5	2.1	2.9
2	Professionals	0.3	0.6	1.1	2.9	0.7	0.8	0.5	0.3	1.3	0.9	1.7
	Technicians & Associate											
3	Professionals	4.1	3.7	3.3	5.3	3.2	3.3	3.0	3.3	4.8	5.6	4.3
4	Clerks	0.9	1.9	3.4	4.8	1.6	2.1	1.3	0.4	0.5	3.0	3.3
	Service Workers, Shop & Market											
5	Sales Workers	7.3	10.7	10.5	15.3	9.7	9.8	9.0	6.5	3.1	11.8	12.0
	Skilled Agricultural & Fishery											
6	Workers/Farmers	32.0	19.7	13.5	6.2	18.5	15.6	22.0	27.7	70.5	10.6	13.7
	Craft and Related											
7	Trades Workers	19.9	16.2	18.8	24.9	16.0	15.2	21.5	28.0	6.6	28.5	20.8
	Plant & Machine Operators &											
8	Assemblers	7.2	13.8	12.3	12.2	11.7	11.2	11.0	7.6	3.7	22.4	12.2
9	Elementary Occupat	27.0	31.0	35.1	23.6	36.2	40.0	28.9	22.6	7.0	15.1	28.8
10	Not Stated	0.1	0.1	0.0	0.8	0.0	0.0	0.0	0.1	0.1	0.1	0.4
	Total %	100	100	100	100	100	100	100	100	100	100	100
	Number	4,131	10,536	25,000	66,877	10,788	27,083	3,985	2,310	3,955	7,931	162,596

Note: Derived from Appendix B.6.4

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**Table 6.13 Continued: Percent Distribution of the Employed Persons 15 Years and Over by Major Occupation
Group One Week Preceding the Census, by Region and Sex, Guyana: 2002**

No.	Occupation Groups	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
	Females											
	Legislators, Senior Officials											
1	& Managers	0.6	1.3	1.4	3.3	0.8	1.4	1.2	1.4	2.0	1.6	2.4
2	Professionals	0.4	1.9	3.5	5.7	3.3	1.8	1.3	0.4	2.4	2.2	4.2
	Technicians & Associate											
3	Professionals	17.3	22.5	16.9	13.1	25.9	21.1	13.9	24.1	11.1	23.1	16.1
4	Clerks	3.9	9.7	17.7	18.9	11.4	12.7	7.5	2.6	3.2	13.4	15.9
	Service Workers, Shop & Market Sales											
5	Workers	14.5	18.2	19.2	22.8	20.6	20.1	22.0	22.9	5.7	29.5	21.6
	Skilled											
6	Agricultural & Fishery	28.9	8.4	2.5	0.9	3.7	3.9	27.8	30.0	60.2	2.9	4.9
	Craft and Related Trades											
7	Workers	4.5	6.3	6.4	6.0	4.0	4.1	3.9	4.2	3.7	5.2	5.6
	Plant & Machine Operators & Assemblers											
8	Elementary	0.4	0.7	2.0	1.6	1.4	0.6	0.4	0.4	0.2	1.4	1.4
9	Occupation	29.3	31.1	30.3	27.1	28.8	34.2	22.1	13.3	11.6	20.7	27.6
10	Not Stated	0.1	0.1	0.1	0.6	0.1	0.0	0.1	0.8	0.1	0.0	0.3
	Total %	100	100	100	100	100	100	100	100	100	100	100
	Number	1,373	3,183	7,913	37,552	2,726	7,665	1,647	499	1,671	4,029	68,258

Note: Derived from Appendix B.6.4

6.3.3 Employment Status of the Labour Force

In addition to the kind of work the individual performs and establishment where he works, the status - whether he is an employer, employee, unpaid family worker, etc. - is an important index used to determine the polarization of poverty level in Guyana. In particular, it is, mainly, because economic development involves an expansion of the employee group and contraction of the groups of own-account workers and unpaid family workers, and even the employers, in proportion to the total labour force. Changes in this direction are necessary and enable the analyst to study whether the economic activity is carried on in small scale family-operated enterprises, or had moved, or was in transition toward a more integrated organization with large-scale mass-production units.

As reflected in Table 6.14, one of the major long-term trends in employment status in Guyana has been the increase in the number of employees, and contraction in the number of “own account workers” and “unpaid family workers” for both males and females. The proportion of

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employees rose from 69 percent in 1991 to 73 percent in 2002, while those of own-account/own business without paid help and unpaid family workers, dropped by 6 and 43 percent respectively, and within the employer/own business with paid help category, there was a relatively small increase of 1 percent.

Employment by both government and private sectors increased between 1991 and 2002. While in 1991, the two sectors competitively engaged equal proportions of paid employees, by 2002, government paid employees had dropped to 25 percent, and in reverse, the proportion of private sector paid employees had risen to 48 percent- an increase of 46 percent. The proportionate decline of government paid employees against private institutions was principally due to the privatization of many public corporations. For instance, public corporations such as Guyana Telephone and Telegraph Corporation (GT&T), Guyana Power and Light (GPL), Guyana Pharmaceutical Corporation (GPC), etc. which accounted for a sizeable number of government paid employees in 1991, were privatized and by 2002, workers there were reported under 'private enterprises' (Table 6.14).

Table 6.14: Percent Distribution and Changes of Employment Status of Employed Labour Force One Week Preceding the Census, Guyana: 1991-2002

Employment Status	Percentage Distribution						Percentage Change		
	1991			2002			1991 - 2002		
	Male	Female	Both	Male	Female	Both	Male	Female	Both
Paid Employee - Govt	31.1	44.2	34.6	21.4	33.3	24.9	-31.6	-13.1	-25.3
Paid Employee - Pvt	35.9	29.9	34.3	51.0	42.4	48.4	40.8	63.5	46.0
Unpaid family worker	3.5	5.2	4.0	1.6	3.6	2.2	-55.1	-21.3	-43.3
Apprentice/Trainee	n/a	n/a	n/a	0.1	0.1	0.1	n/a	n/a	n/a
Employer	3.6	1.3	3.0	3.5	1.6	2.9	-4.5	38.5	0.5
Own Account	24.3	17.5	22.5	21.3	18.4	20.4	-12.9	21.6	-5.8
Not Stated	1.5	1.8	1.6	1.1	0.7	0.9	-28.3	-55.7	-36.7
Total %	100	100	100	100	100	100	-0.7	15.4	3.6
Number	163,784	59,128	222,912	162,596	68,258	230,854	-1,188	9,130	7,942

Note: a). n/a = not available b). Percentage change = $(2002 - 1991)/1991 \times 100$

Of special reference were the differentials employment status within the industries (see Table 6.15). A significant proportion (74 percent) of the labour force in all industries combined was paid employees, own account totalled 20.4 percent, with about 5 percent being employers, unpaid family workers and trainees.

As expected, industries with a high percentage of government paid employees included: "public administration and defense, compulsory social services" (95 percent), education (88 percent), and health and social work (68 percent), and lesser in the others, while the private sector taking the lead within the remaining industries, accounted for more than 50 percent of the paid employees under each industrial category, except in agriculture, hunting and forestry industry, where both the government and private sectors engaged an approximately equal number of paid employees (Table 6.15).

However, in other forms of agriculture, such as fishing, operators of fish hatcheries and fish farms, the government proportion of paid employees was very insignificant, while the private sector and own-account workers played a major role.

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**Table 6.15: Distribution of Employed Labour Force by Status of Employment Within the Industries,
Guyana: 2002 (Both Sexes Only)**

Major Industries	Paid Employee - Govt	Paid Employee - Pvt	Unpaid family workers	Trainee	Employer	Own account	Total %	Number
1	28.0	30.2	6.4	0.0	2.7	32.8	100	45,378
2	1.3	64.3	1.3	0.0	3.4	29.7	100	5,533
3	16.9	70.2	0.4	0.0	3.5	8.9	100	9,374
4	22.3	62.3	0.9	0.2	2.7	11.7	100	30,483
5	44.0	55.1	0.0	0.2	0.2	0.5	100	2,246
6	2.4	81.4	0.3	0.2	3.3	12.5	100	16,100
7	1.8	44.6	3.2	0.2	5.3	45.0	100	37,690
8	1.9	68.4	3.5	0.1	7.1	19.2	100	5,558
9	9.5	64.1	0.8	0.0	4.6	21.0	100	16,790
10	24.1	72.9	0.0	0.0	0.6	2.4	100	3,074
11	12.1	76.7	0.5	0.1	2.4	8.2	100	7,384
12	94.9	4.9	0.1	0.1	0.0	0.1	100	14,995
13	88.2	9.8	0.1	0.0	0.2	1.6	100	13,015
14	67.5	28.4	0.1	0.4	1.6	2.0	100	5,513
15	16.2	62.4	0.9	0.2	2.5	17.8	100	9,599
16	1.7	92.6	2.0	0.0	0.1	3.6	100	6,156
17	22.1	74.5	0.9	0.0	0.4	2.1	100	477
18	7.3	65.7	1.6	0.1	3.4	21.9	100	1,489
Total %	25.0	49.0	2.2	0.1	3.0	20.7	100	230,854

Note: (1) Agriculture, Hunting & Forestry (2) fishing, operators of fish hatchery & fish farms (3) Mining & quarrying (4) Manufacturing (5) Construction (6) Electricity, gas, steam and hot water supply (7) Wholesale & retail trade, repair of vehicles, motor & Hh.goods (8) Hotel and restaurant (9) Transport storage & communication (10) Financial intermediation (11) Real estate, renting & business activities (12) Public admin & defense, compulsory social services (13) Education (14) Health & social work (15) Other community, social & personal activities (16) Private households with employment (17) Extra territorial organization & bodies (18) Not stated

Regional Differentials: Regional distribution of labour force by employment status is given in Table 6.16, for 2002. Like the industries and occupations, the pattern of employment status followed the similar trend as that of the prevalent situation in the entire country. Those who worked for pay constituted a large part of the workers in all the regions, and were predominately private sector employees. Region 9 is the only exception where own-account /own business without paid help accounted for more than 50 percent. This corresponded to the findings earlier, where, within the industry and occupation groups, the distribution there indicated a substantial number of workers in the hinterland regions, particularly, Region 9, were in agriculture and related industries.

In addition, 15 percent or less of the workforce comprised government paid employees in the hinterland regions (7, 8, and 9), which in many ways, is related to variations in economic functions (Table 6.16). For example, in Region 9, it is believed that small scale subsistence agriculture forms the bedrock of their activities, while in Region 8, agriculture and related work, and alluvial mining and quarrying constitute employ a good proportion of workers. At most, these activities usually call for self-employment in the countryside, where unpaid family enterprises or small scale own-account, with or without paid help, are prevalent.

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**Table 6.16: Percent Distribution of Employed Persons 15 Years and Over by
Employment Status, by Region and Sex, Guyana: 2002**

Region	Paid Employee - Govt	Paid Employee - Pvte	Unpaid family worker	Trainee	Employer	Own Account	Total %	Number
Both Sexes								
Region 1	15.4	45.8	10.4	0.0	1.8	26.6	100	5,504
Region 2	17.2	54.3	4.0	0.1	3.4	21.0	100	13,719
Region 3	26.6	50.0	1.4	0.1	2.9	18.9	100	32,913
Region 4	22.9	55.1	1.0	0.1	3.2	17.7	100	104,429
Region 5	34.4	39.6	2.4	0.2	2.8	20.7	100	13,514
Region 6	34.9	37.8	1.5	0.1	2.5	23.2	100	34,748
Region 7	12.5	44.7	8.1	0.0	3.2	31.5	100	5,632
Region 8	9.5	54.2	3.6	0.0	3.3	29.4	100	2,809
Region 9	11.8	15.5	15.0	0.1	1.6	55.9	100	5,626
Region 10	31.5	46.5	1.7	0.1	2.9	17.3	100	11,960
Total %	25.1	48.9	2.2	0.1	3.0	20.7	100	x
Number	58,046	112,910	5,103	241	6,866	47,688	x	230,854
Males								
Region 1	10.5	51.1	6.8	0.0	2.0	29.6	100	4,131
Region 2	10.7	60.9	2.8	0.1	3.9	21.6	100	10,536
Region 3	23.3	52.4	1.2	0.1	3.5	19.5	100	25,000
Region 4	18.7	57.9	0.8	0.2	4.0	18.4	100	66,877
Region 5	30.7	42.8	2.1	0.2	3.2	21.0	100	10,788
Region 6	33.7	39.3	1.3	0.1	2.9	22.7	100	27,083
Region 7	7.1	51.6	3.3	0.0	3.9	34.0	100	3,985
Region 8	4.9	59.3	2.5	0.0	3.6	29.7	100	2,310
Region 9	9.3	16.1	8.9	0.1	1.7	63.9	100	3,955
Region 10	25.6	52.3	1.5	0.1	3.4	17.1	100	7,931
Total %	21.6	51.5	1.6	0.1	3.5	21.5	100	x
Number	35,152	83,814	2,635	199	5,762	35,035	x	162,597
Females								
Region 1	30.2	29.9	21.2	0.0	1.1	17.6	100	1,373
Region 2	38.5	32.3	8.2	0.2	1.9	18.9	100	3,183
Region 3	37.0	42.5	2.1	0.1	1.3	17.0	100	7,913
Region 4	30.3	50.1	1.4	0.1	1.8	16.4	100	37,552
Region 5	48.9	27.2	3.6	0.1	1.0	19.3	100	2,726
Region 6	39.2	32.3	2.3	0.0	1.3	24.9	100	7,665
Region 7	25.6	28.0	19.6	0.1	1.6	25.2	100	1,647
Region 8	30.7	30.7	9.0	0.0	1.6	28.0	100	499
Region 9	17.9	14.1	29.5	0.1	1.5	36.9	100	1,671
Region 10	43.2	35.0	2.2	0.1	1.9	17.8	100	4,029
Total %	33.5	42.6	3.6	0.1	1.6	18.5	100	x
Number	22,894	29,096	2,468	42	1,104	12,653	x	68,257

Note: Employment status "not stated" was prorated. **Derived from Appendix B.6.5.**

CHAPTER 7:

HOUSING AND LIVING ARRANGEMENT

The age and quality of the housing stock, together with living conditions and availability of amenities such as safe drinking water, clean fuel for cooking, lighting etc. are the focus of this part of the census enquiry. Housing quality is one of the first and important means of determining levels of poverty within a country. Housing conditions are linked to the seventh Millennium Development Goal, that is, on the environment. The analysis that follows will use measures of overcrowding, housing stocks and other indicators to show what the country must attain to meet this goal of the MDGs. Sex of household headship is also an indicator used, together with poverty data, to determine gender disparities within a country and the level of 'feminization of poverty' there.

7.1 Household Headship

Table 7.1 shows the distribution of households by the gender of their head for the ten administrative regions of the country for 1991 and 2002. This table shows that the number of households has increased from 154,153 in 1991 to 182,609 in 2002 - an 18.5 percent increment. This change means that the number of households increased at the rate of 1.6 percent per annum or about 2,500 newly-formed households each year. Approximately 43 percent of all households are in Region 4, 17 percent in Region 6 and 14 percent in Region 3. These regions in the same rank order were also the most populous regions in 1991, except that the proportions increased slightly in 2002.

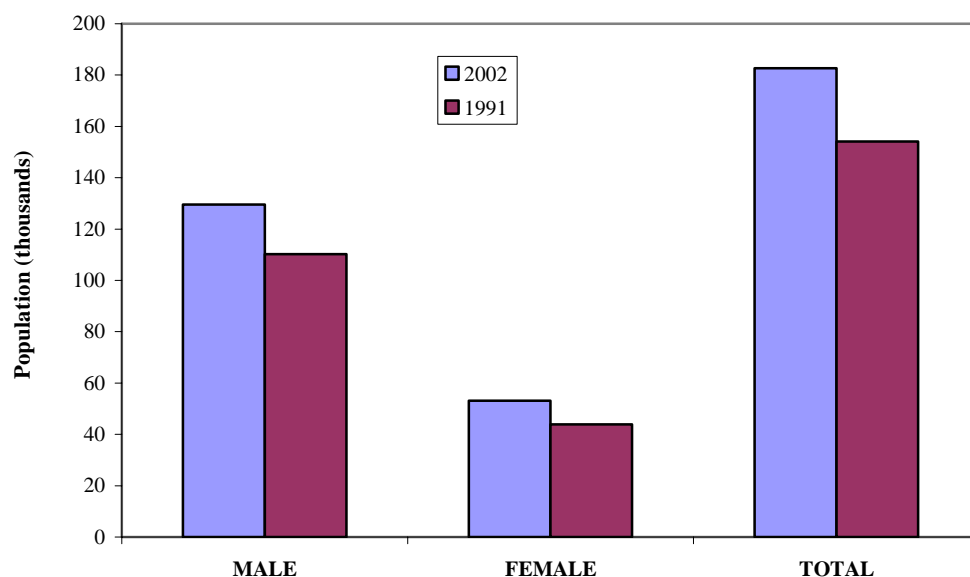
**Table 7.1: Distribution of Heads of Household by Region and Sex,
Guyana: 1991 and 2002**

Region	2002			1991		
	Male	Female	Total	Male	Female	Total
Region 1	2.6	1.4	2.3	2.4	1.4	2.1
Region 2	6.8	4.5	6.1	6.4	4.8	6.0
Region 3	15.3	11.8	14.3	14.8	11.5	13.9
Region 4	38.8	52.0	42.6	37.7	50.6	41.4
Region 5	7.4	6.1	7.0	7.6	6.5	7.3
Region 6	18.1	15.2	17.3	20.4	16.7	19.3
Region 7	2.2	1.5	2.0	2.3	1.6	2.1
Region 8	1.2	0.4	1.0	0.7	0.3	0.6
Region 9	2.4	0.8	1.9	2.2	0.7	1.8
Region 10	5.3	6.1	5.5	5.4	6.1	5.6
Total	100	100	100	100	100	100
Proportion	70.9	29.1	100	71.5	28.5	100
Number	129,389	53,220	182,609	110,212	43,941	154,153

The majority of all households (70.9 percent) are headed by a male. This figure was slightly smaller than that of 1991 (Figure 7.1). Nevertheless, the level of male participation in the lives of children augurs well for the society, when globally there is an increase in single parent and

female headed households. Male headship, of course, does not mean that there is gender equality within households. As a matter of fact, the reverse may be true if males control the resources of the household. This situation provides an opportunity for further research by interest groups to determine the level of empowerment of women within male-headed households.

Fig. 7.1: Distribution of Population by Head of Households
Guyana: 1991-2002



Also, Table 7.1 shows the percentage distribution of the household heads by sex for the regions. Consistent with the regional population distribution, the highest proportion of both male and female households is recorded in Region 4. In the case of female headed households, the censuses of 1991 and 2002 have revealed that in excess of 50 percent of female heads reside in Region 4, a possible correlation between responsibility for the households and job availability. Male heads are spread somewhat more evenly with the highest proportion, 39 percent, residing in Region 4, another 18 percent in Region 6 and 15 percent in Region 3.

Also, a preponderance of male heads over females is clearly shown, when viewing the sex ratios of household headship for each region as indicated in Table 7.2. Overall, male heads outnumbered females by 251 males to every 100 females in 1991. This ratio has declined to 244 in 2002. In some regions, for example, Region 9, the ratio is more than 7 to 1, and it is almost 4 to 1 in Regions 2 and 7. Only in Region 4, where females outnumbered males, is the ratio less than 2 to 1. In fact, in no region at all does the ratio favour female heads.

Table 7.2: Number of Household Heads by Sex and Region and Sex Ratio, Guyana: 1991 and 2002

Region	Number				Sex Ratio	
	2002		1991		2002	1991
	Male	Female	Male	Female	(m/f) x 100	
Region 1	3,402	764	2,665	606	445	440
Region 2	8,787	2,420	7,106	2,093	363	340
Region 3	19,743	6,304	16,356	5,060	313	323
Region 4	50,190	27,677	41,543	22,222	181	187
Region 5	9,533	3,273	8,416	2,839	291	296
Region 6	23,416	8,104	22,439	7,331	289	306
Region 7	2,860	777	2,540	710	368	358
Region 8	1,536	227	811	110	677	737
Region 9	3,114	432	2,401	302	721	795
Region 10	6,808	3,242	5,935	2,668	210	222
Total	129,389	53,220	110,212	43,941	243	251

7.2 Household Overcrowding

7.2.1 Household size

Household size is another poverty indicator which can be determined from the census data by using the average household size as a proxy. In general, average household size for 2002 is 4.1, down from 4.7 in 1991. The average coincides with the highest percentage of persons (19 percent) living in the four-person household indicated in Table 7.4.

Table 7.3: Average Household Size by Region, Guyana: 1991 and 2002

Region	Number of Households		Population Size		Average Household Size	
	2002	1991	2002	1991	2002	1991
Region 1	4,145	3,271	24,275	18,428	5.9	5.6
Region 2	11,220	9,199	49,253	43,455	4.4	4.7
Region 3	25,957	21,416	103,061	95,975	4.0	4.5
Region 4	77,937	63,765	310,320	296,924	4.0	4.7
Region 5	12,774	11,255	52,428	51,280	4.1	4.6
Region 6	31,469	29,770	123,695	142,541	3.9	4.8
Region 7	3,641	3,250	17,597	14,790	4.8	4.6
Region 8	1,871	921	10,095	5,615	5.4	6.1
Region 9	3,543	2,703	19,387	15,057	5.5	5.6
Region 10	10,052	8,603	41,112	39,608	4.1	4.6

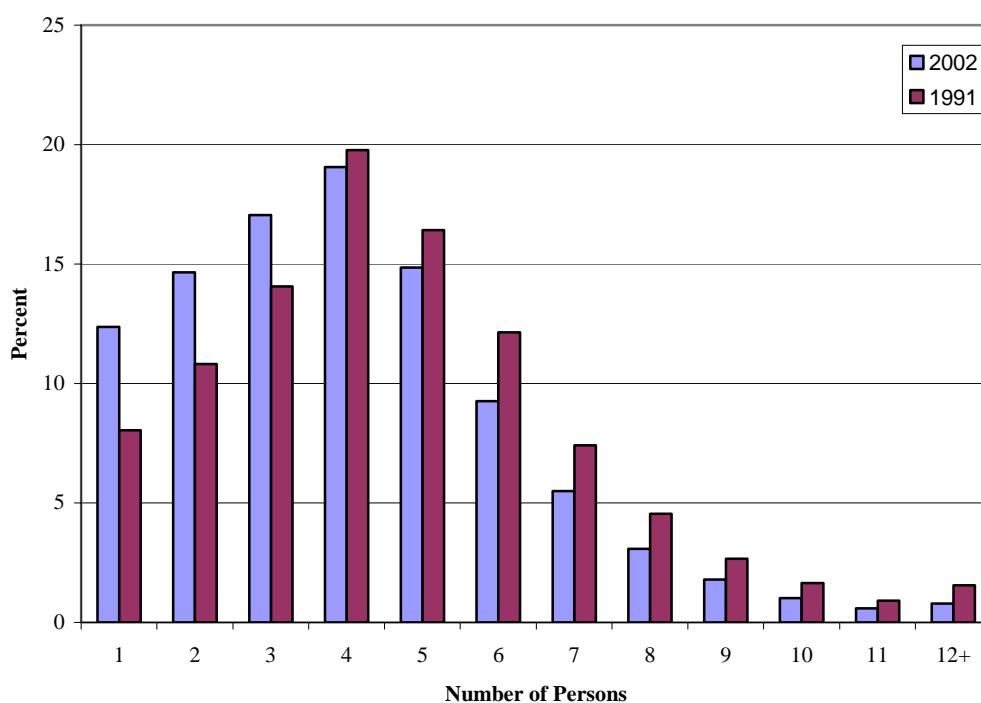
Whereas, the percentages of persons living in households from four persons upwards were still high in 1991, the contrast prevailed in 2002 when most families seemed to have moved from the communal extended family to the nuclear type; thus raising the proportions of family living

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below four person households (Figure 7.2). On its own, household size per se is difficult to interpret, as no conclusions can be derived concerning individual privacy arrangements, especially for sleeping within a dwelling unit. Nevertheless, it is a guide.

At the regional level, Regions 2, 3, 4, 5, 6, 7 and 10 are almost at the national average. In Regions 1, 8 and 9 however, average household size is above the national average that is, nearly 6 persons. This is an indicator of where some of the poorest households may be located. In the case of Region 8, it is possible that there is makeshift housing that is below optimum conditions for persons entering into that mining community.

Fig. 7.2: Household Distribution by Number of Persons, Guyana: (1991-2002)



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Table 7.4: Distribution of Households by Size of Persons in the Household, Guyana: 2002

Household Size	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
1 Person	312	1,155	2,769	10,378	1,403	3,712	485	204	239	1,905	22,562
2 Persons	382	1,445	3,695	12,376	1,736	4,816	429	173	321	1,368	26,741
3 Persons	462	1,749	4,607	13,934	2,119	5,545	539	240	423	1,480	31,098
4 Persons	516	2,083	5,531	14,731	2,552	6,610	561	233	439	1,524	34,780
5 Persons	543	1,899	4,098	10,939	2,091	4,953	512	240	496	1,328	27,099
6 Persons	481	1,217	2,401	6,678	1,249	2,788	389	226	466	989	16,884
7 Persons	443	760	1,293	3,873	710	1,465	282	183	411	621	10,041
8 Persons	347	369	637	2,123	369	771	189	143	303	358	5,609
9 Persons	255	262	369	1,163	240	355	105	80	205	232	3,266
10 Persons	156	116	220	672	124	210	71	66	116	102	1,853
11 Persons	80	77	129	408	79	96	45	26	60	69	1,069
12+ Persons	168	88	181	578	81	119	33	56	64	66	1,434
Not stated	0	0	27	84	21	29	1	1	0	10	173
Total	4,145	11,220	25,957	77,937	12,774	31,469	3,641	1,871	3,543	10,052	182,609

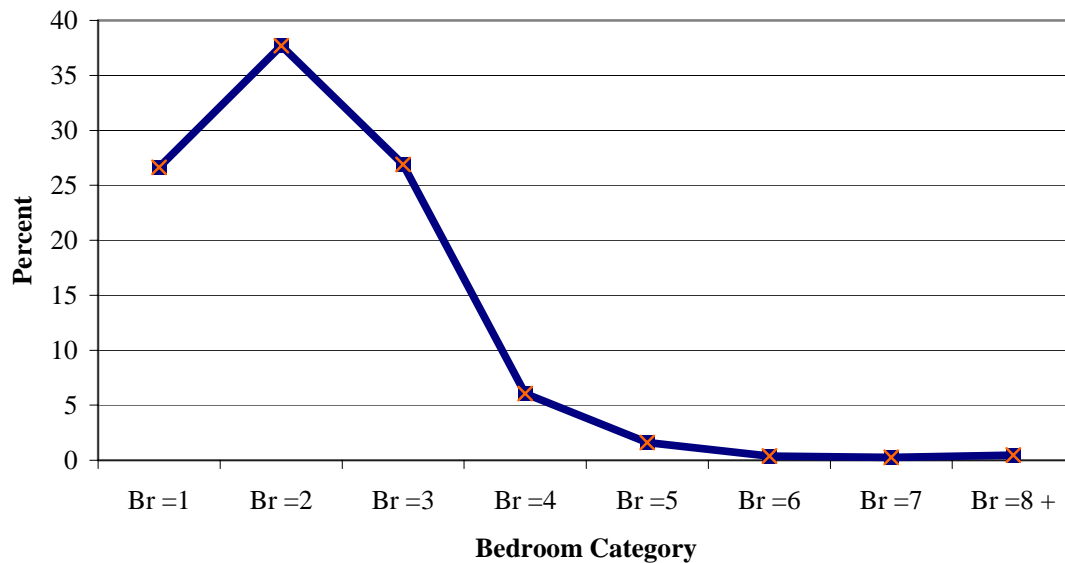
	Percentage										
1 Person	7.5	10.3	10.7	13.3	11.0	11.8	13.3	10.9	6.7	19.0	12.4
2 Persons	9.2	12.9	14.2	15.9	13.6	15.3	11.8	9.2	9.1	13.6	14.6
3 Persons	11.1	15.6	17.7	17.9	16.6	17.6	14.8	12.8	11.9	14.7	17.0
4 Persons	12.4	18.6	21.3	18.9	20.0	21.0	15.4	12.5	12.4	15.2	19.0
5 Persons	13.1	16.9	15.8	14.0	16.4	15.7	14.1	12.8	14.0	13.2	14.8
6 Persons	11.6	10.8	9.2	8.6	9.8	8.9	10.7	12.1	13.2	9.8	9.2
7 Persons	10.7	6.8	5.0	5.0	5.6	4.7	7.7	9.8	11.6	6.2	5.5
8 Persons	8.4	3.3	2.5	2.7	2.9	2.5	5.2	7.6	8.6	3.6	3.1
9 Persons	6.2	2.3	1.4	1.5	1.9	1.1	2.9	4.3	5.8	2.3	1.8
10 Persons	3.8	1.0	0.8	0.9	1.0	0.7	2.0	3.5	3.3	1.0	1.0
11 Persons	1.9	0.7	0.5	0.5	0.6	0.3	1.2	1.4	1.7	0.7	0.6
12+ Persons	4.1	0.8	0.7	0.7	0.6	0.4	0.9	3.0	1.8	0.7	0.8
Not stated	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.1
Total	100	100	100	100	100	100	100	100	100	100	100

7.2.2 Overcrowded Households

Household size per se as given in Table 7.4 is limited and does not clearly reveal individual sleeping privacy arrangements. These being literally difficult to ascertain, a maximum of two persons per bedroom is accepted as standard at face value for Guyana; anything above that is considered overcrowding.

Cross-classification of the number of persons giving the effect of variation in spatial bedroom congestion can be studied from Table 7.5. In general, majority of the enumerated households live in two bedrooms, and followed in equal proportions, those who owned three and one bedrooms dwelling respectively (see Table 7.5 row total and Figure 7.3).

Fig. 7.3: Percent of Persons Per Bedroom, Guyana: 2002



By this standard, only 9.0 percent (17,777) out of 196,629 households occupied one bedroom, that is, they had a maximum of two persons per bedroom, while 5.3 percent was reported to have been single in a bedroom. Also, about 43.1 and 73 percent of those who occupied two and three bedroom units respectively, had no overcrowding in the bedrooms (see Table 7.5).

As expected, the number of persons per bedroom decreases proportionally as the size of bedroom increases, but rationally, the percent overcrowded is significant, and needs to be dealt with, in that, sustainability of a healthy life does not only require the cleaning of the environmental surrounding, but equally, entails being free from air pollution resulting from overcrowding.

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Table 7.5: Distribution of Population in the Households Classified by Number of Persons Per Bedroom, Guyana: 2002

Household Size	Bedrooms By Number of Persons								Total
	1	2	3	4	5	6	7	8	
1 person	10,390	6,970	3,927	820	192	44	44	65	22,452
2 persons	17,777	20,108	12,261	2,328	497	118	122	192	53,403
3 persons	27,642	37,269	22,793	3,973	869	171	249	387	93,353
4 persons	36,900	55,564	37,716	6,523	1,424	316	296	548	139,287
5 persons	32,660	53,460	38,601	7,914	1,901	365	315	630	135,846
6 persons	23,898	38,327	29,573	6,786	1,828	390	186	480	101,468
7 persons	17,194	25,642	20,150	5,098	1,612	315	182	308	70,501
8 persons	11,819	15,593	12,322	3,598	925	240	192	288	44,977
9 persons	7,523	10,272	7,988	2,533	679	234	81	180	29,490
10 persons	4,623	6,129	5,261	1,713	513	180	60	90	18,569
11 persons	2,614	3,636	3,490	1,267	476	154	33	88	11,758
12+ persons	3,589	5,353	4,578	2,200	857	312	132	192	17,213
Total	196,629	278,323	198,660	44,753	11,773	2,839	1,892	3,448	738,317

	Percent of Persons Each Bedroom Category								
1 person	5.3	2.5	2.0	1.8	1.6	1.5	2.3	1.9	3.0
2 persons	9.0	7.2	6.2	5.2	4.2	4.2	6.4	5.6	7.2
3 persons	14.1	13.4	11.5	8.9	7.4	6.0	13.2	11.2	12.6
4 persons	18.8	20.0	19.0	14.6	12.1	11.1	15.6	15.9	18.9
5 persons	16.6	19.2	19.4	17.7	16.1	12.8	16.6	18.3	18.4
6 persons	12.2	13.8	14.9	15.2	15.5	13.7	9.8	13.9	13.7
7 persons	8.7	9.2	10.1	11.4	13.7	11.1	9.6	8.9	9.5
8 persons	6.0	5.6	6.2	8.0	7.9	8.4	10.1	8.3	6.1
9 persons	3.8	3.7	4.0	5.7	5.8	8.2	4.3	5.2	4.0
10 persons	2.4	2.2	2.6	3.8	4.4	6.3	3.2	2.6	2.5
11 persons	1.3	1.3	1.8	2.8	4.0	5.4	1.7	2.6	1.6
12+ persons	1.8	1.9	2.3	4.9	7.3	11.0	7.0	5.6	2.3
Total	100	100	100	100	100	100	100	100	100
Row total %	26.6	37.7	26.9	6.1	1.6	0.4	0.3	0.5	100

Note: Derived from **Appendix B.7.1**. Number of persons in each "bedroom category" was derived by multiplying household size by the corresponding number in each cell of Appendix B.7.1. Later, it was adjusted to agree with the total numerated 738,315 household population.

7.3 Housing and Sanitation Facilities

Three of the eight Millennium Development Goals (MDGs) involve health, household access to safe drinking water, improved sanitation conditions including toilet facilities, garbage disposal, etc. These are used as indicators to monitor and evaluate the achievement of goal seven, that is, environmental sustainability. The population and housing census has always been an effective tool for monitoring of the provision of these basic social services and the 2002 census was no exception.

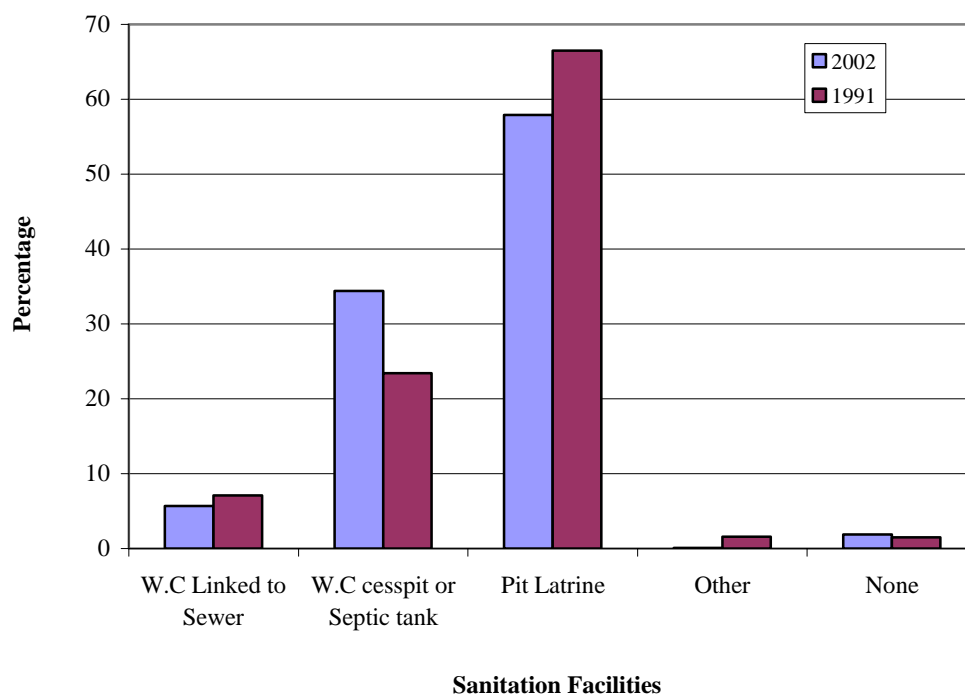
7.3.1 Toilet Facilities

The distribution of the households by type of toilet facility is presented in Table 7.6 and Figure 7.4. This table shows that a little over one-half of the households still use pit latrines, declining from two thirds in 1991. Concomitant with the decline in the use of pit latrines has been the increased use of the water closet (W.C.) with cesspit or septic tank. More than one-third of the population now uses this type of toilet as compared with a little more than one-fifth in 1991.

Table 7.6: Households by Type of Sanitation Facility, Guyana: 1991-2002

Facility	2002		1991	
	Number	Percent	Number	Percent
W.C. Linked to Sewer	9,358	5.1	10,930	7.1
W.C. Cesspit or Septic tank	66,495	36.4	36,043	23.4
Pit Latrine	103,182	56.5	102,437	66.5
Other	282	0.2	2,408	1.6
None	3,292	1.8	2,335	1.5
Total	182,609	100	154,153	100

**Fig. 7.4: Changes in Households Sanitation Facilities
Guyana: 1991-2002**



Notable however, has been the decline in the proportion of households using the modern method of water closet linked to the sewer line. The reason is that this system was constructed more than

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sixty years ago only in Region 4, the capital city region, and has not been extended, because it requires substantial capital investment, if it is to be extended beyond the city limits. Additionally, about two-thirds of the households are in the remaining nine administrative regions where this system does not exist.

Consequently, the only means available to households wanting to modernize the toilet waste disposal in the suburbs or rural areas is by connecting the sewer line to a septic tank, reflected in Table 7.7, for the ten administrative regions. This type of sewage disposal system will probably continue to increase in the future, as it will be the only means by which suburban and rural households can modernize their disposal systems.

The percentage of households without any toilet facilities has also declined from 3.1 percent in 1991, to 2.0 percent in 2002 (see Table 7.6).

**Table 7.7: Households Distribution by Type of Sanitation Facilities
by Region, Guyana: 2002**

W.C Linked to:						
Region	Sewer line	Septic tank	Pit - Ltrine	Other	None	Total
Region 1	0	480	3,553	38	74	4,145
Region 2	0	4,666	6,518	13	23	11,220
Region 3	0	7,432	18,240	93	192	25,957
Region 4	9,358	36,768	31,131	42	638	77,937
Region 5	0	2,582	10,051	2	139	12,774
Region 6	0	8,756	22,456	15	242	31,469
Region 7	0	780	2,290	7	564	3,641
Region 8	0	113	1,246	65	447	1,871
Region 9	0	163	2,549	2	829	3,543
Region 10	0	4,755	5,148	5	144	10,052
Total	9,358	66,495	103,182	282	3,292	182,609

Percentage						
Region	W.C. linked to		Pit -			Total
	Sewer line	Septic tank	Latrine	Other	None	
Region 1	0.0	11.6	85.7	0.9	1.8	100
Region 2	0.0	41.6	58.1	0.1	0.2	100
Region 3	0.0	28.6	70.3	0.4	0.7	100
Region 4	12.0	47.2	39.9	0.1	0.8	100
Region 5	0.0	20.2	78.7	0.0	1.1	100
Region 6	0.0	27.8	71.4	0.0	0.8	100
Region 7	0.0	21.4	62.9	0.2	15.5	100
Region 8	0.0	6.0	66.6	3.5	23.9	100
Region 9	0.0	4.6	71.9	0.1	23.4	100
Region 10	0.0	47.3	51.2	0.0	1.4	100
Total	5.1	36.4	56.5	0.2	1.8	100

Note: 80 "not stated" in Region 3 was added to "other".

Shared sanitation facilities: It is important to note that 84 percent (149,718) of the 179,036 who had toilet facilities, owned them exclusively and did not share with neighboring households (Table 7.8). The proportion sharing toilet facilities has increased both in number and percentage, 19,270 households, constituting 13 percent in 1991, to as high as one and one half times, or 16.4

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percent in 2002 (Table 7.8). Sharing pit-latrines was common among the households; three times higher than those who have access to water closet facilities either linked to sewer line and cesspit or septic tank combined.

Table 7.8: Changes in Sharing Sanitation Facilities, Guyana: 1991 - 2002

Sanitation Facilities	1991 Sanitation Facilities			2002 Sanitation Facilities			Change	
	Not Shared			Not Shared			Not Shared	
	Shared	Shared	Total	Shared	Shared	Total	Shared	Shared
W.C linked to sewer line	1,252	9,678	10,930	1,357	8,072	9,428	105	-1,606
W.C linked to septic tank	2,567	33,476	36,043	7,753	58,602	66,355	5,186	25,126
Pit latrine	15,451	86,986	102,437	20,208	83,044	103,252	4,757	-3,942
Total	19,270	130,140	149,410	29,318	149,718	179,036	10,048	19,578

	Percentage			% Change				
W.C linked to sewer line	0.8	6.5	7.3	0.8	4.5	5.3	8.4	-16.6
W.C linked to septic tank	1.7	22.4	24.1	4.3	32.7	37.1	202.0	75.1
Pit latrine	10.3	58.2	68.6	11.3	46.4	57.7	30.8	-4.5
Total	12.9	87.1	100	16.4	83.6	100	52.1	15.0

All regions have shown significant proportions of households sharing toilet facilities with other neighbours (Table 7.9). As expected, while the proportion sharing toilet facilities in Regions 7, 8 and 9 almost doubled the national average, the remaining regions exhibited figures similar to the overall pattern, except in Region 2, where unexpectedly, less than 5 percent were engaged in sharing facilities.

Notably, sharing toilet facilities is unhealthy and to have nearly one fifth of the households engaged in such a practice, somehow indicates that the proportion of households involved are perhaps living in sub-standard housing conditions (Tables 7.8 and 7.9).

Table 7.9: Distribution of Households by Status of Sharing Sanitation Facilities by Region, Guyana: 2002

Region	Facilities Shared					Facilities Not Shared				
	W.C Linked		Pit - Latrine	Total		W.C Linked		Pit - Latrine	Total	
	Sewerline	Septic tank		Percent	Number	Sewerline	Septic tank		Percent	Number
Region 1	0.0	0.8	16.2	17.0	685	0.0	11.6	71.4	83.0	3,348
Region 2	0.0	1.3	3.2	4.5	503	0.0	40.5	55.0	95.5	10,681
Region 3	0.0	4.2	11.2	15.4	3,948	0.0	24.8	59.9	84.6	21,724
Region 4	1.8	6.7	10.7	19.1	14,791	10.4	40.7	29.7	80.9	62,466
Region 5	0.0	1.2	12.4	13.5	1,711	0.0	19.2	67.2	86.5	10,922
Region 6	0.0	1.6	10.4	12.0	3,745	0.0	26.4	61.6	88.0	27,467
Region 7	0.0	2.5	24.5	27.0	830	0.0	23.0	50.0	73.0	2,240
Region 8	0.0	2.3	31.3	33.5	456	0.0	6.2	60.3	66.5	903
Region 9	0.0	0.8	25.0	25.8	699	0.0	5.2	69.0	74.2	2,013
Region 10	0.0	5.4	14.3	19.7	1,950	0.0	42.5	37.8	80.3	7,953
Total %	0.8	4.3	11.3	16.4	x	4.5	32.7	46.4	83.6	x
Number	1,357	7,753	20,208	x	29,318	8,072	58,602	83,044	x	149,718

7.3.2 Garbage Waste Disposal

Toilet waste disposal as in the preceding section, though necessary, is not sufficient in the sense that, it is a supplement and needs to be accompanied with appropriate garbage disposal systems to ensure environmental sustainability. Improper garbage disposal serves as a catalyst for breeding grounds of many pests as well as hazards including air pollution.

In 2002, more than two-thirds of the households used burning garbage as a main source of controlling the surrounding, 22 percent used the modern method of city-wise garbage collection, and 8 percent dumped garbage on the land or in the sea, river and pond (Table 7.10). Burying and composting garbage is healthier, but only a small proportion of the households control their environment using these methods (3.6 percent). As the case might be, a garbage collection system is mainly in place in Region 4, (45 percent) and to a lesser extent in Regions 10 and 6; in contrast to the use of dumping either on the land, in river or sea as the common method practiced in the main hinterland regions of the country.

All in all, the comparison of the garbage disposal system cannot be made with 1991, because the relevant data is unavailable. However, at this rate of improvement where the percentage of households without toilet facilities has declined along with just a small number involved in the crude garbage dumping method, Guyana is expected to meet the MDG target for improved sanitation.

Table 7.10: Distribution of Households by Method of Garbage Disposal, Guyana: 200

Region	Dump		Dump		Garbage		Other	Total
	on land	Compost	river/sea/pond	Burying	collection service			
Region 1	891	22	2,789	303	132	7	1	4,145
Region 2	738	1,787	8,157	339	140	17	41	11,219
Region 3	886	33	21,959	2,350	310	253	166	25,957
Region 4	1,748	122	38,021	1,296	1,544	34,759	447	77,937
Region 5	416	67	11,790	154	233	66	47	12,773
Region 6	1,153	145	25,422	764	395	3,485	106	31,470
Region 7	588	93	2,167	37	415	319	22	3,641
Region 8	519	36	1,124	13	161	1	17	1,871
Region 9	614	39	2,607	13	221	40	10	3,544
Region 10	995	27	6,689	175	672	1,491	3	10,052
Total	8,548	2,371	120,725	5,444	4,223	40,438	860	182,609
Percent								
Region 1	21.5	0.5	67.3	7.3	3.2	0.2	0.0	100
Region 2	6.6	15.9	72.7	3.0	1.3	0.1	0.4	100
Region 3	3.4	0.1	84.6	9.1	1.2	1.0	0.6	100
Region 4	2.2	0.2	48.8	1.7	2.0	44.6	0.6	100
Region 5	3.3	0.5	92.3	1.2	1.8	0.5	0.4	100
Region 6	3.7	0.5	80.8	2.4	1.3	11.1	0.3	100
Region 7	16.2	2.5	59.5	1.0	11.4	8.8	0.6	100
Region 8	27.7	1.9	60.1	0.7	8.6	0.1	0.9	100
Region 9	17.3	1.1	73.6	0.4	6.2	1.1	0.3	100
Region 10	9.9	0.3	66.5	1.7	6.7	14.8	0.0	100
Total	4.7	1.3	66.1	3.0	2.3	22.1	0.5	100

7.3.3 Households Water Facilities

Two questions posed to household heads to investigate the condition of water in the households include,

- The main source of water supply; and
- Main source of drinking water.

The main intention of the census module was to examine the accessibility of water as well as the availability of safe drinking water to the households. Unfortunately, the data for both is only available in 2002, while in 1991 there were sources of water supply; thus making comparison impossible. Hence, the analysis that follows treats this topic as availability of safe drinking water. In our view, access to water in any form that cannot be used in household chores is of less importance in Guyana.

Sources of Drinking Water: Another MDG is the provision of improved water. In 2002, more than three quarters of the population has access to piped water. Equal proportions have water piped into their dwelling houses or into their yards. Ten percent receive their water from a river, pond or stream and 3 percent through a public stand-pipe. This distribution means that nearly 80 percent of the population has access to improved water as defined in the MDGs.

Table 7.11: Households by Sources of Water Supply, Guyana: 1991-2002

Sources of water supply	2002		1991	
	Number	Percent	Number	Percent
Private, Piped into Dwelling	16,912	9.3	12,741	8.3
Private Catchments/Rainwater	8,829	4.8	7,869	5.1
Private Piped into Yard	11,175	6.1	n/a	n/a
Public, Piped into Dwelling	52,956	29.0	30,984	20.1
Public, Piped into Yard	59,642	32.7	49,965	32.4
Public Standpipe or Hand Pump	5,949	3.3	16,321	10.6
Public Well	1,796	1.0	12,207	7.9
River/Stream/Creek/Pond/Spring	19,390	10.6	*	*
Other	5,960	3.3	24,067	15.6
Total	182,609	100	154,154	100

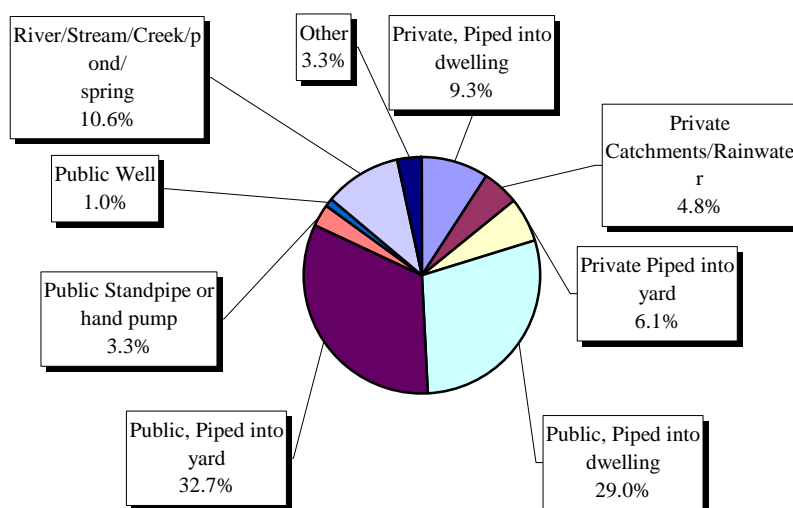
Note

* included with other category in 1991

n/a - data not available

These results mean that slightly more households have water piped into their dwellings and the percentage receiving water from a stand-pipe has declined. The decline in access to water through public stand pipe has declined percentage wise from 10.6 percent in 1991 to 3.3 percent in 2002 and in absolute terms, from 16,321 households in 1991 to 5,949 in 2002. This is a significant improvement in this sector (Table 7.11 and Figure 7.5).

**Fig. 7.5: Distribution of Households by Sources of Water Supply
Guyana: 2002**



Regionally, safe drinking water supply is a major concern in Regions 1, 7, 8 and 9 as more than one-third in Region 7, and a little over half in Regions 1 and 9 drink from unprotected, dug well and spring, and pond/river or stream (Table 7.12). The proportion drinking from such water supply is quite substantial in Region 8, up to three-quarters of the households, in addition to some 19 percent of households in Region 10 who reported to have obtained drinking water supply from like sources. The main source of drinking water in Regions 1, 7 and 8 was rain water collection, and this accounted for 23, 53 and 19 percent respectively, while protected dug well served as a major source of drinking water (26 percent) in Region 9. Safe drinking water supplied by pipe into dwelling and yard or plot being capital intensive project, is mainly available in the coastal belt regions of 2, 3, 4, 5 and 6, and the inland Region 10. Approximately, three-quarters of the households in these regions enjoy piped-borne water facility in their homes. As mentioned earlier, the prevalence of safe drinking water on the whole is fairly good in Guyana, as a substantial proportion of the households is reported to have obtained safe drinking water from standardized sources (Table 7.12).

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Table 7.12: Distribution of Households by Main Source of Drinking Water, by Region: Guyana: 2002

Sources of drinking water	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Pipe Into Dwelling	145	706	7,571	20,351	3,617	9,794	118	4	86	4,592	46,984
Pipe into Yard or Plot	535	6,381	6,715	23,926	6,351	16,131	163	64	96	1,276	61,638
Public Standpipe	129	225	1,059	3,907	720	1,432	15	24	163	657	8,331
Tube Well/Borhole with pump	96	831	167	480	4	13	51	0	214	12	1,868
Protected Dug well	69	37	15	220	12	125	17	5	911	23	1,434
Protected Spring	31	4	14	290	9	24	11	35	18	351	787
Bottle Water	32	44	818	11,955	337	779	58	5	19	309	14,356
Rain water Collection	933	2,623	8,576	8,891	626	1,792	1,922	361	15	843	26,582
Unprotected Dug well	45	6	8	41	2	49	1	19	1,292	27	1,490
Unprotected Spring	121	4	3	32	3	1	2	293	41	582	1,082
Pond/River/Stream	1,979	181	513	754	425	363	1,250	1,037	641	1,249	8,392
Vendor/Pvte Supplier	22	43	87	5,156	63	106	5	18	10	39	5,549
Other	8	135	411	1,934	605	860	28	6	37	92	4,116
Total	4,145	11,220	25,957	77,937	12,774	31,469	3,641	1,871	3,543	10,052	182,609

	Percent										
Pipe Into Dwelling	3.5	6.3	29.2	26.1	28.3	31.1	3.2	0.2	2.4	45.7	25.7
Pipe into Yard or Plot	12.9	56.9	25.9	30.7	49.7	51.3	4.5	3.4	2.7	12.7	33.8
Public Standpipe	3.1	2.0	4.1	5.0	5.6	4.6	0.4	1.3	4.6	6.5	4.6
Tube Well/Borhole with pump	2.3	7.4	0.6	0.6	0.0	0.0	1.4	0.0	6.0	0.1	1.0
Protected Dug well	1.7	0.3	0.1	0.3	0.1	0.4	0.5	0.3	25.7	0.2	0.8
Protected Spring	0.7	0.0	0.1	0.4	0.1	0.1	0.3	1.9	0.5	3.5	0.4
Bottle Water	0.8	0.4	3.2	15.3	2.6	2.5	1.6	0.3	0.5	3.1	7.9
Rain water Collection	22.5	23.4	33.0	11.4	4.9	5.7	52.8	19.3	0.4	8.4	14.6
Unprotected Dug well	1.1	0.1	0.0	0.1	0.0	0.2	0.0	1.0	36.5	0.3	0.8
Unprotected Spring	2.9	0.0	0.0	0.0	0.0	0.0	0.1	15.7	1.2	5.8	0.6
Pond/River/Stream	47.7	1.6	2.0	1.0	3.3	1.2	34.3	55.4	18.1	12.4	4.6
Vendor/Pvte Supplier	0.5	0.4	0.3	6.6	0.5	0.3	0.1	1.0	0.3	0.4	3.0
Other	0.2	1.2	1.6	2.5	4.7	2.7	0.8	0.3	1.0	0.9	2.3
Total	100	100	100	100	100	100	100	100	100	100	100

7.3.4 Households Fuel Facilities

Types of fuel used for domestic consumption are indicators of the standard of living. In 2002, cooking gas and kerosene accounted for more than four-fifths of total domestic fuel consumption in Guyana, as compared to less than 2 percent who used electricity for cooking. This is indicative of good standard, where such fuel for cooking is an essential part of modern households (Table 7.13). The use of wood, which often produces carbon-monoxide and intense heat, is a traditional method, and largely in place in the hinterland regions (1, 2, 7, 8 and 9). More than half of the households there used wood for cooking, as their access to modern fuel facilities, such as, electricity and cooking gas are limited. Charcoal is better source of fuel for local communities, since Guyana has dense tropical rainforest, but very insignificant proportion (less than 1 percent) of the households used this, and mostly in Regions 2 and 4.

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**Table 7.13: Distribution of Households by Type of Fuel Used for Cooking,
Guyana: 2002**

Region	Coal	Wood	Gas	Kerosene	Electricity	Other	Total
Region 1	77	2,453	406	1,192	17	0	4,145
Region 2	422	7,094	1,451	2,108	115	29	11,219
Region 3	44	2,106	10,659	12,873	138	138	25,958
Region 4	301	1,820	42,498	32,264	482	572	77,937
Region 5	22	1,032	3,415	8,194	62	49	12,774
Region 6	44	4,013	8,789	18,437	81	105	31,469
Region 7	66	1,160	959	1,430	5	21	3,641
Region 8	50	1,323	136	346	5	11	1,871
Region 9	3	2,635	842	57	1	5	3,543
Region 10	114	366	2,547	5,309	1,695	21	10,052
Total	1,143	24,002	71,702	82,209	2,601	951	182,608
Percentage							
Region 1	1.9	59.2	9.8	28.8	0.4	0.0	100
Region 2	3.8	63.2	12.9	18.8	1.0	0.3	100
Region 3	0.2	8.1	41.1	49.6	0.5	0.5	100
Region 4	0.4	2.3	54.5	41.4	0.6	0.7	100
Region 5	0.2	8.1	26.7	64.1	0.5	0.4	100
Region 6	0.1	12.8	27.9	58.6	0.3	0.3	100
Region 7	1.8	31.9	26.3	39.3	0.1	0.6	100
Region 8	2.7	70.7	7.3	18.5	0.3	0.6	100
Region 9	0.1	74.4	23.8	1.6	0.0	0.1	100
Region 10	1.1	3.6	25.3	52.8	16.9	0.2	100
Total	0.6	13.1	39.3	45.0	1.4	0.5	100

Note: 110 "not stated" cases of type of fuel was prorated.

7.4 Households' Housing Stock

7.4.1 Ownership Status of Dwellings

A significant proportion of households (63.8 percent) owned the dwellings where they live, and between 1991 and 2002, although the proportional share remained constant, owner-occupied dwellings increased by 19.6 percent, i.e. to 116,503. The number of rented dwellings, both government and private individual rented premises, dropped by 21.6 percent- from 34,393 to 26,977. The decline has been compensated for mainly by the rise in the share of rent-free households, either residing on family, or inherited property and to a lesser extent, in the share of squatted and leased property (Table 7.14).

Private households renting premises constituted about 9 times as many as the government rented premises in 1991, and by 2002 the gap had widened to more than 30 times between the two sectors (Figures 7.7 and 7.8).

Nearly all regions had shown the highest proportion of owner-occupied dwellings, either in 1991 or 2002, except Regions 4, 7 and 10, which accordingly, had the proportion in the category below the 64 percent national average (Figure 7.6). This result is indisputable, as these two regions were migrant destination areas (see Table 3.8); and presumably the presence of lifetime

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in-migrant households could decrease the proportional share of owner-occupied dwellings, and in reverse, increase the proportion of those who rent or are living free-rent.

Table 7.14: Percent Distribution of Households by Ownership Status of Dwelling and Region, Guyana: 1991 -2002

Region	Ownership Status 2002								Total
	Owned	Squatted	Rented - Pvte	Rented Govt	Leased	Rent Free	Other	Not stated	
Region 1	85.8	1.9	2.4	0.3	1.4	7.3	0.0	0.9	4,145
Region 2	80.1	0.7	6.3	1.0	0.9	10.8	0.0	0.2	11,220
Region 3	67.4	2.9	10.8	0.1	0.8	16.8	0.2	1.0	25,957
Region 4	55.5	3.5	21.1	0.4	0.5	17.3	0.3	1.3	77,937
Region 5	73.9	0.4	7.4	0.7	0.3	17.2	0.0	0.2	12,774
Region 6	66.0	0.9	9.9	0.3	0.2	22.2	0.1	0.5	31,469
Region 7	61.8	0.9	12.7	0.9	1.2	21.7	0.4	0.5	3,641
Region 8	81.8	1.7	4.7	0.6	1.0	8.3	1.4	0.4	1,871
Region 9	89.6	0.6	1.6	0.5	0.6	6.5	0.2	0.3	3,543
Region 10	60.1	1.3	14.5	0.7	0.4	20.9	0.2	1.9	10,052
Total %	63.8	2.3	14.3	0.4	0.5	17.4	0.2	1.0	(100)
Number	116,503	4,218	26,172	805	965	31,797	386	1,763	182,609

Region	Ownership Status 1991								Total
	Owned	Squatted	Rented - Pvte	Rented Govt	Leased	Rent Free	Other	Not stated	
Region 1	80.3	3.3	3.8	4.8	0.0	5.8	1.6	0.2	3,271
Region 2	76.5	2.3	8.1	1.5	0.8	8.9	1.7	0.2	9,199
Region 3	68.6	2.0	14.2	0.4	0.3	14.0	0.5	0.0	21,416
Region 4	52.7	1.5	30.9	3.3	0.2	10.8	0.5	0.0	63,765
Region 5	74.7	0.2	9.2	1.0	0.1	14.4	0.4	0.0	11,255
Region 6	70.9	1.2	12.6	0.9	0.2	13.6	0.6	0.0	29,770
Region 7	53.9	1.0	18.5	2.3	0.6	21.7	1.8	0.2	3,250
Region 8	85.6	1.2	4.2	1.0	2.8	3.5	1.7	0.0	921
Region 9	89.8	1.9	1.4	0.2	0.3	5.7	0.6	0.0	2,703
Region 10	57.8	1.5	23.5	4.1	0.3	11.5	0.9	0.3	8,603
Total %	63.2	1.5	20.2	2.2	0.3	12.0	0.7	0.1	(100)
Number	97,411	2,342	31,075	3,318	424	18,445	1,041	97	154,153

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Fig. 7.6: Percent Owner-Occupied Dwellings by Region, Guyana: 1991 and 2002

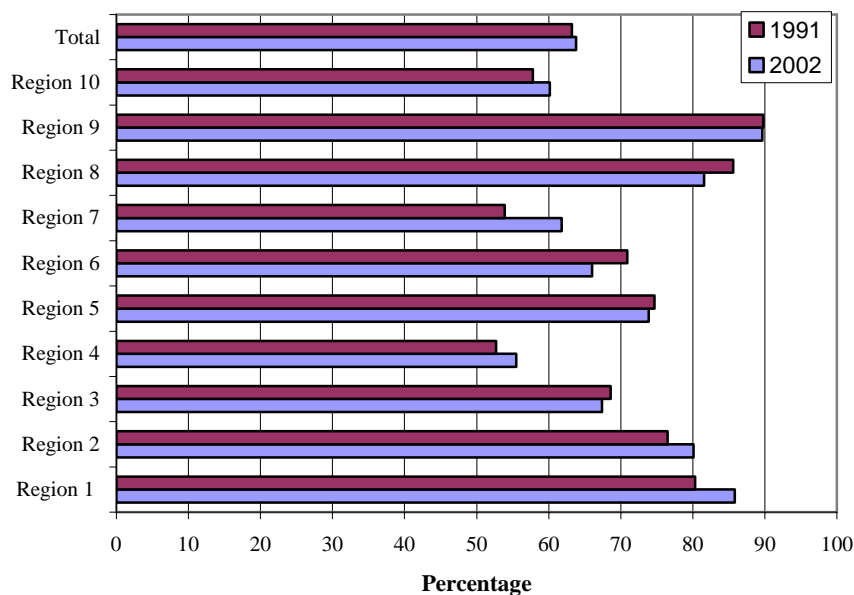


Fig.7.7: Ownership status of dwellings, Guyana: 1991

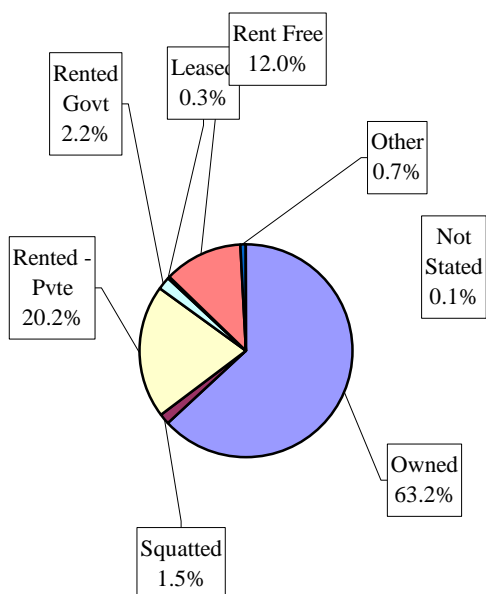
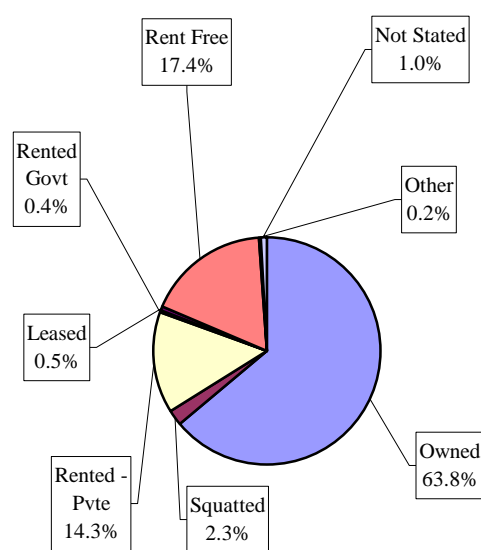


Fig.7.8: Ownership status of dwellings, Guyana: 2002



7.4.2 Year of Construction

The capability of households to construct homes is an indicator of a rise in living standards. Table 7.15 and Figure 7.9 show the distribution of households by year since their dwellings were constructed. Accordingly, about one-third of the households in Guyana confirmed that they had constructed their dwellings more than thirty years ago or before 1970. The proportion varied from relatively low in regions with predominantly rural settlements, that is, Regions 1, 8 and 9, to higher proportions for those seem to have urban or sub-urban based settlements.

Comparatively, the urban or sub-urban areas, like, Vreed-en-Hoop, city of Georgetown, New Amsterdam, Linden, etc. in Regions 3, 4, 6 and 10 respectively, fall under the jurisdictions of the municipalities and households desirous of construction must abide by the building codes and designs acceptable for safety and durability in accordance with the city ordinance. As such, permanent structures with durable features are found in these regions, compared to the hinterland regions with large rural communities. Besides, some of the country's colonial historical settlements are along the coastal belt regions; hence it is not surprising to see substantial numbers of the dwellings there being built during the early times.

When comparing housing development progress in the earliest years with the decades of the 1970's to 1999, it seems more likely that house construction in Guyana peaked in 1999, when 7,180 households, constituting nearly 4 percent of total households confirmed to have completed their dwellings within that single year.

On the whole, there was dramatic increase in construction activities toward the end of the period compared to the previous intervals. For example, between 1998 to September 2002, up to 29,175 households or 16 percent of the total households completed their dwellings, an achievement greater than what was realized in any of the periods indicated in Table 7.15. A sizeable proportion (15.4 percent) of the dwellings had no year of construction recorded (Table 7.15 and Figure 7.9).

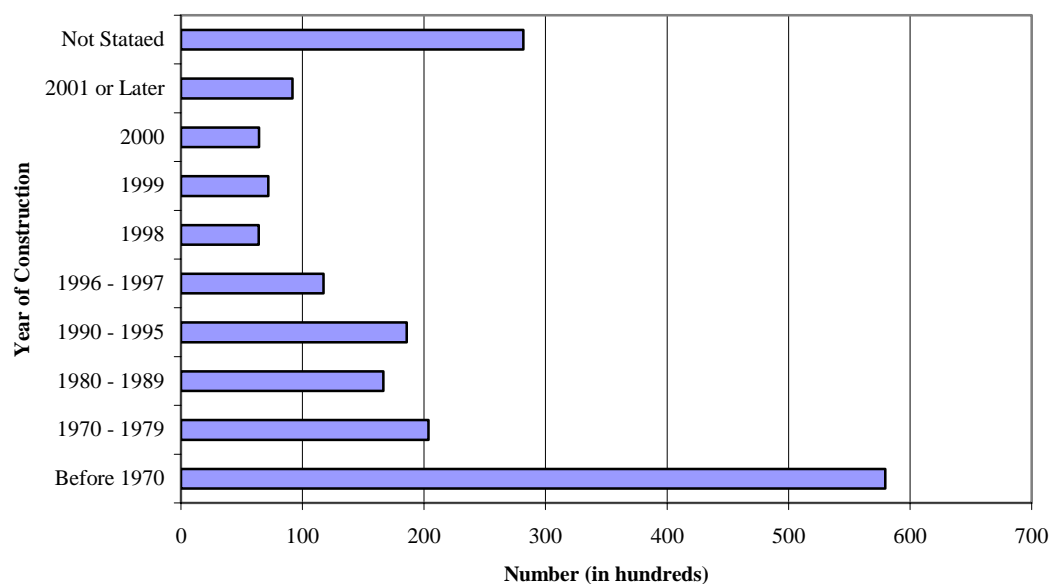
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Table 7.15: Distribution of Households by Year Since Dwellings Built, by Region, Guyana: 2002

Construction Year	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Before 1970	502	2,776	8,140	25,764	4,407	12,003	806	113	265	3,168	57,944
1970 - 1979	190	1,163	2,976	8,325	1,642	3,967	281	100	285	1,424	20,353
1980 - 1989	321	1,258	2,494	5,613	1,693	3,266	337	222	573	875	16,652
1990 - 1995	508	1,342	2,942	7,214	1,224	3,041	415	321	659	912	18,578
1996 - 1997	398	865	1,996	4,648	869	1,726	216	245	345	431	11,739
1998	315	423	967	2,363	490	959	167	150	232	329	6,395
1999	502	1,276	891	2,243	371	950	197	166	287	297	7,180
2000	435	410	903	2,163	465	1,038	203	165	264	363	6,409
2001 or Later	780	572	1,379	2,996	650	1,430	355	273	274	482	9,191
Not Stated	194	1,135	3,269	16,608	963	3,089	664	116	359	1,771	28,168
Total	4,145	11,220	25,957	77,937	12,774	31,469	3,641	1,871	3,543	10,052	182,609

	Percentage										
Before 1970	12.1	24.7	31.4	33.1	34.5	38.1	22.1	6.0	7.5	31.5	31.7
1970 - 1979	4.6	10.4	11.5	10.7	12.9	12.6	7.7	5.3	8.0	14.2	11.1
1980 - 1989	7.7	11.2	9.6	7.2	13.3	10.4	9.3	11.9	16.2	8.7	9.1
1990 - 1995	12.3	12.0	11.3	9.3	9.6	9.7	11.4	17.2	18.6	9.1	10.2
1996 - 1997	9.6	7.7	7.7	6.0	6.8	5.5	5.9	13.1	9.7	4.3	6.4
1998	7.6	3.8	3.7	3.0	3.8	3.0	4.6	8.0	6.5	3.3	3.5
1999	12.1	11.4	3.4	2.9	2.9	3.0	5.4	8.9	8.1	3.0	3.9
2000	10.5	3.7	3.5	2.8	3.6	3.3	5.6	8.8	7.5	3.6	3.5
2001 or Later	18.8	5.1	5.3	3.8	5.1	4.5	9.8	14.6	7.7	4.8	5.0
Not Stated	4.7	10.1	12.6	21.3	7.5	9.8	18.2	6.2	10.1	17.6	15.4
Total	100	100	100	100	100	100	100	100	100	100	100

Fig. 7.9: Household Distribution by Year Dwellings Built, Guyana: 2002



7.4.3 Types of Dwellings

The types of dwellings built in Guyana had slightly changed over the decades. The **undivided private** housing which currently comprises 71 percent of the dwelling stock in the country- was the norm even long before the two recent censuses, down from 74 percent in 1991 and followed by **part of private dwelling** (13 percent). Between 1991 and 2002 there was expansion in both number and percentage of households reported to be in **part of private house, double house/duplex, business and dwelling** combined and **barracks** type of dwellings, except households occupying **town-house** dwellings which declined in both categories, and **flat/apartment** dwellings which increased in absolute terms, but remained relatively stable proportionally (Table 7.16).

The larger proportion of households living in undivided private dwellings and its reduction over the recent decade is probably in line with the overall decline in the average family size which accordingly suggests perhaps that larger sized households had the tendency to occupy **undivided private** houses while smaller households mostly occupy **part private** dwelling units. Besides, the changes may be a result of demolition and replacements concomitant with new construction during the intercensal period.

**Table 7.16: Distribution of Households by Types of Dwellings,
Guyana; 1991 and 2002**

Types of Dwellings	2002		1991	
	Number	Percent	Number	Percent
Undivided House (Pvte)	129,654	71.0	113,684	73.7
Part of Pvte House	25,950	14.2	20,376	13.2
Flat/Appartment	13,582	7.4	11,932	7.7
Town-House	1,474	0.8	1,675	1.1
Double house/Duplex	5,317	2.9	2,007	1.3
Business & dwellings	4,259	2.3	2,926	1.9
Barracks	446	0.2	238	0.2
Other	1,393	0.8	1,315	0.9
Not stated	534	0.3	0	0.0
Total	182,609	100	154,153	100

In Table 7.17, a significant proportion of households lived in **undivided private** dwellings in all regions, but to a lesser extent in Regions 4 and 10. In these two regions, sizeable proportions also lived in **part of private** dwellings (19 and 20 percent) and **flat/ apartment** (13 and 7 percent), respectively.

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Table 7.17: Distribution of Households by Type of Dwelling Resided and Region, Guyana: 2002

Region	Undivided Pvte House	Part of Pvte House	Flat/Apartm ent	Town- house	Duplex	Business & dwelling	Barracks	Other	Total
Region 1	3,221	164	307	61	152	160	30	50	4,145
Region 2	8,427	734	528	435	447	353	146	152	11,222
Region 3	19,755	3,689	973	118	825	415	28	155	25,958
Region 4	47,140	15,147	9,980	655	2,481	1,711	103	720	77,937
Region 5	11,176	949	146	9	87	365	9	33	12,774
Region 6	26,108	2,715	701	84	1,030	738	16	77	31,469
Region 7	2,794	385	145	5	35	161	37	79	3,641
Region 8	1,502	115	24	3	51	87	23	65	1,870
Region 9	3,253	98	97	0	8	45	5	37	3,543
Region 10	6672	2013	711	115	218	240	52	31	10,052
Total	130,048	26,009	13,612	1,485	5,335	4,275	449	1,399	182,611

	Percentage								
Region 1	77.7	3.9	7.4	1.5	3.7	3.8	0.7	1.2	100
Region 2	75.1	6.5	4.7	3.9	4.0	3.1	1.3	1.4	100
Region 3	76.1	14.2	3.8	0.5	3.2	1.6	0.1	0.6	100
Region 4	60.5	19.4	12.8	0.8	3.2	2.2	0.1	0.9	100
Region 5	87.5	7.4	1.1	0.1	0.7	2.9	0.1	0.3	100
Region 6	83.0	8.6	2.2	0.3	3.3	2.3	0.1	0.2	100
Region 7	76.7	10.6	4.0	0.1	1.0	4.4	1.0	2.2	100
Region 8	80.3	6.2	1.3	0.2	2.7	4.7	1.2	3.5	100
Region 9	91.8	2.8	2.7	0.0	0.2	1.3	0.1	1.0	100
Region 10	66.4	20.0	7.1	1.1	2.2	2.4	0.5	0.3	100
Total	71.2	14.2	7.5	0.8	2.9	2.3	0.2	0.8	100

Note: 540 "not stated" cases was prorated.

7.4.4 Materials Used in House Construction

7.4.4.1 Type of materials for wall

According to the 2002 census, six in every ten households in Guyana used wood to construct the outer wall of their dwellings; down from eight in the 1991 census (Table 7.18). The decline in the use of wood was mainly an outcome of concomitant increase in the number of households using concrete and combined use of concrete and wood in construction. Besides, there was an increase in the number of households using stone, clay brick and adobe; though the proportional shares of these categories to the total households are insignificant.

In reverse, households in makeshift dwellings dropped more than 20 times compared to the existing users in 1991. However, the decline in makeshift dwellings is suspected to be that some makeshift households have been grouped with **'other category'** as evidenced by the sharp increase in this category in 2002 (see Table 7.18).

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Table 7.18: Distribution of Households by Materials Used to Build Wall of Dwelling, Guyana: 1991 and 2002

Types of Materials	2002		1991	
	Number	Percent	Number	Percent
Wood	112,563	61.6	118,630	77.0
Concrete	27,067	14.8	9,409	6.1
Wood & Concrete	34,666	19.0	20,407	13.2
Stone	510	0.3	20	0.0
Adobe	3,325	1.8	2,540	1.6
Makeshift	51	0.0	1,053	0.7
Clay brick	761	0.4	361	0.2
Other	3,471	1.9	0	0.0
Not Stated	195	0.1	1,733	1.1
Total	182,609	100	154,153	100

In Table 7.19, about three-quarters of the households in Region 9 used adobe wall along with another 13 percent who used clay bricks. The reduction in the use of wood there can be attributed to savannah grassland which covers most parts of the region; in addition to lack of sufficient road networks, thus creating difficulty in transporting lumber from other evergreen vegetation regions for construction.

Table 7.19: Distribution of Households by Materials Used to Build Wall of Dwellings, by Region, Guyana: 2002

Region	Wood	Concrete	Wood & Concrete	Stone	Adobe	Makeshift	Clay brick	Other	Total
Region 1	3,373	168	191	3	36	17	28	329	4,145
Region 2	6,138	1,952	1,386	0	4	0	19	1,721	11,220
Region 3	15,975	4,333	5,065	182	109	1	25	266	25,956
Region 4	42,379	14,410	20,362	324	8	16	83	355	77,937
Region 5	10,169	1,091	1,442	0	15	0	4	53	12,774
Region 6	25,210	1,834	4,341	0	2	0	5	77	31,469
Region 7	2,809	394	134	1	26	3	3	271	3,641
Region 8	1,015	22	32	1	489	8	33	271	1,871
Region 9	212	193	13	0	2,628	5	464	28	3,543
Region 10	5,392	2,703	1,741	0	8	1	97	110	10,052
Total	112,672	27,100	34,707	511	3,325	51	761	3,481	182,608

Percentage									
Region 1	81.4	4.1	4.6	0.1	0.9	0.4	0.7	7.9	100
Region 2	54.7	17.4	12.4	0.0	0.0	0.0	0.2	15.3	100
Region 3	61.5	16.7	19.5	0.7	0.4	0.0	0.1	1.0	100
Region 4	54.4	18.5	26.1	0.4	0.0	0.0	0.1	0.5	100
Region 5	79.6	8.5	11.3	0.0	0.1	0.0	0.0	0.4	100
Region 6	80.1	5.8	13.8	0.0	0.0	0.0	0.0	0.2	100
Region 7	77.1	10.8	3.7	0.0	0.7	0.1	0.1	7.4	100
Region 8	54.2	1.2	1.7	0.1	26.1	0.4	1.8	14.5	100
Region 9	6.0	5.4	0.4	0.0	74.2	0.1	13.1	0.8	100
Region 10	53.6	26.9	17.3	0.0	0.1	0.0	1.0	1.1	100
Total	61.7	14.8	19.0	0.3	1.8	0.0	0.4	1.9	100

Note: 195 cases of materials used for wall "not stated" was prorated.

Similarly, the inaccessibility due to difficult terrain in Region 8 may explain why households there, resorted to using whatever building materials were available to them. As such, besides wood, 26 percent used adobe, while another 15 percent used other unidentifiable materials to build the wall. The use of “other material” too is prevalent in Region 2 (15 percent). The dominant use of these sub-standard materials in building is associated with poor housing quality.

7.4.4.2 Type of materials for roofing

Dwelling quality does not only rely on type of materials used to construct the wall as in the preceding section, but equally the materials used in roofing. As such, sheet metal being the major roofing material used as shown in Table 7.20 is an indication of durability for dwellings in Guyana. The sheet metal accounted for 93 percent in 1991 and declined slightly (3 percent) in 2002 census.

At the regional level (Table 7.21), higher proportions of households in Regions 3, 4, 5, 6, 7 and 10 use metal sheets in roofing. However, as a major deviation throughout the analysis because of the remoteness, households in the hinterland regions use any available local materials in roofing. For instance, in Regions 1, 2, 8 and 9, the proportion of households using metal sheets which is considered more guaranteed and durable is far below the national average. The situation is greater in Region 9, where only 16 percent of the households used metal sheets, with more than three-quarters using thatch or troolie palm leaves to roof their dwellings.

Unlike Region 9, roofing materials in Region 2 are diversified; with about 21 percent using shingles (asphalt, wood and other), 17 percent tiles and 18 percent using some varieties of local materials referred to as makeshift.

The predominant use of these sub-standard materials in roofing indicates in general the regions where the poorest housings are located in the country.

**Table 7.20: Distribution of Households by Types of Materials
Used for Roofing Dwelling, Guyana: 1991 and 2002**

Roofing Materials	2002		1991	
	Number	Percent	Number	Percent
Sheet Metal (Zn, Al, Galv)	164,877	90.3	143,404	93.0
Shingles (Asphalt)	1,104	0.6	346	0.2
Shingles (Wood)	1,755	1.0	1,892	1.2
Shingles (Other)	1,839	1.0	237	0.2
Tile	1,953	1.1	17	0.0
Concrete	325	0.2	30	0.0
Thatched/Troolie Palm	7,016	3.8	0	0.0
Makeshift	2,522	1.4	1,726	1.1
Other	1,193	0.7	6,501	4.2
Not Stated	25	0.0	0	0.0
Total	182,609	100	154,153	100

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Table 7.21: Distribution of Households by Type of Roofing Materials Dwelling Was Built with and Region, Guyana: 2002

Region	Sheet	Shingles (Asphalt)	Shingles (Wood)	Shingles (Other)	Tile	Concrete	Thatched/	Makes hift	Other	Total
	Metal (Zn, Al,						Troolie Palm			
Region 1	1,987	2	3	3	26	10	2,025	67	22	4,145
Region 2	4,422	316	229	1,761	1,861	195	205	2,036	195	11,220
Region 3	25,420	82	99	8	3	14	173	68	90	25,957
Region 4	75,438	640	772	52	45	65	266	129	530	77,937
Region 5	12,612	8	28	3	1	8	69	10	35	12,774
Region 6	31,067	13	112	2		14	212	10	39	31,469
Region 7	2,887	1	115	1	2	2	468	81	84	3,641
Region 8	866	3	153	3			675	60	111	1,871
Region 9	553	26	167	3	10	2	2,759	15	8	3,543
Region 10	9,625	13	77	3	5	15	164	46	104	10,052
Total	164,877	1,104	1,755	1,839	1,953	325	7,016	2,522	1,218	182,608

Percentage										
Region 1	47.9	0.0	0.1	0.1	0.6	0.2	48.9	1.6	0.5	100
Region 2	39.4	2.8	2.0	15.7	16.6	1.7	1.8	18.1	1.7	100
Region 3	97.9	0.3	0.4	0.0	0.0	0.1	0.7	0.3	0.3	100
Region 4	96.8	0.8	1.0	0.1	0.1	0.1	0.3	0.2	0.7	100
Region 5	98.7	0.1	0.2	0.0	0.0	0.1	0.5	0.1	0.3	100
Region 6	98.7	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.1	100
Region 7	79.3	0.0	3.2	0.0	0.1	0.1	12.9	2.2	2.3	100
Region 8	46.3	0.2	8.2	0.2	0.0	0.0	36.1	3.2	5.9	100
Region 9	15.6	0.7	4.7	0.1	0.3	0.1	77.9	0.4	0.2	100
Region 10	95.8	0.1	0.8	0.0	0.0	0.1	1.6	0.5	1.0	100
Total	90.3	0.6	1.0	1.0	1.1	0.2	3.8	1.4	0.7	100

Note: 25 roofing materials "not stated" was added to "other category"

CHAPTER 8:

DISABILITY AND HEALTH

Disabled people are often the most disadvantaged citizens in a society. Many do not have access to basic services such as education, employment, health and even recreational facilities.

The term “disability”, as it applied to humans, refers to any condition that impedes the completion of daily tasks, using traditional methods or physical or mental impairment that substantially limits one or more of the major life activities of such an individual³⁰. As such, it should be borne in mind that disability is not something one has to be born with as it can develop later in life as well³¹.

Guyana has a National Commission on Disability (NCD) and other non-governmental organizations which aim at promoting the welfare of the disabled citizens, but the work of these organizations is limited by the lack of accurate information regarding the size and activities of the disabled people. Hence, the objectives of this chapter are to identify:

- Distribution of disabled population;
- Age-sex pattern of disabilities;
- How the disabilities were acquired?
- Access of disabled people to education; and
- Opportunity for employment of disabled people.

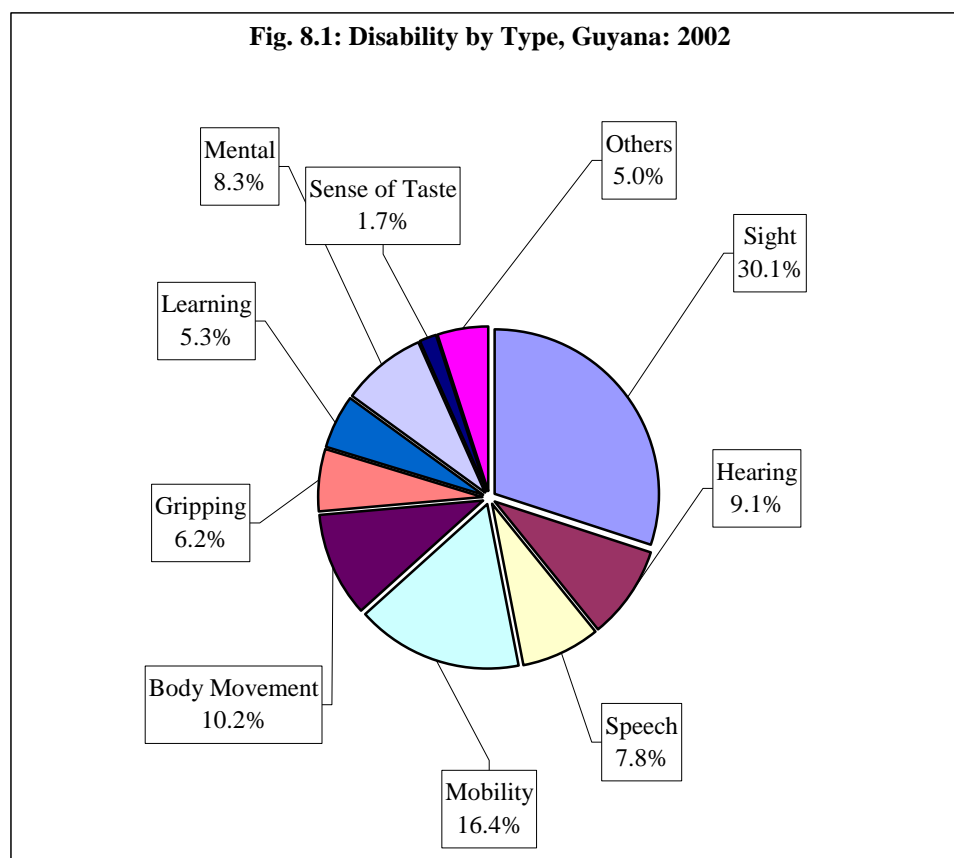
8.1 Distribution of Disabled Population

Within the framework of the definition, the number of citizens living with some form of disability in Guyana was 48,419, about 6.4 percent of the total population. The distribution by sex indicates that females outnumber males - with 51.1 percent (24,767) of them compared to 48.8 percent (23,652) males (see Appendix B.8.1). As there was no similar data in 1991, our analysis is limited to the 2002 distribution.

Figure 8.1 shows percentage distribution of disabled people by types, further elaborated in Table 8.1a by region of residence and sex. Accordingly, visual impairment or sight, was a major cause of disability in Guyana, and constituted 30.1 percent (14,574), of the total number of disabled persons. Significant proportions were also reported to be suffering from mobility impairment (16.4 percent), body movement (10.2 percent) and hearing (9.1 percent). About 8.3 percent (4,019) was reported as having mental impairment, which is quite substantial, considering the embarrassment this group sometimes pose to others in the absence of a rehabilitation camp. The least type disturbing, perhaps because of its milder intensity in really disabling people in performing their normal activities was those who lost their sense of taste (1.7 percent).

³⁰Marsha Katz and Nancy The Rural Fact Sheet (Available online at: [Maxsonhttp://ruralinstitute.umd.edu/training/publications/fact_sheets/disability_defined.asp](http://ruralinstitute.umd.edu/training/publications/fact_sheets/disability_defined.asp))

³¹ Ibid



Disparities exist in disability in Guyana, and it can be demonstrated by the fact that females affected by visual impairment were slightly higher than males – 33 compared to 27 percent of males, and more than two-fifths of the disabled citizens in Regions 2, 7 and 10 were reported to have sight impairment. The pattern of disability by types as presented by the remaining regions did not diverge much from the national experience (Table 8.1a).

Table 8.1b examines the concentration of disabled citizens, and it shows disability to be a significant component of the population, following almost the ranking order of the population in the ten administrative regions. As such, because Region 4 has the largest proportion of the total population, it possesses a greater number of disabled people or about two-fifths of the disabled citizens live there, 17 percent in Region 6, 13 percent in Region 3, etc. This pattern of distribution of disabled people has been observed for each type of disability and among males and females separately.

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Table 8.1a: Percent Distribution of Disabled Citizens by Types of Disability Classified by Region and Sex, Guyana: 2002

Region	Percent by Types of Disability in a Region										Total	
	Sight	Hearing	Speech	Mobility	Body Movement	Gripping	Learning	Mental	Tasting	Others	Percent	Number
Both Sexes												
Region 1	27.2	13.2	7.9	11.8	8.6	7.6	7.2	8.4	6.3	1.7	100	2,744
Region 2	37.6	9.7	6.9	14.3	8.3	4.9	4.5	6.5	1.2	6.0	100	3,665
Region 3	30.3	9.1	8.3	17.4	11.4	6.1	5.2	8.5	1.1	2.7	100	6,257
Region 4	29.5	8.4	7.6	16.7	10.3	5.9	5.2	8.4	1.3	6.6	100	18,847
Region 5	29.5	9.7	7.3	16.3	10.1	5.9	5.0	9.4	1.6	5.0	100	3,863
Region 6	27.2	8.1	8.1	18.5	11.5	7.1	5.1	8.4	1.9	4.2	100	8,218
Region 7	34.9	11.4	8.8	13.8	7.3	4.9	5.3	7.0	1.3	5.2	100	770
Region 8	27.2	12.4	7.7	12.2	10.1	7.7	7.2	8.4	1.6	5.5	100	622
Region 9	29.6	10.4	11.0	17.5	10.0	5.9	6.2	8.1	0.1	1.2	100	730
Region 10	36.1	9.4	7.4	14.3	8.0	5.6	5.8	7.5	1.5	4.4	100	2,703
Total	30.1	9.1	7.8	16.4	10.2	6.2	5.3	8.3	1.7	5.0	100	48,419
Males												
Region 1	26.6	13.1	7.5	12.7	8.4	7.4	7.2	8.8	6.5	1.7	100	1,479
Region 2	33.2	10.1	8.6	15.6	8.9	4.9	4.9	6.7	1.4	5.8	100	1,751
Region 3	27.1	9.0	8.8	18.2	11.8	7.1	5.1	8.7	1.0	3.1	100	3,132
Region 4	26.3	8.5	8.5	17.0	10.3	6.5	5.5	9.2	1.3	6.8	100	8,878
Region 5	26.7	9.5	8.1	16.6	9.7	7.0	5.5	10.3	1.6	5.0	100	1,892
Region 6	23.6	8.2	9.2	19.3	11.5	7.9	5.1	8.6	1.9	4.8	100	4,041
Region 7	32.9	12.0	10.1	14.2	6.7	5.0	5.3	7.9	1.2	4.6	100	416
Region 8	27.5	11.9	7.9	11.3	9.1	8.2	6.8	10.5	1.7	5.1	100	353
Region 9	30.0	10.6	11.8	17.9	9.2	4.3	5.1	9.2	0.0	1.9	100	414
Region 10	32.6	9.6	7.6	15.3	8.1	6.3	6.1	9.3	1.2	4.1	100	1,296
Total	27.1	9.2	8.6	16.9	10.2	6.7	5.5	8.9	1.7	5.1	100	23,652
Females												
Region 1	27.7	13.4	8.5	10.8	8.9	7.7	7.2	8.0	6.0	1.7	100	1,265
Region 2	41.6	9.2	5.4	13.1	7.9	5.0	4.2	6.4	1.0	6.2	100	1,914
Region 3	33.6	9.2	7.7	16.5	11.1	5.1	5.2	8.2	1.1	2.3	100	3,125
Region 4	32.2	8.3	6.8	16.3	10.4	5.4	4.9	7.8	1.4	6.5	100	9,969
Region 5	32.3	9.9	6.5	16.1	10.6	4.9	4.6	8.6	1.5	4.9	100	1,971
Region 6	30.6	8.0	7.0	17.7	11.4	6.4	5.1	8.2	2.0	3.6	100	4,177
Region 7	37.3	10.7	7.3	13.3	7.9	4.8	5.4	5.9	1.4	5.9	100	354
Region 8	26.8	13.0	7.4	13.4	11.5	7.1	7.8	5.6	1.5	5.9	100	269
Region 9	29.1	10.1	9.8	17.1	11.1	7.9	7.6	6.6	0.3	0.3	100	316
Region 10	39.4	9.3	7.2	13.4	7.9	5.0	5.5	6.0	1.7	4.6	100	1,407
Total	33.0	9.0	7.0	15.8	10.2	5.6	5.1	7.7	1.7	4.9	100	24,767

Note: Derived from Appendix B. 8.1

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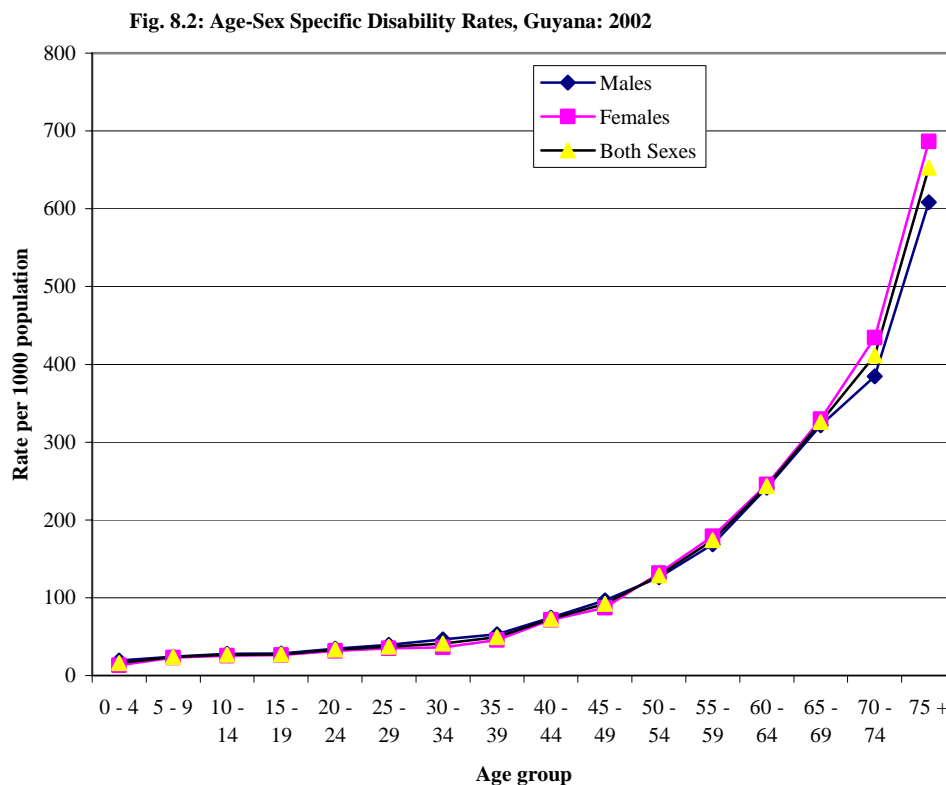
Table 8.1b: Percent Distribution of Disabled Citizens by Types of Disability Classified by Region and Sex, Guyana: 2002

Guyana, 2002											
	Percent of Disabled Citizens Within a Region										
	Body										
Region	Sight	Hearing	Speech	Mobility	Movement	Gripping	Learning	Mental	Tasting	Other	Total
Both Sexes											
Region 1	5.1	8.2	5.8	4.1	4.8	7.0	7.7	5.8	21.1	1.9	5.7
Region 2	9.5	8.0	6.7	6.6	6.2	6.1	6.5	6.0	5.3	9.0	7.6
Region 3	13.0	12.9	13.7	13.7	14.5	12.8	12.6	13.2	8.2	7.0	12.9
Region 4	38.1	36.0	38.1	39.6	39.3	37.5	38.0	39.6	31.0	51.7	38.9
Region 5	7.8	8.5	7.5	8.0	7.9	7.7	7.6	9.1	7.5	7.9	8.0
Region 6	15.3	15.1	17.6	19.2	19.0	19.6	16.3	17.3	19.6	14.1	17.0
Region 7	1.8	2.0	1.8	1.3	1.1	1.3	1.6	1.3	1.2	1.7	1.6
Region 8	1.2	1.7	1.3	1.0	1.3	1.6	1.8	1.3	1.2	1.4	1.3
Region 9	1.5	1.7	2.1	1.6	1.5	1.4	1.8	1.5	0.1	0.4	1.5
Region 10	6.7	5.8	5.3	4.9	4.4	5.1	6.1	5.1	4.9	4.9	5.6
Total %	100	100	100	100	100	100	100	100	100	100	100
Number	14,577	4,410	3,763	7,921	4,946	2,984	2,564	4,017	817	2,420	48,419
Males											
Region 1	6.2	8.9	5.4	4.7	5.1	6.9	8.2	6.2	23.8	2.1	6.3
Region 2	9.1	8.1	7.4	6.8	6.4	5.4	6.5	5.6	6.0	8.3	7.4
Region 3	13.2	12.9	13.5	14.3	15.3	14.0	12.4	12.9	7.9	8.1	13.2
Region 4	36.5	34.7	37.2	37.7	37.8	36.1	37.8	38.7	29.0	49.6	37.5
Region 5	7.9	8.2	7.6	7.8	7.6	8.3	8.0	9.2	7.7	7.9	8.0
Region 6	14.9	15.2	18.2	19.4	19.3	19.9	15.8	16.5	18.9	16.0	17.1
Region 7	2.1	2.3	2.1	1.5	1.2	1.3	1.7	1.6	1.2	1.6	1.8
Region 8	1.5	1.9	1.4	1.0	1.3	1.8	1.8	1.8	1.5	1.5	1.5
Region 9	1.9	2.0	2.4	1.8	1.6	1.1	1.6	1.8	0.0	0.7	1.8
Region 10	6.6	5.7	4.8	4.9	4.4	5.1	6.1	5.7	4.0	4.4	5.5
Total %	100	100	100	100	100	100	100	100	100	100	100
Number	6,402	2,180	2,038	4,006	2,410	1,594	1,300	2,109	403	1,210	23,652
Females											
Region 1	4.3	7.6	6.2	3.5	4.5	7.1	7.2	5.3	18.4	1.8	5.1
Region 2	9.7	7.9	6.0	6.4	6.0	6.8	6.4	6.4	4.6	9.8	7.7
Region 3	12.8	12.9	14.0	13.2	13.7	11.4	12.9	13.5	8.5	5.9	12.6
Region 4	39.3	37.3	39.0	41.6	40.8	39.1	38.3	40.6	32.9	53.7	40.3
Region 5	7.8	8.8	7.5	8.1	8.2	7.0	7.2	8.9	7.2	8.0	8.0
Region 6	15.6	14.9	16.9	18.9	18.8	19.2	16.8	18.0	20.3	12.3	16.9
Region 7	1.6	1.7	1.5	1.2	1.1	1.2	1.5	1.1	1.2	1.7	1.4
Region 8	0.9	1.6	1.2	0.9	1.2	1.4	1.7	0.8	1.0	1.3	1.1
Region 9	1.1	1.4	1.8	1.4	1.4	1.8	1.9	1.1	0.2	0.1	1.3
Region 10	6.8	5.9	5.9	4.8	4.4	5.0	6.2	4.4	5.8	5.4	5.7
Total %	100	100	100	100	100	100	100	100	100	100	100
Number	8,175	2,230	1,725	3,915	2,536	1,390	1,264	1,908	414	1,210	24,767

Note: Derived from Appendix B.8.1

8.2 Age-Sex Patterns of Disabilities

According to the 2002 census, there were 42,577 disabled adults (15 years and over) and 5,842 disabled children (below 15 years) in Guyana. The age-sex specific disability rates, that is, the number of disabled persons in each age group divided by the given population in the same age group, expressed per 1000 population is displayed in Figure 8.2. The graph portrays a picture typical of a central death rate schedule. But, unlike the age specific death rates, which has a U-shaped or J-shaped curve, depending on the nature of the data (whether from developed or less developed country), the age specific disability rates schedule for Guyana is concave, that is, relatively low at infancy, almost at zero, rising steadily, and then more gradually to a maximum at the very oldest ages. This conforms to the assertion by disabled right advocates who refer to disability as "Temporarily Able-Bodied" (TAB), as a reminder that many will usually become disabled, either from exhaustion (physical, mental or emotional), illness, poor health or poor fitness, especially if these occur during the aged and frail stages of life³².



Disability in old age is one phase in the human life cycle, which comes due to exhaustion and physical weakness of the body system, but the proportion of children and adolescent reporting various types of disabilities is also significant. Generally, within the disabled group, 12 percent of children below 15 years and 8 percent of youth, (15-24 years) were impaired, and the main causes of their disabilities were speech, learning and sense of taste (about 40 percent in each category respectively), (Table 8.2).

³² From Wikipedia, the Free Encyclopedia: (Available online at: <http://en.wikipedia.org/wiki/Disability>)

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Similarly, about 30 percent of the senior citizens, (65 years and over) had disabilities. As expected, the aged disabled people were particularly affected by body movement (41 percent), mobility (40 percent), hearing (37 percent), gripping (33 percent) and sight (30 percent), respectively. As previously stated, mental incapacity was 8.3 percent on the overall, and of this, 35 and 22 percent of the adults 25-44 and 45-64 years, respectively, were affected by mental health difficulties. Almost 70 percent of persons who suffered from mental health difficulties were adults in the main working age groups (15-64 years) who required further investigation to establish the cause of the illness (Table 8.2).

Table 8.2: Percent Distribution of Disabled Citizens by Age, Sex and Types, Guyana: 2002

Age Group	Sight	Hearing	Speech	Mobility	Body Movement	Gripping	Learning	Mental	Sense of Taste	Others	Total
Both Sexes											
0 - 14	7.9	13.3	24.7	8.3	8.3	11.0	22.6	14.4	27.5	16.5	12.1
15 - 24	6.2	8.6	14.2	4.6	5.2	6.8	16.7	12.0	12.1	8.8	8.0
25 - 44	20.3	20.4	28.6	15.9	15.6	19.2	30.9	35.2	19.6	22.4	21.6
45 - 64	34.1	20.1	15.9	31.3	29.2	29.2	16.0	22.4	17.5	33.2	27.9
65 +	29.9	36.7	15.8	39.5	41.2	33.2	12.9	14.9	20.7	18.6	29.5
NS	1.6	0.9	0.7	0.4	0.4	0.6	0.9	1.1	2.6	0.4	1.0
Total	100	100	100	100	100	100	100	100	100	100	100
Number	14,577	4,410	3,763	7,921	4,946	2,984	2,564	4,017	817	2,420	48,419
Males											
0 - 14	8.7	15.0	26.4	9.1	8.8	11.7	24.5	16.1	30.3	17.5	13.4
15 - 24	6.0	8.9	14.4	5.3	6.1	7.3	17.6	12.1	11.2	9.2	8.4
25 - 44	19.9	20.6	27.4	20.3	19.6	23.1	31.2	38.3	20.6	24.0	23.4
45 - 64	34.1	19.9	15.8	33.1	31.8	30.8	15.4	20.8	17.9	33.3	28.1
65 +	29.5	34.9	15.2	31.8	33.4	26.5	10.2	11.4	17.4	15.5	25.7
NS	1.7	0.8	0.8	0.4	0.3	0.5	1.0	1.2	2.7	0.5	1.0
Total	100	100	100	100	100	100	100	100	100	100	100
Number	6,402	2,180	2,038	4,006	2,410	1,594	1,300	2,109	403	1,210	23,652
Females											
0 - 14	7.2	11.7	22.7	7.4	7.8	10.1	20.6	12.5	24.9	15.5	10.7
15 - 24	6.4	8.3	14.0	3.9	4.4	6.2	15.7	11.9	13.0	8.5	7.6
25 - 44	20.5	20.2	30.0	11.4	11.8	14.7	30.6	31.7	18.6	20.7	19.8
45 - 64	34.1	20.3	16.0	29.6	26.8	27.4	16.7	24.2	17.1	33.1	27.8
65 +	30.2	38.5	16.6	47.4	48.7	41.0	15.7	18.9	23.9	21.8	33.1
NS	1.5	0.9	0.6	0.4	0.6	0.6	0.7	0.9	2.4	0.2	0.9
Total	100	100	100	100	100	100	100	100	100	100	100
Number	8,175	2,230	1,725	3,915	2,536	1,390	1,264	1,908	414	1,210	24,767

Note: NS = not stated. This table was derived from **Appendix B.8.2**.

8.3 How Disabilities were Acquired?

The source of disabilities is important, since, it would help policy-makers to adopt measures aimed at reducing the likelihood of the illness. Generally, about 41 percent of the disabilities were the result of accidents, 26 percent did not know or did not state how disability was acquired, and 18 percent had acquired it from birth, while 15 percent was caused by diseases (Table 8.3).

Table 8.3: Percent Distribution of Disabled Citizens by Type and How Disability Acquired, Guyana: 2002

Disability Types	How Disability Acquired				Total	
	Birth	Disease	Accident	Not stated	Percent	Number
Both Sexes						
Sight	5.9	12.8	47.7	33.5	100	14,577
Hearing	23.3	12.1	37.2	27.4	100	4,410
Speech	49.8	7.1	22.5	20.6	100	3,763
Mobility	11.0	23.6	45.7	19.7	100	7,921
Body Movement	10.9	20.9	47.7	20.5	100	4,946
Gripping	13.4	23.0	41.8	21.8	100	2,984
Learning	46.2	10.3	20.8	22.8	100	2,564
Mental	31.5	14.3	30.3	23.9	100	4,017
Sense of Taste	16.4	8.4	24.5	50.7	100	817
Others	17.4	10.0	45.2	27.4	100	2,420
Total	17.7	15.3	40.7	26.3	100	48,419
Males						
Sight	6.0	16.8	43.8	33.3	100	6,402
Hearing	23.7	15.0	34.4	27.0	100	2,180
Speech	48.7	8.1	21.9	21.3	100	2,038
Mobility	11.3	31.1	38.9	18.6	100	4,006
Body Movement	11.4	27.2	42.2	19.2	100	2,410
Gripping	13.1	30.7	35.4	20.8	100	1,594
Learning	46.2	11.5	18.8	23.5	100	1,300
Mental	32.0	16.5	26.4	25.2	100	2,109
Sense of Taste	16.4	8.9	22.3	52.4	100	403
Others	18.3	14.1	40.6	26.9	100	1,210
Total	18.6	19.7	36.0	25.7	100	23,652
Females						
Sight	5.8	9.7	50.8	33.7	100	8,175
Hearing	22.9	9.3	40.0	27.8	100	2,230
Speech	51.1	5.9	23.3	19.7	100	1,725
Mobility	10.7	16.0	52.5	20.7	100	3,915
Body Movement	10.4	14.9	53.0	21.7	100	2,536
Gripping	13.7	14.2	49.1	23.0	100	1,390
Learning	46.1	9.0	22.8	22.1	100	1,264
Mental	31.1	11.9	34.6	22.4	100	1,908
Sense of Taste	16.4	8.0	26.6	49.0	100	414
Others	16.4	5.8	49.9	27.9	100	1,210
Total	16.9	11.1	45.2	26.8	100	24,767

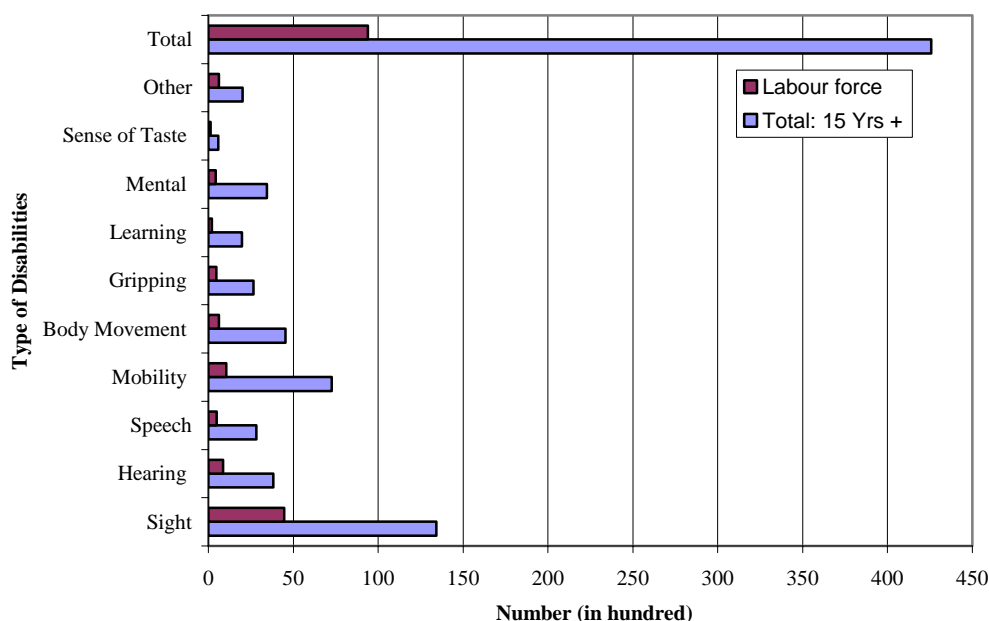
Significantly, about half of those suffering from speech and learning difficulties had been born with the impairment. Similarly, sight, body movement, mobility and gripping were mainly the result of accidents (up to more than two-fifths in these categories), while birth disorders and accidents were responsible for mental health deficiencies in equal proportions, of about one third.

Disaggregating disabilities between the sexes indicates more males being impaired by diseases (19.7 percent) than females (11.1 percent). In contrast, more females (45.2 percent) were impaired by accident compared to 36.0 percent among the males. Nearly equal proportions of disabled males and females said birth complication was responsible for their misfortune; at the same time, about a quarter of them did not state how the illness originated (Table 8.3).

8.4 Employment Opportunities for Disabled People

Labour force participation rates among the disabled people are given in Table 8.4 and illustrated graphically in Figure 8.3. Despite no job discriminations against disabled people in Guyana, they do not have the same opportunities to participate in the labour force. Of the 42,577 disabled persons (15 years and over), 22 percent (9,388) were in the labour force, that is, were economically active and were working or had the need for work. This rate was nearly three times lower, when compared with non-disabled people in Guyana (see chapter 6).

Fig. 8.3: Number of Disabled Persons in the Labour Force, Guyana: 2002



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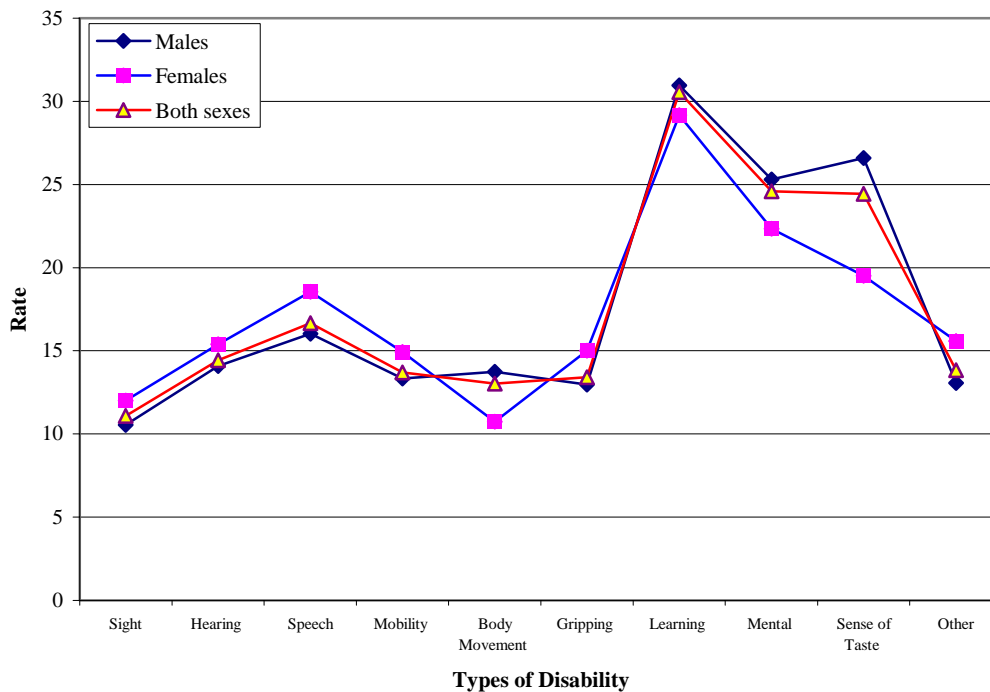
Table 8.4: Employment Status of the Disabled Citizens 15 years and Over Classified by Types of Disability and Sex, Guyana: 2002

Employment Status		Types of Disability									
		Body									
		Movem Grippi									
Both Sexes	Sight	Hearing	Speech	Mobility	ent	ng	Learning	Mental	Tasting	Other	Total
Total: 15 Yrs +	13,427	3,823	2,833	7,265	4,537	2,657	1,985	3,438	592	2,020	42,577
Labour force	4,468	873	492	1,059	622	470	216	431	135	622	9,388
Employed	3,973	747	410	914	541	407	150	325	102	536	8,105
Unemployed	495	126	82	145	81	63	66	106	33	86	1,283
Not in LF	8,959	2,950	2,341	6,206	3,915	2,187	1,769	3,007	457	1,398	33,189
Males											
Total: 15 Yrs +	5,843	1,854	1,500	3,640	2,198	1,407	981	1,769	281	998	20,471
Labour force	2,853	639	368	818	473	370	168	328	94	436	6,547
Employed	2,552	549	309	709	408	322	116	245	69	379	5,658
Unemployed	301	90	59	109	65	48	52	83	25	57	889
Not in LF	2,990	1,215	1,132	2,822	1,725	1,037	813	1,441	187	562	13,924
Females											
Total: 15 Yrs +	7,584	1,969	1,333	3,625	2,339	1,250	1,004	1,669	311	1,022	22,106
Labour force	1,615	234	124	241	149	100	48	103	41	186	2,841
Employed	1,421	198	101	205	133	85	34	80	33	157	2,447
Unemployed	194	36	23	36	16	15	14	23	8	29	394
Not in LF	5,969	1,735	1,209	3,384	2,190	1,150	956	1,566	270	836	19,265
Percentage											
Both Sexes											
Total: 15 Yrs +	100	100	100	100	100	100	100	100	100	100	100
Labour force	33.3	22.8	17.4	14.6	13.7	17.7	10.9	12.5	22.8	30.8	22.0
Employed	88.9	85.6	83.3	86.3	87.0	86.6	69.4	75.4	75.6	86.2	86.3
Unemployed	11.1	14.4	16.7	13.7	13.0	13.4	30.6	24.6	24.4	13.8	13.7
Not in LF	66.7	77.2	82.6	85.4	86.3	82.3	89.1	87.5	77.2	69.2	78.0
Males											
Total: 15 Yrs +	100	100	100	100	100	100	100	100	100	100	100
Labour force	48.8	34.5	24.5	22.5	21.5	26.3	17.1	18.5	33.5	43.7	32.0
Employed	89.4	85.9	84.0	86.7	86.3	87.0	69.0	74.7	73.4	86.9	86.4
Unemployed	10.6	14.1	16.0	13.3	13.7	13.0	31.0	25.3	26.6	13.1	13.6
Not in LF	51.2	65.5	75.5	77.5	78.5	73.7	82.9	81.5	66.5	56.3	68.0
Females											
Total: 15 Yrs +	100	100	100	100	100	100	100	100	100	100	100
Labour force	21.3	11.9	9.3	6.6	6.4	8.0	4.8	6.2	13.2	18.2	12.9
Employed	88.0	84.6	81.5	85.1	89.3	85.0	70.8	77.7	80.5	84.4	86.1
Unemployed	12.0	15.4	18.5	14.9	10.7	15.0	29.2	22.3	19.5	15.6	13.9
Not in LF	78.7	88.1	90.7	93.4	93.6	92.0	95.2	93.8	86.8	81.8	87.1

Note : LF = Labour force

The participation rates varied by sex and by type of disabilities. For example, the overall participation among disabled women was 13 percent, about two and half times lower than disabled men who had 32 percent participation rate. People with learning difficulties and mental health problems, followed by groups with impaired body movement, mobility, gripping and speech difficulties, in that order, were least likely to be in the employment.

Fig. 8.4: Unemployment Rates Among Disabled Persons, Guyana: 2002



Although a small number was in the labour force, however, 86 percent of disabled persons who sought for jobs were employed, and 14 percent unemployed as compared with 88 percent employed and 12 percent unemployed among the non-disabled persons. It was also observed that unemployment was higher among people with learning difficulties and mental health and cases of tasting **difficulties** as compared to disabled persons with visual incapability (Figure 8.4).

8.5 Disabled People Access to Education

Education being the universal key to success, access to it is critical for self actualization and achievement, and because education for people with disabilities is special, it tends to limit their achievements even if the desires are there to learn. Besides, Hannah Mitchell³³ noted that the social and economic conditions of persons with disabilities can prevent them from equal access to education. This sub-section mainly focuses on the enrolment rate among disabled citizens as well as their level of educational achievement in Guyana.

Table 8.5 reveals that only 7.4 percent (3,483) of the people with disabilities currently attended school either full time or part time, and that there was no gender disparity in the enrolment rate. Of note, the attendance rate of people with mobility, body movement, gripping and mental disabilities was much lower, when compared to the average for the entire disabled groups. Unless the mental group whose low attending rate can be justified by mental health, it can be

³³ Hannah Mitchell (2005), Raising the Profile of Disability in Guyana, National Commission on Disabilities Survey Based on 1,500 Disabled Persons (Available online at: <http://www.statisticsguyana.gov.gy/>)

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assumed reasonably that difficulty of movement prevented the other groups from accessing learning.

Table 8.5: Distribution of Disabled Citizens 5 Years and Over by Types of Disability, Attending Or Not Attending School and Attending Rate, by Sex, Guyana:

Disability Types	Number			Attending
Both Sexes	Attend	Not Attend	Total	Rate
Sight	1,121	13,194	14,315	7.8
Hearing	415	3,872	4,287	9.7
Speech	456	3,076	3,532	12.9
Mobility	297	7,447	7,744	3.8
Body Movement	152	4,677	4,829	3.1
Gripping	134	2,748	2,882	4.6
Learning	252	2,196	2,448	10.3
Mental	251	3,641	3,892	6.4
Sense of Taste	117	630	747	15.7
Others	288	2,027	2,315	12.4
Total	3,483	43,508	46,991	7.4
Males				
Sight	496	5,767	6,263	7.9
Hearing	222	1,887	2,109	10.5
Speech	248	1,643	1,891	13.1
Mobility	157	3,746	3,903	4.0
Body Movement	77	2,264	2,341	3.3
Gripping	75	1,456	1,531	4.9
Learning	123	1,101	1,224	10.0
Mental	146	1,879	2,025	7.2
Sense of Taste	59	300	359	16.4
Others	143	1,004	1,147	12.5
Total	1,746	21,047	22,793	7.7
Females				
Sight	625	7,427	8,052	7.8
Hearing	193	1,985	2,178	8.9
Speech	208	1,433	1,641	12.7
Mobility	140	3,701	3,841	3.6
Body Movement	75	2,413	2,488	3.0
Gripping	59	1,292	1,351	4.4
Learning	129	1,095	1,224	10.5
Mental	105	1,762	1,867	5.6
Sense of Taste	58	330	388	14.9
Others	145	1,023	1,168	12.4
Total	1,737	22,461	24,198	7.2

Despite their impairments, a large percentage of the disabled citizens had achieved some form of higher education. As reflected in Table 8.6, 16 percent (7,500) had acquired no education, 41.3 percent primary education, 34.6 percent secondary education, and about 3.3 percent post secondary and tertiary education combined. Up to 1.3 percent had obtained a specialized form of education, but was not clearly stated, while those who did not state their educational achievement at all amounted to nearly 3.5 percent (Table 8.6).

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About one-third of those with speech and learning disabilities had no education, while as expected, a quarter of those with mental health problems had no education (Table 8.6).

The educational achievement exhibited by the disabled citizens is unprecedented, but not really surprising, because only 18 percent (8,583) of the 48,419 reported with disabilities had acquired the illness leading to their impairment from birth. Apparently, the majority may have achieved the educational standard prior to the incident that led to their unfortunate situation.

CHAPTER 9:

MARRIAGE, DIVORCE AND COHABITATION

In Guyana, as in most societies, statistics on marriage are important; they shed light on family formation, family composition, etc. The trend in the number of marriages has implications for housing requirement and community services³⁴. Also, the civil status of married is associated with a variety of positive outcomes, and dissolution is associated with negative outcomes for men, women and the children³⁵. For example, childbearing takes place mainly within socially prescribed and relatively stable marital unions; children born into stable unions are less likely to be exposed to a high risk of infant and childhood deaths, etc. Thus, the study of the pattern of marriage is essential to the understanding of fertility and other behavioral patterns within the society.

However, the full analysis of the benefits of marital status - to either the children or spouses and the society as a whole - is beyond the scope of this analysis, but, it is intended to highlight the importance of the data. The specific purpose of this section is therefore, to investigate the following:

- What proportion of the population is currently in union?
- At what age such a marriage takes place?
- What are the age, sex and regional patterns?
- What are the likely probabilities of the union status?

In the census, union status was defined to include any legal civil status of marriage of a man and woman as husband and wife, as well as other stable cohabitation, such as man and woman living together in common-law relationship with or without any legal binding.

9.1 Current Union Status

Table 9.1 shows that, based on the definition of union status, 27.8 percent of the total marriageable population in Guyana had never married, 56.7 percent were currently married, either legally or living in common-law relationship, while 13.4 percent were either divorced, separated, widowed, or were common law, meaning, no longer living together; in addition to about 2 percent who were married but were not currently in union. The table also reveals that a higher proportion of males was never married, compared to the females; for instance, a ratio of one female to nearly every two males in this category, and in reverse, one out of every seven females was a widow; four times higher than the widowers. Nearly equal proportions (56 and 57 percent) of men and women were duly bound in marriage, either legally or by consensual relationship, indicating that a significant proportion live in common-law union.

³⁴ Henry S. Shryock et al (1971) The Methods and Materials of Demography, US Government Printing Office

³⁵ Mathew D. Bramlett et al (2006) Cohabitation, Marriage, Divorce, and Remarriage in the United States (PDF file)

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Two concomitant factors are necessary to explain the high proportion of females in widowhood. First, the singulate mean age at marriage for males exceeded that of females, indicating that the Guyanese men mostly marry to women younger than their ages; and in reverse, the longevity of females is higher than males. On the higher proportion of never married males, it is observed that once females attained marriageable age, they are encouraged to take a home and marry unlike the males who have to go through a period of time to prepare. As such, the time elapsed is more likely to be the reason for a higher proportion of never married males than females.

Table 9.1: Percentage Distribution of the Population 15 Years and Over by Marital Status, Sex and Region, Guyana: 2002

Region	Marital Status								Total	
	Married	Common Law	Divorced	Separated	Widowed	Married (Not in Union)	Was Common Law	Never in Union	Percent	Number
Both Sexes										
Region 1	31.9	33.6	0.2	0.1	3.0	1.2	7.9	22.1	100	11,278
Region 2	43.3	17.8	0.8	0.2	5.2	1.9	4.0	26.8	100	29,788
Region 3	40.6	20.5	1.3	0.3	4.8	2.0	4.5	26.0	100	66,887
Region 4	32.0	19.9	2.0	0.4	4.5	2.2	8.5	30.4	100	199,833
Region 5	37.5	22.3	1.1	0.4	5.3	1.9	5.2	26.3	100	32,731
Region 6	39.4	22.0	1.4	0.4	5.6	2.1	4.6	24.6	100	78,693
Region 7	36.8	23.2	0.4	0.3	3.3	1.6	7.7	26.7	100	9,595
Region 8	37.2	25.6	0.5	0.2	2.5	1.0	7.1	25.8	100	5,709
Region 9	50.7	17.6	0.3	0.1	3.6	0.9	4.4	22.3	100	10,033
Region 10	29.4	18.9	1.7	0.3	3.6	2.1	12.4	31.5	100	24,306
Total	36.0	20.7	1.5	0.4	4.7	2.0	6.8	27.8	100	x
Number	168,659	97,244	7,181	1,731	21,922	9,532	32,043	130,542	x	468,853
Males										
Region 1	30.2	31.1	0.1	0.0	2.0	1.3	3.7	31.7	100	5,947
Region 2	42.6	17.2	0.6	0.1	2.2	1.7	1.6	34.0	100	14,929
Region 3	40.1	20.0	1.0	0.3	2.1	1.8	2.0	32.7	100	33,473
Region 4	32.2	20.2	1.5	0.4	1.8	1.9	2.9	39.3	100	95,691
Region 5	37.3	21.8	1.0	0.4	2.2	1.8	1.8	33.8	100	16,247
Region 6	39.1	21.7	1.2	0.4	2.2	2.1	2.3	31.2	100	38,960
Region 7	35.3	21.9	0.4	0.3	1.6	1.7	3.7	35.1	100	5,047
Region 8	33.6	23.4	0.6	0.3	1.5	1.0	5.8	33.7	100	3,479
Region 9	48.9	16.3	0.2	0.2	2.2	1.0	1.9	29.4	100	5,256
Region 10	30.2	19.0	1.4	0.3	1.8	1.9	4.0	41.5	100	11,904
Total	35.8	20.5	1.1	0.3	2.0	1.8	2.6	35.7	100	x
Number	82,787	47,446	2,655	747	4,547	4,227	5,997	82,527	x	230,933
Females										
Region 1	33.7	36.4	0.2	0.1	4.2	1.1	12.7	11.5	100	5,331
Region 2	44.0	18.3	1.0	0.3	8.2	2.1	6.4	19.6	100	14,859
Region 3	41.1	21.0	1.6	0.4	7.5	2.1	6.9	19.4	100	33,414
Region 4	31.7	19.7	2.5	0.5	7.0	2.5	13.7	22.3	100	104,142
Region 5	37.7	22.8	1.3	0.4	8.3	2.1	8.6	18.9	100	16,484
Region 6	39.7	22.2	1.7	0.4	8.9	2.2	6.9	18.1	100	39,733
Region 7	38.5	24.6	0.5	0.2	5.2	1.4	12.2	17.3	100	4,548
Region 8	42.8	28.9	0.4	0.0	4.1	1.1	9.1	13.6	100	2,230
Region 9	52.6	19.1	0.4	0.1	5.2	0.9	7.1	14.6	100	4,777
Region 10	28.6	18.9	2.0	0.4	5.3	2.3	20.6	22.0	100	12,402
Total %	36.1	20.9	1.9	0.4	7.3	2.2	10.9	20.2	100	x
Number	85,872	49,798	4,526	984	17,375	5,305	26,045	48,015	x	237,920

In all the regions, a significant proportion of men or women somewhat above the national average, in the marriageable age range had ever married, except in Regions 1, 4 and 10, where the percentage reported ever-married was less than the prevailing national total, (Table 9.1).

Although statistics presented in the analysis are descriptive in nature, it is necessary that the relatively small proportion ever-married in the two regions would be related to individual characteristics there as compared to others. For instance, they have a higher percentage of urban populations, higher proportion of gross and net secondary school enrolments, higher proportion in nonagricultural industries, and serve as migration destination areas, etc. These individual characteristics are more likely to affect the proportion ever married in the regions, and require cross-sectional investigation.

As there was no similar marital union data in 1991, comparison with 2002 can only be made for those who ever married. Such comparisons given in Table 9.2 and Figure 9.1 varied across demographic subgroups, for example, age, sex and marital status. The table reveals that the marital status of males and females diverged significantly between 1991 and 2002, for instance, about 45 and 51 percent of males and females respectively enumerated in 1991 were ever married, rising to 63 and 79 percent, respectively in 2002. However, the sharp increase is unreliable and should be interpreted with caution. It could possibly be the outcome of changes in the definition of the module from marital status to marital union (see section 9.3.3 singulate mean at marriage).

**Table 9.2: Changes in Marital Status of Persons 15 Years and Over, by Sex,
Guyana: 1991 - 2002**

Marital status	1991			2002		
	Males	Females	Both Sexes	Males	Females	Both Sexes
Ever Married	45.2	51.0	48.1	62.7	78.6	70.7
Never Married	54.8	49.0	51.9	37.3	21.4	29.3
Total %	100	100	100	100	100	100
Number	223,404	233,242	456,646	230,933	237,920	468,853

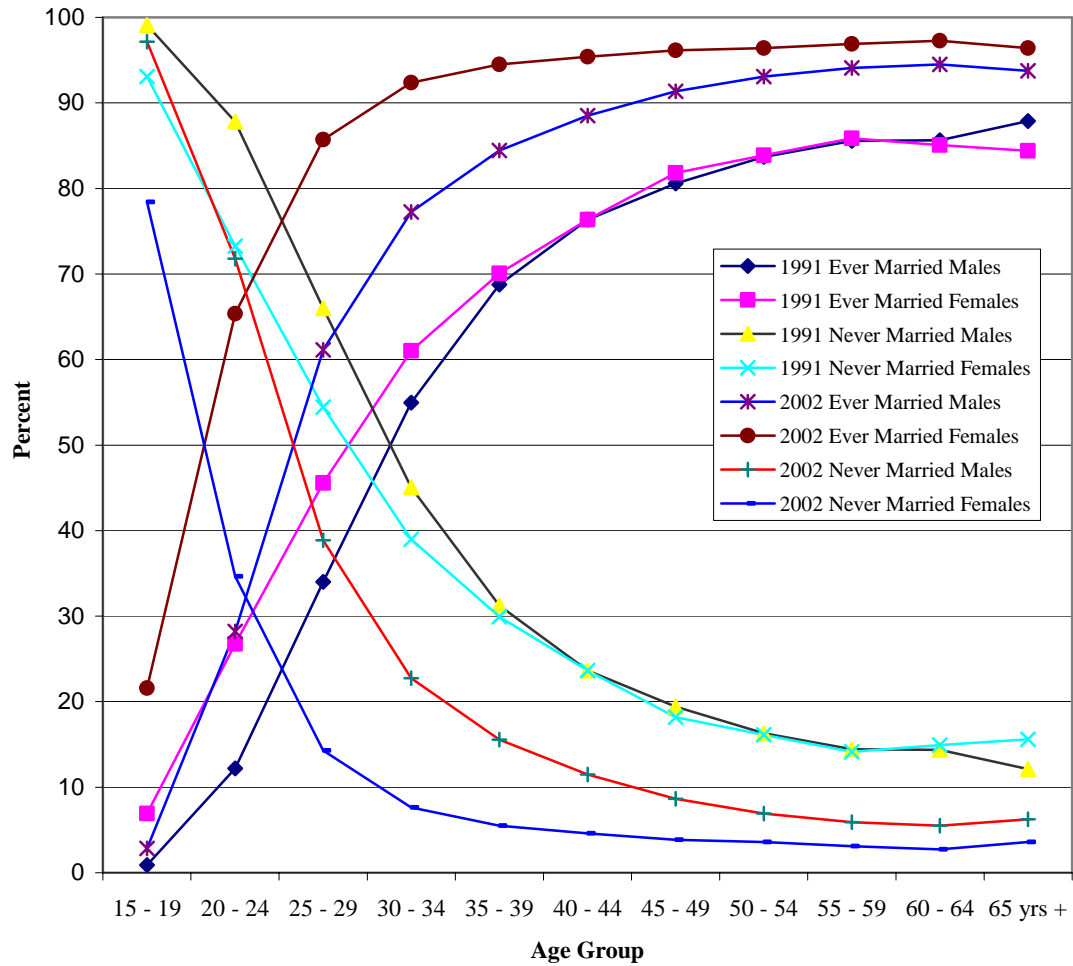
9.2 Age-Sex Pattern and Mean Age at Marriage

9.2.1 Age-Sex Pattern

The age-sex pattern of marital status is displayed in Table 9.3 and graphically in Figure 9.1, showing in any case the universal trends. As expected, the proportion of men or women who have never married in the two censuses decreases substantially with increasing age; in inverse relation, the proportion increases with increasing age for those who have ever married. For instance, the never married for both sexes combined was 86.6 percent for 15-19 years, but by 55 years and over, only about 4.5 percent remained of those who had never married. The likelihood of never married was higher for males within the teenage group, which is 95.7 percent, as compared to 77.6 percent among the females, but it similarly decreases with age and later equalized with females by the time both of them exited the marriageable age range (see Figure 9.1).

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Fig. 9.1: Percent Distribution of Never and Ever Married, Guyana: 1991 - 2002



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Table 9.3: Percent Distribution of the Population 15 Years and Over by Age, Union Status and Sex, Guyana: 2002

Age Group	Common Married	Common Law	Divorced	Separated	Widowed	Married (Not in Union)	Was Common Law	Never in Union	Not Stated	Total	
										Percent	Number
Both Sexes											
15 - 19	3.7	6.1	0.0	0.0	0.0	0.2	2.0	86.6	1.3	100	65,417
20 - 24	18.4	20.7	0.2	0.1	0.3	0.7	6.2	52.0	1.5	100	62,989
25 - 29	31.4	29.9	0.5	0.2	0.6	1.3	8.9	25.9	1.3	100	59,853
30 - 34	39.9	32.0	0.9	0.3	0.7	1.7	8.5	14.9	1.1	100	56,825
35 - 39	46.8	28.6	1.4	0.4	1.2	2.0	8.3	10.4	0.8	100	51,730
40 - 44	51.8	23.4	2.5	0.6	2.2	2.5	8.1	8.0	0.9	100	45,695
45 - 49	55.1	19.1	3.4	0.7	3.7	3.4	7.6	6.2	0.8	100	35,250
50 - 54	54.7	16.2	4.0	0.8	7.5	4.1	6.6	5.2	0.9	100	27,693
55+	45.5	9.9	3.1	0.7	24.9	4.1	6.1	4.5	1.3	100	63,401
Total	34.7	19.9	1.1	0.3	1.9	1.8	2.5	34.5	3.3	100	468,853
Males											
15 - 19	0.6	1.7	0.0	0.0	0.0	0.0	0.4	95.7	1.5	100	32,619
20 - 24	10.2	15.1	0.1	0.0	0.1	0.4	1.7	70.4	2.0	100	30,925
25 - 29	27.3	28.2	0.3	0.2	0.2	1.1	2.8	38.2	1.8	100	29,326
30 - 34	37.8	32.6	0.6	0.2	0.2	1.3	3.3	22.4	1.5	100	28,264
35 - 39	46.0	30.6	0.9	0.4	0.4	1.8	3.5	15.4	1.1	100	25,699
40 - 44	53.5	25.7	1.4	0.5	0.7	2.1	3.4	11.4	1.2	100	22,773
45 - 49	59.0	21.1	2.4	0.6	1.1	2.8	3.4	8.5	1.1	100	17,564
50 - 54	60.2	19.1	3.0	0.6	2.5	3.8	2.7	6.8	1.3	100	13,905
55 +	56.2	13.2	3.1	0.7	11.7	4.6	2.9	5.9	1.8	100	29,858
Total	35.0	20.1	1.1	0.3	1.9	1.8	2.5	34.9	2.4	100	230,933
Females											
15 - 19	6.9	10.5	0.0	0.0	0.1	0.3	3.6	77.6	1.1	100	32,798
20 - 24	26.3	26.1	0.3	0.1	0.4	1.0	10.5	34.3	1.0	100	32,064
25 - 29	35.3	31.6	0.7	0.2	1.0	1.5	14.7	14.2	0.7	100	30,527
30 - 34	41.9	31.5	1.2	0.3	1.1	2.0	13.6	7.6	0.7	100	28,561
35 - 39	47.6	26.6	2.0	0.5	2.0	2.3	13.1	5.5	0.5	100	26,031
40 - 44	50.2	21.1	3.5	0.6	3.6	2.9	12.9	4.6	0.5	100	22,922
45 - 49	51.2	17.1	4.5	0.8	6.3	3.9	11.9	3.8	0.4	100	17,686
50 - 54	49.2	13.4	4.9	0.9	12.6	4.4	10.5	3.6	0.5	100	13,788
55 +	36.0	7.0	3.1	0.7	36.6	3.7	8.9	3.2	0.9	100	33,543
Total	35.5	20.6	1.9	0.4	7.2	2.2	10.8	19.9	1.6	100	237,920

Note: Derived from Appendix B.9.1

9.2.2 Singulate Mean Age at Marriage

The age at which women marry has relation to their status in the society. According to Selvaratnam (1988), in societies where the girls marry early, the age difference between brides and grooms may average 10 to 12 years, and in some instances may be as much as 20 years, which implies that the woman's already subordinate position at the time of marriage is further compounded by the additional advantage her husband has accrued with his age and experiences³⁶.

³⁶ S. Selvaratnam (1988) "Population and Status of Women" an Article in Asia-Pacific Population Journal, Vol.3, No.2 or (PDF)

Apart from using age at marriage as an indicator of status of women, it helps to determine the length of time women are exposed to the risk of childbearing; hence the lower the singulate mean age at marriage (SMAM), the higher the risk of fertility in the absence of contraceptive use or abstinence.

The SMAM is the mean age at first marriage among those who ever marry (or, in practice, among those who marry by some predefined age-limit)³⁷. It is computed from the proportions that are single, that is, never married, in each age group. This method assumes that no first marriage occurs after age 50 or before age 15.

In Guyana, the singulate mean age at first marriage was 27.8 years for females and 30.1 years for males in 1991, reducing to 21.4 and 26.5 years respectively, in 2002, (Table 9.4). It is not meaningful to compare 1991 and 2002 SMAM because of differences in the definition of married. For example, in 1991 the definition referred to marital status, (married, never married, divorced, widowed and separated), while in 2002, it was meant to measure union status, with the intent to include consensual unions.

Consequently, additional categories such as common-law, was common-law; in addition, those who were ever married but not in union, either because one of the partners was absent, were inserted in the marriage module. As such, since the 2002 questions explicitly covered consensual unions, to the extent that those who were even in causal cohabitation of common-law relationship but were no longer living together were recorded, the result was a somewhat higher number of ever married couples, thereby reducing the singulate mean age at marriage.

Regarding the differentials in SMAM, Table 9.4 also shows that Region 1 exhibited the lowest for women (18.0 years), followed by Regions 8 and 9, where by the age 18.6 and 19.1 years respectively, 50 percent of women there had already ever married. The estimates for the rest of the regions were similar; ranging from 20.2 years for women in Region 7 to 22.1 years for those in Region 4. The estimates for males, though higher than females, were consistent, varying insignificantly, for instance, the lowest being 24.3 years for males in Regions 1 and 9 respectively, to the highest, of 27.4 years in Region 10.

From these estimates, it is now clear why the growth rate in the hinterland regions, particularly Region 8, doubled during the intercensal period. The lower SMAM for women in these regions requires special investigation, as status and development of women are in most instances tied to the tradition and custom under which women take their bridegrooms.

³⁷ United Nations (1983) Manual X: Indirect Techniques for Demographic Estimation, UN Publication.

Table 9.4: Singulate Mean Age at Marriage by Sex and Region, Guyana: 2002

Region	Males	Females
Region 1	24.3	18.0
Region 2	26.4	21.1
Region 3	26.2	21.4
Region 4	27.3	22.1
Region 5	26.4	20.9
Region 6	25.5	20.7
Region 7	26.2	20.2
Region 8	24.7	18.6
Region 9	24.3	19.1
Region 10	27.4	21.9
Guyana 1991	30.1	27.8
Guyana 2002	26.5	21.4

CHAPTER 10:

CHILDREN AND YOUTH

This chapter is devoted to the children and youths because of this importance. The specific objectives include:

- Distribution of dependent children and youths at both regional and household headship levels;
- Age and economic dependency ratios;
- Educational enrolment of children and youths; and
- The influence of school attendance and educational level on youths labour force participation.

10.1 Distribution of Dependent Children and Youths

10.1.1 Regional Distribution of Dependents

Earlier, in chapter 1, we presented the regional distribution of the population, and re-emphasized further in chapter 3, stressing on the regional growth rates and impact of internal migration. In this section, the emphasis will be on regional distribution of children and youths; particularly, with the view of identifying the pattern which is necessary for socio-economic development planning.

Table 10.1 displays both the absolute and percentage distribution of dependent children and youths in 2002. In all, there were 264,096 (69 percent) dependent children, aged 0-14 years and 118,552 (31 percent) dependent youths, aged 15-24 years in 2002. As the table shows, there were slightly more boy children aged 0-14 years than girls; and conversely, a slightly higher number of female youths than males. This is a usual demographic phenomenon, where there have always been more boy children at birth, but the deficit of girls is overcome and girls outnumber boys as they grow from infancy to adolescence.

Region 4 has the highest percentage of the two categories of dependent children groups - about 38.3 and 42.7 percent of young children and youths respectively, and in ranking order, Regions 6, 3, 2, 5 and 10 came next. Due to the sparse population distribution in the hinterland regions, less than 5 percent of either the children or the adolescents are found in each of the regions. The concentration of the dependent children and youths in Region 4 is no doubt a surprise, because both the economic functionaries as well as the majority of educational facilities, such as the University of Guyana and other higher institutions of learning are located there. The reason for concentration of children and youths in the remaining regions is more likely similar to the prevailing situation in Region 4.

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Table 10.1: Distribution of Dependent Children and Youth by Broad Age Groups, Sex and Administrative Region, Guyana: 2002

Region	Males		Females		Both sexes	
	0-14	15-24	0-14	15-24	0-14	15-24
Region 1	5,975	1,488	5,861	1,601	11,836	3,089
Region 2	9,405	3,751	9,112	4,080	18,517	7,831
Region 3	17,979	7,697	17,259	8,663	35,238	16,360
Region 4	51,044	24,198	50,018	26,447	101,062	50,645
Region 5	9,704	3,857	9,501	4,348	19,205	8,205
Region 6	21,926	8,803	21,033	9,947	42,959	18,750
Region 7	3,433	1,282	3,311	1,326	6,744	2,608
Region 8	2,136	899	1,963	711	4,099	1,610
Region 9	4,655	1,428	4,532	1,473	9,187	2,901
Region 10	7,806	3,096	7,443	3,457	15,249	6,553
Total	134,063	56,499	130,033	62,053	264,096	118,552
Percent						
Region 1	4.5	2.6	4.5	2.6	4.5	2.6
Region 2	7.0	6.6	7.0	6.6	7.0	6.6
Region 3	13.4	13.6	13.3	14.0	13.3	13.8
Region 4	38.1	42.8	38.5	42.6	38.3	42.7
Region 5	7.2	6.8	7.3	7.0	7.3	6.9
Region 6	16.4	15.6	16.2	16.0	16.3	15.8
Region 7	2.6	2.3	2.5	2.1	2.6	2.2
Region 8	1.6	1.6	1.5	1.1	1.6	1.4
Region 9	3.5	2.5	3.5	2.4	3.5	2.4
Region 10	5.8	5.5	5.7	5.6	5.8	5.5
Total	100	100	100	100	100	100

Note: Youth 15-24 years (9,871) who were heads of households are treated as responsible adults, hence excluded from the dependent population.

10.1.2 Children by Gender of Head of Households

Whereas, the preceding section dealt with the regional distribution of dependent children, this section will focus on the distribution by gender of the head of households, with the view of gauging circumstances under which children live.

In 2002, about 28.5 percent of the dependent children in Guyana resided in households headed by females, and 71.5 percent resided in male-headed households. Also, substantial proportions (65.2 percent) of those in the female-headed households were aged below 15 years (Table 10.2).

It is important to note that the proportion of dependent children in male-headed households decreases with the age of children, and inversely increases in the case of dependent children in female-headed households. Nonetheless, even among youths aged 20-24 years, we observe that more than two out of every three of them still lived in male-headed households.

Table 10.2: Distribution of Dependent Children and Youth by Age and Gender of Heads of Households, Guyana: 2002

Age of Children	Gender of Hh. Heads		
	Male	Female	Total
Under 5	66,354	21,886	88,240
5 - 9	70,290	25,478	95,768
10 - 14	56,329	23,759	80,088
15 - 19	43,593	20,592	64,185
20 - 24	37,038	17,329	54,367
Total	273,604	109,044	382,648
Percent			
Under 5	75.2	24.8	100
5 - 9	73.4	26.6	100
10 - 14	70.3	29.7	100
15 - 19	67.9	32.1	100
20 - 24	68.1	31.9	100
Total	71.5	28.5	100

Note: Youth 15-24 years (9,871) who were heads of households are treated as responsible adults, hence excluded from the dependent population.

Tables 10.3A and B expanded on the distribution of dependent children by linking the age of the household heads. As reflected, the bulk of the dependent children and youths were headed by adults in their prime working ages, that is, 25-44 years, followed by 45-64 years.

The pattern of the distribution was somehow identical for both males and females, with less percentage being controlled by households headed by youths or adolescents, and the elderly, 65 years and over (Tables 10.3A & B).

However, in the case of female-headed households, the proportion of dependent children headed by women 45-64 was about twice as high as that of male-headed households. Furthermore, a relatively high proportion of the adolescent children were found in the elderly female-headed households. One plausibly suspected reason could be that these elderly women may be living as single-parents, whose marriage may have been terminated by divorce or death of the partners, and to seek protection and assistance in supplementing the home's income, they persuaded these bigger children to still remain part of the household.

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Table 10.3A: Distribution of Dependent Children and Youths by Age and Age Group of Household Heads by sex, Guyana: 2002

Age of Hh. Heads	Number of Dependent Headed by Both Sexes					Total
	Under 5	Aged 5-9	Aged 10-14	Aged 15-19	Aged 20-24	
15-19	485	168	222	418	279	1,572
20-24	6,759	1,848	789	2,196	3,228	14,820
25-44	57,302	64,801	49,145	31,333	20,846	223,427
45-64	18,809	22,713	23,944	25,109	25,564	116,139
65+	4,665	6,007	5,770	4,961	4,276	25,679
Not stated	220	231	218	168	174	1,011
Total	88,240	95,768	80,088	64,185	54,367	382,648
Number of Dependent Headed by Males						
15-19	195	96	131	297	153	872
20-24	4,762	973	530	1,808	2,680	10,753
25-44	46,375	50,373	35,752	21,034	14,752	168,286
45-64	12,243	15,335	16,825	17,800	17,030	79,233
65+	2,611	3,333	2,929	2,534	2,298	13,705
Not stated	168	180	162	120	125	755
Total	66,354	70,290	56,329	43,593	37,038	273,604
Number of Dependent Headed by Females						
15-19	290	72	91	121	126	700
20-24	1,997	875	259	388	548	4,067
25-44	10,927	14,428	13,393	10,299	6,094	55,141
45-64	6,566	7,378	7,119	7,309	8,534	36,906
65+	2,054	2,674	2,841	2,427	1,978	11,974
Not stated	52	51	56	48	49	256
Total	21,886	25,478	23,759	20,592	17,329	109,044

Note: Youth 15-24 years (9,871) who were heads of households are treated as responsible adults, hence excluded from the dependent population.

What still remains unanswered from the preceding argument is whether these women were, in fact, not living below the minimum standard with a high degree of vulnerability. In Guyana for example, in a typical married couple household, at most, the male is the head, regardless of his income status. Any addition outside of married-couple headed household may more likely be formed by parents affected by dissolution either by death, divorce or separation, and children born out of wedlock, where the care and support becomes the burden of these women, or the one person household with no dependent child.

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Table 10.3B: Percent Distribution of Dependent Children and Youths by Age and Age group of Household Heads, Guyana: 2002

Age of Hh. Heads	Percent of Dependent Headed by Both Sexes					
	Under 5	Aged 5-9	Aged 10-14	Aged 15-19	Aged 20-24	Total
15-19	0.5	0.2	0.3	0.7	0.5	0.4
20-24	7.7	1.9	1.0	3.4	5.9	3.9
25-44	64.9	67.7	61.4	48.8	38.3	58.4
45-64	21.3	23.7	29.9	39.1	47.0	30.4
65+	5.3	6.3	7.2	7.7	7.9	6.7
Not stated	0.2	0.2	0.3	0.3	0.3	0.3
Total	100	100	100	100	100	100
Percent of Dependent Headed by Males						
15-19	0.3	0.1	0.2	0.7	0.4	0.3
20-24	7.2	1.4	0.9	4.1	7.2	3.9
25-44	69.9	71.7	63.5	48.3	39.8	61.5
45-64	18.5	21.8	29.9	40.8	46.0	29.0
65+	3.9	4.7	5.2	5.8	6.2	5.0
Not stated	0.3	0.3	0.3	0.3	0.3	0.3
Total	100	100	100	100	100	100
Percent of Dependent Headed by Females						
15-19	1.3	0.3	0.4	0.6	0.7	0.6
20-24	9.1	3.4	1.1	1.9	3.2	3.7
25-44	49.9	56.6	56.4	50.0	35.2	50.6
45-64	30.0	29.0	30.0	35.5	49.2	33.8
65+	9.4	10.5	12.0	11.8	11.4	11.0
Not stated	0.2	0.2	0.2	0.2	0.3	0.2
Total	100	100	100	100	100	100

Note: Youths 15-24 years (9,871) who were heads of households are treated as responsible adults, hence are excluded from the dependent population.

10.2 Dependency Ratios

Dependency ratios are mainly categorized into two, namely: age dependency ratio and economic dependency ratio. While the age dependency ratio is related to the age structure of the population, and measures the population aging index, the economic dependency ratio is concerned with the number of working persons in relation to the population.

There is, of course, a high relationship between the two ratios but they are not identical. For instance, the higher the proportion of persons in age groups 15-64 years, the lower the proportion of children and elderly or age dependency ratio, but this does not mean that all of those reported in these adult age groups are capable of working. There are some who may be students, disabled, retired or even in the house-keeping duties. But on the one hand, there will be relatively low economic dependency ratio, if the high number reported is equally engaged in the production of economic goods and services.

10.2.1 Age Dependency Ratios (ADR)

Age dependency ratios derived using the 2002 census are displayed in Table 10.4. For convenience, working ages start at age 15 years in Guyana, although increasing proportions of individuals pursue their education beyond that age and remain financially dependent, either on the state or parents. The retired, (65 years and over) are also added to the dependent children 0-14 years, hence, our denominator is the sum of the age groups 15-64 years who are in the real productive ages.

For the entire country, the age dependency ratio was 67 to every 100 persons in the main productive ages, varied across the regions by sex. Regions 1 and 9 registered the highest, with ADR averaging 115 and 108 per every 100 productive aged persons.

**Table 10.4: Age-Sex Dependency
Ratio by Region, Guyana: 2002**

Region	Males	Females	Both sexes
Region 1	106	126	115
Region 2	74	75	75
Region 3	63	62	63
Region 4	62	59	60
Region 5	71	70	71
Region 6	66	65	65
Region 7	72	86	78
Region 8	70	104	83
Region 9	104	112	108
Region 10	74	72	73
Total	67	66	67

Age dependency ratios also varied by sex, but the significant difference was in Region 8, where ADR for males and females was 70 and 104 dependents to every 100 adults, respectively. This can be explained by in-migration of adult males there for mining and quarrying activities, as earlier discussed.

The remaining regions, though high, were within the range of the national average. The high ADR in Region 1 and 9 was expected, in that these two regions, along with Region 8, recorded the highest estimates of total fertility rates (see Chapter 4: Infant mortality and fertility), and correspondingly, recorded the highest growth rates during the intercensal period (see Chapter 3: Population redistribution and internal migration).

10.2.2 Economic Dependency Ratios (EDR)

From a social point of view, persons who are not in the labour force may be regarded as dependents, in the sense that they consume, but do not produce, though they may be independent financially, that is, receiving personal incomes in the form of pensions, rents, dividends, remittances from abroad and so on. The number of such persons not in the labour force, including children per 100 of the labour force are economic dependency ratio³⁸.

³⁸United Nations (1968) Methods of Analysing Census Data on Economic Activities of the Population, Population studies, No. 43 United Nations Publication

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In 2002, the economic dependency ratio for Guyana was 187 dependents per 100 working persons, while that for children was estimated as 101, meaning that, to every working adult, there was at least one dependent child, aged 0-14 years to support (Table 10.5). This implies that children alone accounted for 54 percent of the total dependency burden in Guyana in 2002.

Regions with total economic dependency ratio exceeding 200 dependents to every 100 working persons include, Regions 1, 2, 5, 6, and 9, while regions with the highest ratios of children to working population were Regions 1 and 9, and to a lesser extent in Regions 5 and 2. The lowest children EDR were reported in Regions 4 and 3 (see Figure 10.1).

Table 10.5: Economic Dependency Ratio (EDR) by Administrative Region, and Contribution of Children to Total Dependency Ratios, Guyana: 2002

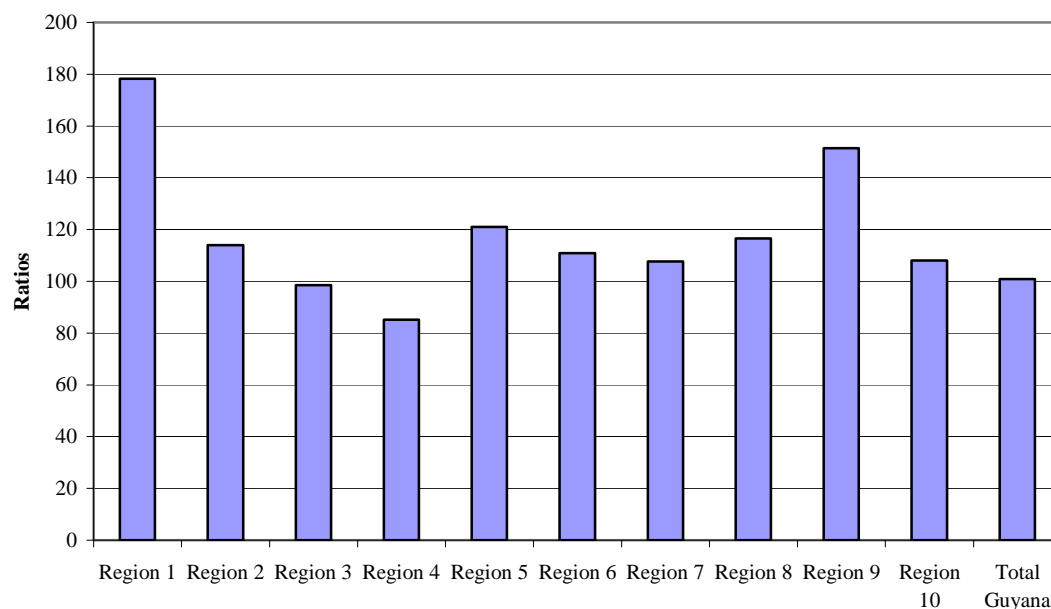
Region	Dependent Population		Economic Dependency Ratios		% Children's contribution to total	
	Labour Force	Children 0-14	Total dep. popn	Children	Total Popn.	
	(1)	(2)	(3)	(4)	(5)	(6)
Region 1	6,640	11,836	17,635	178	266	67.1
Region 2	16,250	18,517	33,004	114	203	56.1
Region 3	35,790	35,238	67,271	98	188	52.4
Region 4	118,731	101,062	191,589	85	161	52.7
Region 5	15,863	19,205	36,565	121	231	52.5
Region 6	38,729	42,959	84,965	111	219	50.6
Region 7	6,267	6,744	11,330	108	181	59.5
Region 8	3,518	4,099	6,577	117	187	62.3
Region 9	6,065	9,187	13,322	151	220	69.0
Region 10	14,107	15,249	27,005	108	191	56.5
Total	261,960	264,096	489,263	101	187	54.0

Note: a) EDR = (# of dependents/labour force) x 100

b) Children's contribution or col.6 = (col.2/col.3) x 100

The high EDR in Regions 1 and 9 also coincided with a high age dependency ratio derived earlier in the previous section, as well as a high proportion of children in the total population, discussed in chapter two. In all the regions, the contributions of children to the EDR range were as high as 69 percent in Region 9 to as low as 50.6 percent in Region 6, indicating that, since, the children were not of an age to allude to under reporting of their economic activities, they play a significant role in bringing about the overall economic dependency in the country.

Fig. 10.1: Ratio of Dependent Children to Working Population, Guyana: 2002



10.3 Educational Enrolment of Children and Youths

10.3.1 Early Childhood Education

The compulsory school age in Guyana officially commences for a child who has at least attained the age of five years before the beginning of the academic year, but to prepare the child for academic excellence, most parents enroll their children in pre-school for early childhood education. Table 10.6 presents the distribution of pre-school children by gender of household heads. Generally, the apparent desire of parents to enroll their children in school is evidenced in the table. Either within the male-headed or female-headed households, pre-school enrolment increases with age of children, and was slightly better across all ages for households headed by females as compared to male-headed households. However, in absolute terms, the number of pre-school children in male-headed households was almost thrice that of female-headed households.

Table 10.6: Early Childhood Education by Gender of Head of Household, Guyana: 2002

Enrolment within Male-headed Households					
		Not		%	% Not
Age	Attending	Attending	Total	Attending	Attending
2	504	12,895	13,399	3.8	96.2
3	4,651	8,468	13,119	35.5	64.5
4	13,110	1,498	14,608	89.7	10.3
5	13,004	815	13,819	94.1	5.9
6	13,377	500	13,877	96.4	3.6
Total	44,646	24,176	68,822	64.9	35.1
Enrolment within Female-headed Households					
		Not		%	% Not
Age	Attending	Attending	Total	Attending	Attending
2	221	4,147	4,368	5.1	94.9
3	1,622	2,760	4,382	37.0	63.0
4	4,669	367	5,036	92.7	7.3
5	4,444	208	4,652	95.5	4.5
6	4,783	136	4,919	97.2	2.8
Total	15,739	7,618	23,357	67.4	32.6

Besides, the effect of the compulsory school enrolment is evidenced in the table, that by the time the children attained the ages of five and six years, nearly all of them were in school, as compared to very young children (two years old), only 3.8 percent of whom were enrolled in pre-school in households headed by males and 5.1 percent in female-headed households.

The difference in pre-school enrolment within male and female-headed households, though less, but in part, could be explained by gender disparities in the use and allocation of earnings. Chant³⁹ noted, “whereas women frequently devote all they earn to household needs, this is less so among men”. In stating empirical evidence, Chant mentioned that from a range of contexts, more money in relative terms may be available for common expenditure within households headed by women, with positive effects for members’ nutritional intake, health care and education⁴⁰. This finding is more identical to Guyana, particularly in the urban sector, where many working mothers are concerned with the well-being of their young children by giving them early child-hood education beginning with “day care” or pre-school.

³⁹ Sylvia Chant (2003), Female Household Headship and the Feminization of Poverty: Facts, Fictions and Forward Strategies. London Institute of Economics, Gender Institute

⁴⁰ Ibid

10.3.2 School Attendance of Children and Youths by Occupational Status of Parents

The cross-classification of occupational status of the head of households by enrolment of children and youths in school within the household is presented in Table 10.7 by sex of head of household. By and large, the pattern of enrolment as shown in the table does not diverge from the general school enrolment in Guyana, described earlier under education and training, where until after the compulsory school age, nearly all the children were in school. For children between 5-14 years, only 5 percent was not attending as compared to the youths 15-24 years, where as expected, 75.9 percent reported not attending.

School attendance by occupational status of head of household, does not vary significantly, but indicates that occupations which are believed to earn a higher level of income or are connected one way or other to higher educational qualifications, exhibited the highest likelihood of a child's enrolment in school. For example, within the household headed by professionals, about 99.2 percent of children there attended school compared to those with elementary or agricultural and related occupations.

Similarly, the school attendance rates by gender of head of household were slightly higher in female-headed households, a reason which could be identical to pre-school enrolment as earlier discussed. The difference in the attendance rates in either female-headed or male-headed households was not significant for children 5-14 years compared to the youth 15-24 years (see Table 10.7).

Comparison of enrolment of children and youths reflected in the table indicates also that the rates for children attending school were more than three times higher than the youths in either households headed by females or males. As indicated earlier in chapter five, it was not possible to have all the youths 15-24 years in school because after primary and secondary education, not all of them can proceed to enroll for tertiary education. In fact, some of them were already heads of households managing their dependents.

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Table 10.7: Number of Dependent Children Attending School by Age and Occupational Status of Household Heads and Sex, Guyana: 2002

	Children 5-14 Years			Youth 15 - 24 Years		
	Attend	Not attend	Total	Attend	Not attend	Total
Occupational Status of Household Heads	Number of dependent in male headed households					
Legislators, Senior Officials & Managers	3,238	86	3,324	1,079	1,823	2,902
Professionals	1,448	12	1,460	733	603	1,336
Technicians & Associate Professionals	3,695	92	3,787	1,298	1,917	3,215
Clerks	1,858	47	1,905	551	1,164	1,715
Service Wrks, Shop & Market Sales Wrks	10,530	366	10,896	2,300	6,430	8,730
Agricultural & Fishery Workers/Farmers	19,074	1,541	20,615	2,589	10,370	12,959
Craft and Related Trades Workers	18,937	648	19,585	3,289	10,229	13,518
Plant & Machine Operators & Assemblers	14,275	485	14,760	2,588	7,437	10,025
Elementary Occupation & Not stated	47,244	3,043	50,287	6,721	26,566	33,287
Total	120,299	6,320	126,619	21,148	66,539	87,687
	Number of dependent in female headed households					
Legislators, Senior Officials & Managers	438	9	447	193	312	505
Professionals	512	4	516	316	303	619
Technicians & Associate Professionals	1,965	26	1,991	846	1,274	2,120
Clerks	1,797	35	1,832	796	1,239	2,035
Service, Shop & Market Sales Wrks	5,576	137	5,713	1,553	3,624	5,177
Agricultural & Fishery Workers/Farmers	821	83	904	127	523	650
Craft and Related Trades Workers	1,170	47	1,217	360	811	1,171
Plant & Machine Operators & Assemblers	254	15	269	80	174	254
Elementary Occupation & Not stated	34,701	1,647	36,348	7,643	20,561	28,204
Total	47,234	2,003	49,237	11,914	28,821	40,735
	Percent dependent in male headed households					
Legislators, Senior Officials & Managers	97.4	2.6	100	37.2	62.8	100
Professionals	99.2	0.8	100	54.8	45.2	100
Technicians & Associate Professionals	97.6	2.4	100	40.4	59.6	100
Clerks	97.5	2.5	100	32.1	67.9	100
Service Wrks, Shop & Market Sales Wrks	96.6	3.4	100	26.3	73.7	100
Agricultural & Fishery Workers/Farmers	92.5	7.5	100	20.0	80.0	100
Craft and Related Trades Workers	96.7	3.3	100	24.3	75.7	100
Plant & Machine Operators & Assemblers	96.7	3.3	100	25.8	74.2	100
Elementary Occupation & Not stated	93.9	6.1	100	20.2	79.8	100
Total	95.0	5.0	100	24.1	75.9	100
	Percent dependent in female headed households					
Legislators, Senior Officials & Managers	98.0	2.0	100	38.2	61.8	100
Professionals	99.2	0.8	100	51.0	49.0	100
Technicians & Associate Professionals	98.7	1.3	100	39.9	60.1	100
Clerks	98.1	1.9	100	39.1	60.9	100
Service, Shop & Market Sales Wrks	97.6	2.4	100	30.0	70.0	100
Agricultural & Fishery Workers/Farmers	90.8	9.2	100	19.5	80.5	100
Craft and Related Trades Workers	96.1	3.9	100	30.7	69.3	100
Plant & Machine Operators & Assemblers	94.4	5.6	100	31.5	68.5	100
Elementary Occupation & Not stated	95.5	4.5	100	27.1	72.9	100
Total	95.9	4.1	100	29.2	70.8	100

10.3.3 School Attendance of Children and Youths by Educational Attainment of Parents

The interrelationship between the educational status of parents or heads of households and enrolment of their dependent children and youths is discussed in this section. The analytical approach is similar to the relationship between the occupation of household heads and school attendance rates as presented in the preceding section.

Educational qualification of parents as an imperative factor in educating dependent children is evidenced in Table 10.8. In any of the household headship types, the higher the level of education reached, the higher the percentage of dependent children and youths attending school in 2002. In the female-headed households, the “other category” reported that the entire (99 percent) children there attended school, something questionably contested but is nevertheless true. This deviation could be due to the small size of children involved in this category, and is not based on the notion that the desire to educate dependent children was better among those whose qualification was not even clearly defined and grouped under “other category”.

However, it is unrealistic to conclude that people with no education have less desire to enroll their children in school. Perhaps, the majority of the people in this range are living below the minimum poverty line, hence cannot afford to send their children to school.

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Table 10.8: Number of Dependent Children Attending School by Age and Educational Status of Household Heads and Sex, Guyana: 2002

Status of Household Heads and Sex, Guyana: 2002

Status of Household Heads	Children 5-14 Years			Youth 15 - 24 Years		
	Not					
	Attend	Attend	Total	Attend	Not Attend	Total
Number of dependents (male-headed households)						
None/Nursery	2,854	627	3,481	269	2,014	2,283
Primary	39,659	2,812	42,471	5,512	23,250	28,762
Secondary	67,447	2,607	70,054	11,793	35,991	47,784
Post Secondary	2,719	31	2,750	880	1,401	2,281
University/Tertiary	4,188	54	4,242	2,098	1,981	4,079
Other	310	12	322	88	183	271
Not Stated	3,120	179	3,299	506	1,721	2,227
Total	120,297	6,322	126,619	21,146	66,541	87,687
Number of dependents (female-headed households)						
None/Nursery	1,218	199	1,417	178	810	988
Primary	12,653	779	13,432	2,545	8,595	11,140
Secondary	28,817	921	29,738	7,143	16,684	23,827
Post Secondary	1,798	41	1,839	718	978	1,696
University/Tertiary	1,786	27	1,813	1,064	1,095	2,159
Other	226	2	228	68	124	192
Not Stated	735	35	770	197	537	734
Total	47,233	2,004	49,237	11,913	28,823	40,736
Percent of dependents (male-headed households)						
None/Nursery	82.0	18.0	100	11.8	88.2	100
Primary	93.4	6.6	100	19.2	80.8	100
Secondary	96.3	3.7	100	24.7	75.3	100
Post Secondary	98.9	1.1	100	38.6	61.4	100
University/Tertiary	98.7	1.3	100	51.4	48.6	100
Other	96.3	3.7	100	32.5	67.5	100
Not Stated	94.6	5.4	100	22.7	77.3	100
Total	95.0	5.0	100	24.1	75.9	100
Percent of dependents (female-headed households)						
None/Nursery	85.9	14.1	100	18.0	82.0	100
Primary	94.2	5.8	100	22.8	77.2	100
Secondary	96.9	3.1	100	30.0	70.0	100
Post Secondary	97.8	2.2	100	42.3	57.7	100
University/Tertiary	98.5	1.5	100	49.3	50.7	100
Other	99.1	0.9	100	35.4	64.6	100
Not Stated	95.5	4.5	100	26.8	73.2	100
Total	95.9	4.1	100	29.2	70.8	100

10.4 The Influence of School Attendance and Educational Level on Labour Force Participation of Youths

10.4.1 School Attendance and Activity Rates of Youths

The extent in which non-participation of young people in economic activities is accounted for by their attendance at school is discussed in this section. In Table 10.9, age-sex specific school attendance rates and economic activity rates for the corresponding age groups are reflected and compared with the variations between the two to understand the association.

The summation of the rates is also given in the last column of the table to study the effect of combining school attendance with economic activities. A minimal estimate of the proportion of the population in the given category that is neither in school nor economically active is given if the sum is below 100 percent, and conversely, an excess over 100 percent is a minimal estimate of the proportion of persons combining school attendance with economic activity.

Table 10.9: Comparison of Economic Activity and School Attendance Rates of Persons Aged 15-24 Years, by Sex, Guyana: 2002

Age Group	Population	Labour Force	Persons attending school	Economic activity rate	School attending rate	Sum of rates
Males						
15-19	32,618	15,215	13,461	46.6	41.3	87.9
20-24	30,937	26,654	1,508	86.2	4.9	91.0
Total	63,555	41,869	14,969	65.9	23.6	89.4
Females						
15-19	32,798	7,454	13,839	22.7	42.2	64.9
20-24	32,069	12,912	1,508	40.3	4.7	45.0
Total	64,867	20,366	15,347	31.4	23.7	55.1

To better present the concept, firstly, the reported number of youths attending school full-time or part-time is given in Table 10.10 and compared with those classified as “persons attending school” in Table 10.9. Accordingly, the number of persons attending school for age group 15-19 years in Table 10.9 is slightly higher than school attending figures reported in Table 10.10; but in reverse, the number of persons classified as persons attending school is higher (almost twice) than the reported figures in Table 10.9 for age group 20-24 years. All these are the symbolic effect of combining school with economic activities, but the number being of insignificance, the activity rates did not exceed 100 percent.

Table 10.10: Number of Youths Attending School, Guyana: 2002

Age group	Males	Females	Total
15 - 19	13,301	14,113	27,414
20 - 24	2,378	3,270	5,648
Total	15,679	17,383	33,062

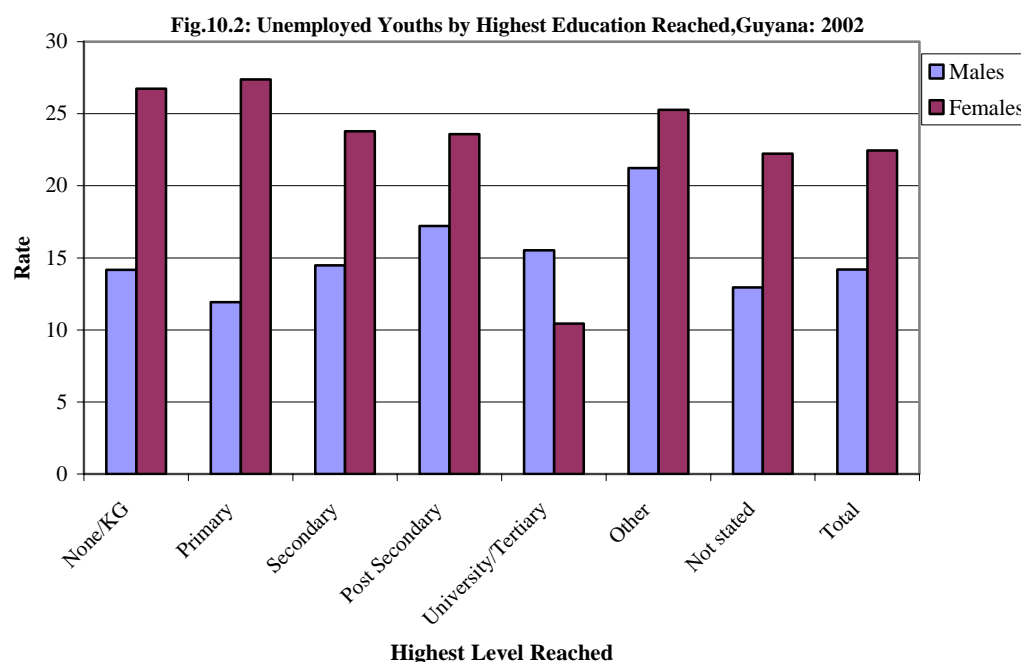
Also, as reflected in Table 10.9, economic activity rate increases with age, and conversely, decreases with attendance. For example, about two-fifths of both males and females in age group 15-19 years attended school, compared to labour force rates of 46.6 and 22.7 percent

respectively; but by age 20-24 years, labour force rates had increased to nearly twice, while the proportion attending school had decreased to less than 5 percent.

Females who were neither in school nor economically active were not necessarily a problem, because as highlighted in chapter eleven, young females who were not in school, were mostly occupied with domestic duties; at least helping their mothers, if they were not yet married. In the case of males, though not significant, is a waste of potential labour resources; for instance, persons 15-19 years should not be in the category of retired/too old to work. This signifies a disquieting social problem.

10.4.2 Educational level and Activity Rates of Youths

How the level of education affects the likelihood of youths being in labour force is the focus of this section. To facilitate the process, cross-classification of youths in the labour force with highest level of education attained by employment and unemployment status is shown in Table 10.11.



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Table 10.11: Employment and Unemployment Among Youths Classified by Highest Level of Education, age and Sex, Guyana: 2002

Highest Level Reached	15-19 Years				
	Labour force	Employed	Unemployed	Employment rate	Unemployment rate
Males					
None/KG	276	200	76	72.5	27.5
Primary	2,795	2,080	715	74.4	25.6
Secondary	11,369	7,652	3,717	67.3	32.7
Post Secondary	473	288	185	60.9	39.1
University/Tertiary	206	139	67	67.5	32.5
Other	71	43	28	60.6	39.4
Not stated	25	21	4	84.0	16.0
Total	15,215	10,423	4,792	68.5	31.5
Females					
None/KG	62	38	24	61.3	38.7
Primary	510	309	201	60.6	39.4
Secondary	6,200	3,269	2,931	52.7	47.3
Post Secondary	391	196	195	50.1	49.9
University/Tertiary	244	174	70	71.3	28.7
Other	41	17	24	41.5	58.5
Not stated	6	3	3	50.0	50.0
Total	7,454	4,006	3,448	53.7	46.3
20-24 Years					
Males					
None/KG	487	418	69	85.8	14.2
Primary	5,334	4,698	636	88.1	11.9
Secondary	18,064	15,448	2,616	85.5	14.5
Post Secondary	1,372	1,136	236	82.8	17.2
University/Tertiary	1,166	985	181	84.5	15.5
Other	146	115	31	78.8	21.2
Not stated	85	74	11	87.1	12.9
Total	26,654	22,874	3,780	85.8	14.2
Females					
None/KG	101	74	27	73.3	26.7
Primary	818	594	224	72.6	27.4
Secondary	9,222	7,029	2,193	76.2	23.8
Post Secondary	1,153	881	272	76.4	23.6
University/Tertiary	1,514	1,356	158	89.6	10.4
Other	95	71	24	74.7	25.3
Not stated	9	7	2	77.8	22.2
Total	12,912	10,012	2,900	77.5	22.5

Here, the traditional problem, concerning young school graduates who seem to have a waiting period before finding their first job due to lack of work-experience is apparently reflected. The

unemployment rate is higher for the teen age group (15-19 years), but declined by half for the adolescent, 20-24 years at all levels of highest education achieved.

There was also a sex differential in the unemployment pattern by level of education. At all levels of highest education reached, females exhibited the highest unemployment rate (see Figure 10.2). A possible reason for early abatement in male unemployment could be that males at all ages are more likely than females to accept 'odd jobs' as a means of ending their unemployment. High unemployment among secondary and post secondary youths as compared to no education may likely be due to job preference against educational training.

CHAPTER 11:

GENDER AND DEVELOPMENT ISSUES

Women's role in the society has been a controversial issue of debate over the decades; some arguing that rapid population growth appears to be the major obstacles for the advancement of women, while other critics blame the low status to their roles in the labour force participation⁴¹. Some version of the argument noted that the home-life suffers terribly when women work, for women are faced with a double burden of office or factory work followed by domestic chores and child care⁴², but in economic terms, the costing of these contributions are neglected.

The status of women had always been lower than men, but the extent of the gap between the sexes varies across cultures and time. As such, gender is seen as a social construct specifying the socially and culturally prescribed roles that men and women are to follow or a biological distinction between males and females⁴³. Hence, the extent to which the society views women's roles or women who are engaged in domestic activities, as against gainful employment outside of the home, has inverse relation to their status.

There are of course, numerous indicators, such as, the level of education, marital status, mortality and fertility levels, rural and urban residence, etc. that are plausibly responsible for the differential roles that men and women play in Guyana, which seem to have an adverse effect on women's status. However, the objective of this chapter is to examine labour force participation rates of men and women; looking at the differences and the changes during the decades, the interrelations of industry, occupation and employment status, and the differentials in household headships.

11.1 Labour Force Participation Rates

11.1.1 Crude and Refined Participation Rates

The Guyanese labour force participation rate has slowly increased since 1980. In 1980, the crude activity rate, that is, the percentage of the total population in the labour force, was 31.4 percent; by 2002, it had risen to 36.2 percent. However, the refined activity rate, which is limited to participation in labour force to the population "at risk" (15 years and above), was slightly different. The overall rate fell by one percentage point, from 57.1 percent in 1980 to 56.1 percent in 2002 (Table 11.2).

A noteworthy feature of the increase in the crude rate has been the rapid growth in the volume of female labour force, as a result of expansion of opportunities for female education which contributed to an influx of women into the labour market. Also, fertility decline in Guyana, which is presently estimated at 3.7 births per woman, means that women are spending less time

⁴¹ Carol S. Coonrod (1998) Chronic Hunger and the Status of Women in India, the Hunger Project (Available online at <http://www.thp.org/reports/indiawom.htm>)

⁴² Archbishop of Canterbury (2006) Do working women jeopardise family? Telegraph speakers' corner (Available at: [lifehttp://www.telegraph.co.uk/news/main.jhtml?view](http://www.telegraph.co.uk/news/main.jhtml?view))

⁴³ V.J. Hull and David Lucas "Sex and Gender" in Asking Demographic Questions, Australian National University (1985)

in family-building roles as compared to the 1970's when the total fertility rate was 5.8 children per childbearing woman⁴⁴. The estimates of women's crude and refined participation rates reflected in Table 11.1 show an increase from 14.4 to 22.1 percent and from 25.9 to 34.1 percent in 1980 and 2002, respectively.

Despite the rise however, the relative size of the female labour force was substantially lower than men, meaning they were not as free as men to enter the labour market due to heavy domestic work and child up-bringing (see main activities when not in labour force in section 11.2). The male crude participation rate rose from 48.7 percent in 1980 to 50.2 percent in 2002, while that of refined participation rate dropped from 89.3 percent to 78.5 percent during the same period (Table 11.1).

Table 11.1: Labour Force Participation Rates, Guyana: 1980 - 2002

Participation Rate	1980			2002		
	Male	Female	Total	Male	Female	Total
Crude Activity Rate (CAR)	48.7	14.4	31.4	50.2	22.1	36.2
Refined Activity Rate (RAR)	89.3	25.9	57.1	78.5	34.1	56.1

Note: CAR = (total labour force/total popn)x100
RAR = (total labour force/popn aged 15 and over) x 100

11.1.2 Participation by Educational Qualifications

The decision to take part in the labour force is strongly influenced by educational qualifications as well as by the influence of the business cycle on the labour market. In most cases, women's decisions to participate in the labour market appear to be more strongly influenced by the economic cycle than men's. At most, the propensity for women to exit the labour market rather than remaining unemployed, especially when jobs become harder to find is approximately higher than men. While cyclical data are unavailable for the evaluation, the focus in this section would be on the influence of educational qualifications on labour force participation.

In the Guyanese 2002 census, the comparable participation rates for women aged 15-24 years were 16.8 percent with CXC or its equivalent and 11.3 percent with no school qualifications (Table 11.2). Of these two educational qualifications, 12.1 and 7.1 percent with CXC or equivalent and non-educational qualifications actually had work. Those out of labour force and with no educational qualifications were mainly in "home duties" (31.8 percent home duties compared to 11.3 percent in labour force).

However, it was slightly different in the case of women aged 25-44 years. The highest participation rate was displayed by those with no educational qualifications (19.9 percent), followed by those with CXC or its equivalent (13.3 percent). All along, the participation rates among "school leaving" and "bachelor degree and above", ranked third and fourth respectively, principally, because only small groups of women are found in these two categories of educational qualifications.

⁴⁴ Bureau of Statistics (1975) Guyana Fertility Survey Country Report Volume I (Page 48)

Similarly a high proportion of 25-44 years old women was in “home duties” as compared to their active engagement in the labour force. This coincides with the peak of child-bearing in Guyana, where many women are assumed to withdraw from the labour force to care for children.

Unlike the women, where “home duties” confronted their involvement in the labour force, men’s educational qualification was not strongly linked to their determination whether to work or not. The comparable findings in 2002, reveal that participation was higher for those with no school qualifications for the two broad age groups; followed by people with CXC or its equivalent having higher levels of participation than persons with school leaving or drop-out certificates, and people with bachelor degrees, respectively (Table 11.2).

As a consequence of the high number of men seeking or wanting work with no qualifications, their unemployment rate was high, for instance, about 9.0 percent sought for work, or their unemployment rate was 20.3 percent. This rate was particularly recorded for those aged 15-24 years, some of them whom assumed to have sought for their first jobs (Table 11.2).

A possible reason for Guyanese men and women without educational qualifications having higher participation rates was that, people with no educational qualifications were more likely to accept “odd jobs” as a means of ending their unemployment as compared to those with CXC or higher degrees, who may be job preferential, commensurate with their respective training.

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Table 11.2: Number of Adults Aged 15-44 Years Engaged in Specific Activities by Educational Qualifications and Sex, Guyana: 2002

Educational Qualification	Female				Male			
	Worked	Sought Work	Labour force	Home duties	Worked	Sought Work	Labour force	Home duties
Aged 15-24 Years								
None	4,613	2,695	7,308	20,627	22,424	5,702	28,126	3,882
School Leaving	859	393	1,252	1,864	2,324	498	2,822	318
CXC or Equivalent	7,837	3,062	10,899	5,273	7,576	2,150	9,726	938
Bachelor & above	422	61	483	63	333	70	403	19
Not stated	274	136	410	486	623	152	775	111
Total	14,005	6,347	20,352	28,313	33,280	8,572	41,852	5,268
Aged 25-44 Years								
None	18,541	2,969	21,510	48,501	64,342	5,203	69,545	2,706
School Leaving	2,979	490	3,469	4,210	6,199	512	6,711	281
CXC or Equivalent	13,209	1,121	14,330	7,650	14,960	1,035	15,995	521
Bachelor & above	1,977	79	2,056	198	2,118	93	2,211	33
Not stated	1,303	148	1,451	1,345	3,084	260	3,344	109
Total	38,009	4,807	42,816	61,904	90,703	7,103	97,806	3,650
Aged 15-24 Years Activity Rates (%)								
None	7.0	4.1	11.1	31.3	34.3	8.7	43.0	5.9
School Leaving	1.3	0.6	1.9	2.8	3.5	0.8	4.3	0.5
CXC or Equivalent	11.9	4.6	16.3	8.0	11.6	3.3	14.9	1.4
Bachelor & above	0.6	0.1	0.7	0.1	0.5	0.1	0.6	0.0
Not stated	0.4	0.2	0.6	0.7	1.0	0.2	1.2	0.2
Total	12.8	9.6	30.9	42.9	50.9	13.1	64.0	8.1
Aged 25-44 Years Activity Rates (%)								
None	17.0	2.7	19.7	44.4	60.0	4.8	63.7	2.5
School Leaving	2.7	0.4	3.3	3.9	5.7	0.5	6.2	0.3
CXC or Equivalent	12.1	1.0	13.1	7.0	13.7	0.9	14.7	0.5
Bachelor & above	1.8	0.1	1.9	0.2	1.9	0.1	2.0	0.0
Not stated	1.2	0.1	1.3	1.2	2.8	0.2	3.1	0.1
Total	34.8	4.4	39.2	56.7	83.1	6.5	89.1	3.3

Note: Rate = i.e., (working no educ. 15-24/total popn 15-24) x100

11.2 Main Activities When not in Labour Force

Most households in Guyana depended on income from women as evidenced by the increasing dimension of women in the labour force. However, as Pat Hudson⁴⁵ argues, sometimes the earning power of women contributed to their independence and to their profile in the public arena, but most often it merely added to their already heavy domestic burdens.

A major activity for women aged 15 years and over who were not in the labour force was “home duties”, with 50.7 percent of women listing this as their main activity in 2002 (Table 11.3 and illustrated in Figure 11.1). The large proportion of women reporting “home duties” as their main

⁴⁵Pat Hudson and W. R. Lee (ed.), Women’s work and the family economy in historical perspective (Manchester University Press, 1990)

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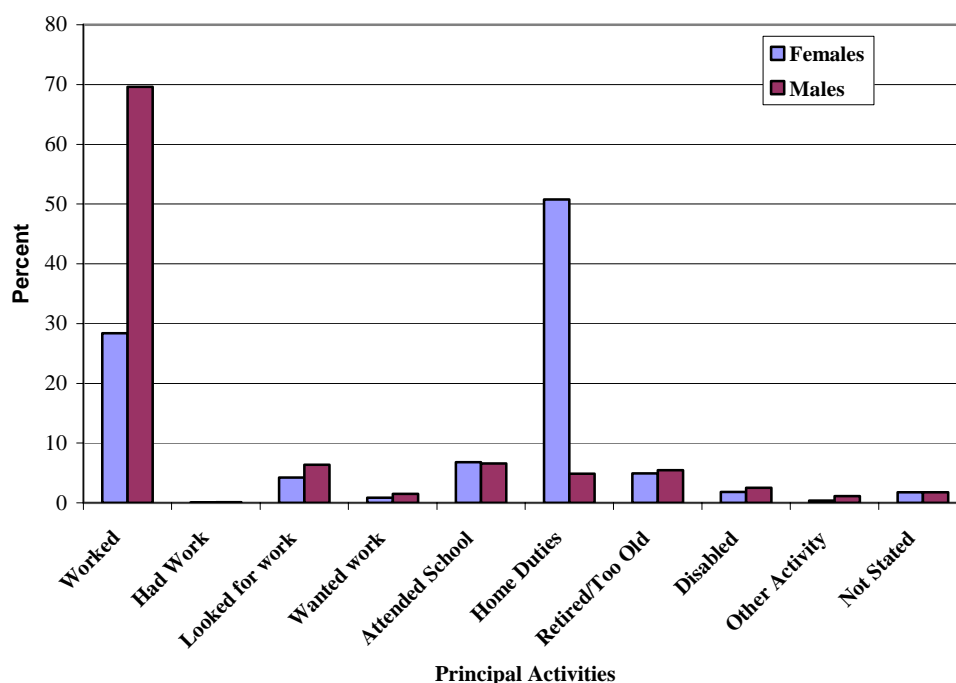
activity was common across all age groups, except for elderly women aged 65 and over, who as expected, had more than 50 percent listed “retired or too old to work” (Table 11.3 and Figure 11.2). The elderly women reporting “retired /too old to work “as their main activity coincides with a higher number of elderly women whose main source of livelihood was old-age pension and disability benefits (see Chapter 12 – The Elderly).

Table 11.3: Principal Activities of Adults 15 Years and Over, Past Week Preceding the Census by Age Group and Sex, Guyana: 2002

Main Activities	FEMALES						MALES					
	15-24	25-44	45-64	65+	NS	Total	15-24	25-44	45-64	65+	NS	Total
Worked	13,993	37,977	15,249	932	140	68,291	33,230	90,680	35,571	2,862	377	162,720
Had Work	20	59	13	1	0	93	59	128	61	5	0	253
Looked for work	5,369	3,990	736	44	11	10,150	6,880	5,828	2,009	119	39	14,875
Wanted work	978	817	229	20	5	2,049	1,692	1,275	503	44	19	3,533
Attended School	15,550	722	54	13	15	16,354	14,968	404	27	18	28	15,445
Home Duties	28,313	61,904	26,993	4,554	224	121,988	5,268	3,650	1,998	494	40	11,450
Retired/Too Old	27	61	2,791	8,922	68	11,869	22	70	3,808	8,796	38	12,734
Disabled	327	903	1,359	1,822	29	4,440	525	1,774	2,265	1,276	28	5,868
Other Activity	282	328	185	47	117	959	899	1,093	468	54	165	2,679
Not Stated	0	1,273	649	399	1,919	4,240	0	1,160	603	346	2,079	4,188
Total	64,859	108,034	48,258	16,754	2,528	240,433	63,543	106,062	47,313	14,014	2,813	233,745
PERCENT												
Worked	21.6	35.2	31.6	5.6	5.5	28.4	52.3	85.5	75.2	20.4	13.4	69.6
Had Work	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1
Looked for work	8.3	3.7	1.5	0.3	0.4	4.2	10.8	5.5	4.2	0.8	1.4	6.4
Wanted work	1.5	0.8	0.5	0.1	0.2	0.9	2.7	1.2	1.1	0.3	0.7	1.5
Attended School	24.0	0.7	0.1	0.1	0.6	6.8	23.6	0.4	0.1	0.1	1.0	6.6
Home Duties	43.7	57.3	55.9	27.2	8.9	50.7	8.3	3.4	4.2	3.5	1.4	4.9
Retired/Too Old	0.0	0.1	5.8	53.3	2.7	4.9	0.0	0.1	8.0	62.8	1.4	5.4
Disabled	0.5	0.8	2.8	10.9	1.1	1.8	0.8	1.7	4.8	9.1	1.0	2.5
Other Activity	0.4	0.3	0.4	0.3	4.6	0.4	1.4	1.0	1.0	0.4	5.9	1.1
Not Stated	0.0	1.2	1.3	2.4	75.9	1.8	0.0	1.1	1.3	2.5	73.9	1.8
Total	100	100	100	100	100	100	100	100	100	100	100	100

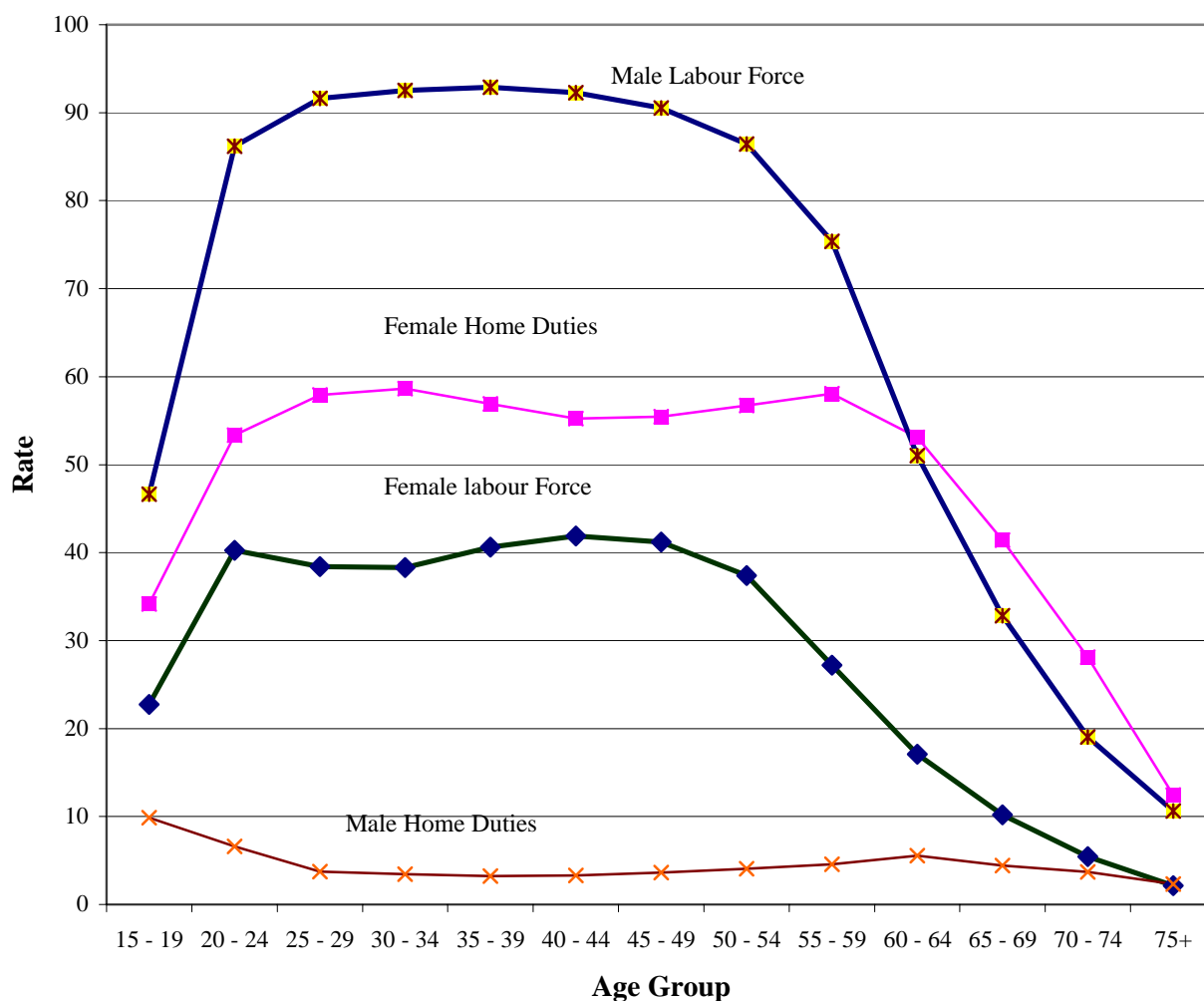
The illustration in Figure 11.2 indicates that home duty rates were higher for women at all ages, particularly so, for those aged 25-39 years, than labour force participation rates; but from age 40 onward, the rates began to fall. The irregular pattern indicates women’s withdrawal from the labour force after marriage or the beginning of child-bearing; and later re-entering after completing their fertility. Secondly, there is a tendency to under-estimate economically active women who work as unpaid helpers on the farms and other small scale family-operated enterprises, apparently due to the reluctance of the male household heads who usually support the entire family, to include many gainful activities of the women.

Fig.11.1: Principal Activities of Males and Females Aged 15 Years and Over, Guyana: 2002



Unlike the women, whose most common main activity when not in the labour force was “home duties”, only 4.9 percent of men were in “home duties”, while other main activities outside the labour force varied. In 2002, the most common activities for males aged 15 years and over who were not in the labour force were “attending school” (6.6 percent) and “retired or too old to work” (5.4 percent) along with 2.5 percent who reported to have some form of disability. Thus, as shown in Table 11.3 and Figure 11.2, the differences between males and females were reflected in their pattern of home-care duties and labour force participation, but the differences in the remaining categories were insignificant, for example, differing by less than 1 percentage point.

Fig.11.2: Labour Force Participation and Home Duty Rates, by Age and Sex, Guyana: 2002



11.3 Interrelations of Industry and Occupation

Interrelationship between industry and occupation is presented in this section as a proxy for the different roles played by men and women in the work force in Guyana. As far as the status of women is concerned, the types of work they do and industries where such activities take place are important to understanding the social construct specifying the socially and culturally prescribed roles that men and women are to follow. For example, Hull and Lucas⁴⁶ noted that “if all the miners in the country are men, this may reflect the society’s assumption that only men are capable of heavy work”.

⁴⁶ V.J. Hull and David Lucas “Sex and Gender” in *Asking Demographic Questions*, Australian National University (1985)

Also, the forms of economic organization where women work would be examined to determine the diversification of their roles in the economy. This is important, because to a greater extent, where the forms of economic organization are relatively simple, the relation between occupation and industry, where the labour force is engaged, can be closely linked so much so that the two classifications largely reflect each other. For example, if agriculture dominates the economy, the majority of the labour force will be in agriculture and fishery; while in a complex form of economy, the occupations within an industry are diverse, such that many dissimilar occupational groups (i.e., nurses, doctors or teachers working in agricultural industry) act concurrently to produce the goods and services.

Tables 11.4A to C present the cross-classification of major occupation group by major industry group for Guyana in 2002, apparently showing how demands for various occupational skills influenced the demand for labour in given industries, or conversely, how the labour supply in certain occupations affected the growth of manpower in certain industries.

As reflected in Table 11.4B, the employment of women was mainly concentrated in three industries, namely: a) wholesale and retail trade, repair of vehicles, motor and household goods, b) education, and c) manufacture industry, and to a lesser extent, in four industries, a) public administration, defense and compulsory social services, b) agriculture and related industries, c) health and social work, and d) hotel and restaurant industry.

Some of the industries listed have a symbolic form of simple economy. For example, in Table 11.4B and C, of a total 6.9 percent of women in agriculture industry, 65.7 percent was in agricultural occupations, and a total of 22.7 and 4.2 percent in “wholesale and retail trade, repair of vehicles, motor and household goods industry”, and “real estate, renting and business activities industry”, 62.6 and 55.5 percent respectively were in “service, shop and market sales occupations”, thus reflecting the closed link between the occupations and the three industries where the women worked.

On the one hand, the proportions of total female labour force reported as engaged in “professional”, “technical and associate professional”, “clerical”, and “service, shop and market sales occupations” exceeded the corresponding proportions for males except in three occupation groups, such as, “legislative, senior official and managerial”, agricultural, fishery and farm occupations, and “elementary combined with other occupations”, where on the reverse, males exceeded the females. However, in absolute terms, (see Table 11.4A) women’s share in the “service, shop and market sales occupation” which employed the largest number of the women, was smaller than that of men.

But, the majority of the women reported as “professional”, “technical and associate professional” were employed in low paying industries, such as, “education” and “health and social work”, or mainly as teachers and nurses, which are of relatively low status. These two industries employed 68.1 and 46.4 percent of these higher career women, respectively.

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Table 11.4A: Number of employed women and men 15 years and over cross classified by industries worked past week preceding the census by occupations, Guyana: 2002

OCCUPATIONS								
INDUSTRIES	Legislators, Senior Officials & Managers	Profession al	Technicians & Associate Professiona ls	Clerks	Service, Shop & Market Sales Wrkrs	Agricul, Fishery & Farm Workers	All other Occupations	Total
	FEMALES							
1	32	14	35	112	77	3,120	1,358	4,748
2	2	0	6	29	5	33	186	261
3	31	7	52	178	154	1	264	687
4	169	79	207	1,194	401	84	4,991	7,125
5	20	20	24	244	63	1	124	496
6	9	10	8	66	11	1	201	306
7	643	49	147	1,887	4,847	52	7,906	15,531
8	184	6	24	474	2,257	6	654	3,605
9	109	48	151	943	379	0	304	1,934
10	108	99	228	1,054	88	0	159	1,736
11	55	134	147	689	1,578	12	228	2,843
12	96	446	875	2,404	1,750	20	785	6,376
13	20	1,604	6,757	441	304	1	800	9,927
14	40	197	1,970	456	969	3	611	4,246
15	122	170	386	723	1,879	11	5,286	8,577
Total	1,640	2,883	11,017	10,894	14,762	3,345	23,857	68,398
MALES								
1	436	56	96	131	350	18,883	20,748	40,700
2	44	14	8	21	38	2,267	2,894	5,286
3	301	77	184	166	394	40	7,567	8,729
4	874	237	600	976	1,718	587	18,423	23,415
5	64	76	136	135	85	5	1,256	1,757
6	224	57	112	85	87	2	15,259	15,826
7	1,447	117	408	1,119	5,030	230	13,889	22,240
8	346	4	27	107	1,112	5	367	1,968
9	299	120	368	601	1,977	22	11,512	14,899
10	139	68	237	457	231	2	215	1,349
11	146	342	469	351	2,520	39	700	4,567
12	188	459	1,007	888	4,274	98	1,743	8,657
13	31	655	1,739	68	342	3	266	3,104
14	28	205	477	74	160	3	330	1,277
15	242	264	1,156	234	1,239	90	5,974	9,199
Total	4,809	2,751	7,024	5,413	19,557	22,276	101,143	162,973

Note: 1). Agriculture, hunting and forestry, 2). Fishing, operators of fish hatchery and fish farms, 3). Mining and quarrying, 4). Manufacturing, 5). Electricity, gas, steam and water supply, 6). Construction, 7). Wholesale and retail trades, repair of vehicles, motor & Hh.goods, 8). Hotel and restaurants, 9). Transport, storage and communication, 10). Financial intermediation, 11). Real estate, renting and business activities, 12). Public administration, defense and compulsory social services, 13). Education, 14). Health and social work, 15). All other industries.

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Table 11.4B: Percent of Employed Males and Females 15 Years and Over Cross Classified by Industries Worked Past Week Preceding the Census by Occupations, Guyana: 2002

OCCUPATIONS								
	Legislators, Senior Officials & Managers	Technicia ns & Associate Professio nal als	Service Wrkrs, Shop & Market Sales Wrkrs	Agricul, Fishery & Farm Workers	All other Occupatio ns			
INDUSTRIES								Total
N0.	Females: Percent Distribution by Occupation							
1	0.7	0.3	0.7	2.4	1.6	65.7	28.6	100
2	0.8	0.0	2.3	11.1	1.9	12.6	71.3	100
3	4.5	1.0	7.6	25.9	22.4	0.1	38.4	100
4	2.4	1.1	2.9	16.8	5.6	1.2	70.0	100
5	4.0	4.0	4.8	49.2	12.7	0.2	25.0	100
6	2.9	3.3	2.6	21.6	3.6	0.3	65.7	100
7	4.1	0.3	0.9	12.1	31.2	0.3	50.9	100
8	5.1	0.2	0.7	13.1	62.6	0.2	18.1	100
9	5.6	2.5	7.8	48.8	19.6	0.0	15.7	100
10	6.2	5.7	13.1	60.7	5.1	0.0	9.2	100
11	1.9	4.7	5.2	24.2	55.5	0.4	8.0	100
12	1.5	7.0	13.7	37.7	27.4	0.3	12.3	100
13	0.2	16.2	68.1	4.4	3.1	0.0	8.1	100
14	0.9	4.6	46.4	10.7	22.8	0.1	14.4	100
15	1.4	2.0	4.5	8.4	21.9	0.1	61.6	100
Total	2.4	4.2	16.1	15.9	21.6	4.9	34.9	100
N0.	Males: Percent Distribution by Occupation							
1	1.1	0.1	0.2	0.3	0.9	46.4	51.0	100
2	0.8	0.3	0.2	0.4	0.7	42.9	54.7	100
3	3.4	0.9	2.1	1.9	4.5	0.5	86.7	100
4	3.7	1.0	2.6	4.2	7.3	2.5	78.7	100
5	3.6	4.3	7.7	7.7	4.8	0.3	71.5	100
6	1.4	0.4	0.7	0.5	0.5	0.0	96.4	100
7	6.5	0.5	1.8	5.0	22.6	1.0	62.5	100
8	17.6	0.2	1.4	5.4	56.5	0.3	18.6	100
9	2.0	0.8	2.5	4.0	13.3	0.1	77.3	100
10	10.3	5.0	17.6	33.9	17.1	0.1	15.9	100
11	3.2	7.5	10.3	7.7	55.2	0.9	15.3	100
12	2.2	5.3	11.6	10.3	49.4	1.1	20.1	100
13	1.0	21.1	56.0	2.2	11.0	0.1	8.6	100
14	2.2	16.1	37.4	5.8	12.5	0.2	25.8	100
15	2.6	2.9	12.6	2.5	13.5	1.0	64.9	100
Total	3.0	1.7	4.3	3.3	12.0	13.7	62.1	100

Note: 1). Agriculture, hunting and forestry, 2). Fishing, operators of fish hatchery and fish farms, 3). Mining and quarrying, 4). Manufacturing, 5). Electricity, gas, steam and water supply, 6). Construction, 7). Wholesale and retail trades, repair of vehicles, motor & Hh.goods, 8). Hotel and restaurants, 9). Transport, storage and communcation, 10). Financial intermediation, 11). Real estate, renting and business activities, 12). Public administration, defense and compulsory social services, 13). Education, 14). Health and social work, 15). All other industries.

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Table 11.4C: Percent of Employed Males and Females 15 Years and Over Cross Classified by Industries Worked Past Week Preceding the Census by Occupations, Guyana: 2002

OCCUPATIONS								
INDUSTRIES	Legislators, Senior Officials & Managers	Profession al	Technicians & Associate Professiona ls	Clerks	Service, Shop & Market Sales Wrkrs	Agricul, Fishery & Farm Workers	All other Occupations	Total
No.	Females: Percent Distribution by Industry							
1	2.0	0.5	0.3	1.0	0.5	93.3	5.7	6.9
2	0.1	0.0	0.1	0.3	0.0	1.0	0.8	0.4
3	1.9	0.2	0.5	1.6	1.0	0.0	1.1	1.0
4	10.3	2.7	1.9	11.0	2.7	2.5	20.9	10.4
5	1.2	0.7	0.2	2.2	0.4	0.0	0.5	0.7
6	0.5	0.3	0.1	0.6	0.1	0.0	0.8	0.4
7	39.2	1.7	1.3	17.3	32.8	1.6	33.1	22.7
8	11.2	0.2	0.2	4.4	15.3	0.2	2.7	5.3
9	6.6	1.7	1.4	8.7	2.6	0.0	1.3	2.8
10	6.6	3.4	2.1	9.7	0.6	0.0	0.7	2.5
11	3.4	4.6	1.3	6.3	10.7	0.4	1.0	4.2
12	5.9	15.5	7.9	22.1	11.9	0.6	3.3	9.3
13	1.2	55.6	61.3	4.0	2.1	0.0	3.4	14.5
14	2.4	6.8	17.9	4.2	6.6	0.1	2.6	6.2
15	7.4	5.9	3.5	6.6	12.7	0.3	22.2	12.5
Total	100	100	100	100	100	100	100	100
No.	Males: Percent Distribution by Industry							
1	9.1	2.0	1.4	2.4	1.8	84.8	20.5	25.0
2	0.9	0.5	0.1	0.4	0.2	10.2	2.9	3.2
3	6.3	2.8	2.6	3.1	2.0	0.2	7.5	5.4
4	18.2	8.6	8.5	18.0	8.8	2.6	18.2	14.4
5	1.3	2.8	1.9	2.5	0.4	0.0	1.2	1.1
6	4.7	2.1	1.6	1.6	0.4	0.0	15.1	9.7
7	30.1	4.3	5.8	20.7	25.7	1.0	13.7	13.6
8	7.2	0.1	0.4	2.0	5.7	0.0	0.4	1.2
9	6.2	4.4	5.2	11.1	10.1	0.1	11.4	9.1
10	2.9	2.5	3.4	8.4	1.2	0.0	0.2	0.8
11	3.0	12.4	6.7	6.5	12.9	0.2	0.7	2.8
12	3.9	16.7	14.3	16.4	21.9	0.4	1.7	5.3
13	0.6	23.8	24.8	1.3	1.7	0.0	0.3	1.9
14	0.6	7.5	6.8	1.4	0.8	0.0	0.3	0.8
15	5.0	9.6	16.5	4.3	6.3	0.4	5.9	5.6
Total	100	100	100	100	100	100	100	100

Note: 1). Agriculture, hunting and forestry, 2). Fishing, operators of fish hatchery and fish farms, 3). Mining and quarrying, 4). Manufacturing, 5). Electricity, gas, steam and water supply, 6). Construction, 7). Wholesale and retail trades, repair of vehicles, motor & Hh.goods, 8). Hotel and restaurants, 9). Transport, storage and communication, 10). Financial intermediation, 11). Real estate, renting and business activities, 12). Public administration, defense and compulsory social services, 13). Education, 14). Health and social work, 15). All other industries.

The financial intermediation industry employed a relatively small number of women, but seems to have a diverse number of literate women working there. For instance, of the total 2.5

percentage of women in the labour force in that industry, 60.7 percent was clerks, 13.1 percent, “technical and associate professional workers”, 6.2 percent, “legislative, senior official and managerial workers”, and 5.7 percent, professionals, compared to the manufacturing industry where up to 70 percent female workers there were in elementary and other occupations not specified.

On the demand and supply side for higher career women, the proportion of legislative, senior official and managerial workers (39.2 percent), in the industry division of “wholesale and retail trade, repair of vehicles, motor and household goods” (Table 11.4C), is higher than that for any other industry group, but only 4.1 percent of the total employment within that industry group (Table 11.4B) was “legislators, senior officials and managers”, while the bulk of the women there was engaged in low ranking occupations, that is, “all other occupations category” (50.9 percent), and ‘service, shop, market sale and related occupations (31.2 percent). So, if employment in “wholesale and retail trade and related enterprises doubled, the impact on the demands for these higher decision making positions mentioned, would be relatively little.

On the one hand, although only less than 1 percent (Table 11.4C) of women in construction industry were in the “legislative, senior official and managerial”, “professional and technical” categories, construction industry employed 2.9 percent of all legislative, senior official and managerial workers, 3.3 percent of professional women, and 2.6 percent of technical and associate professional working women (Table 11.4B). The expansion of construction industry would have a greater effect on demands for women in higher decision-making positions; as well as for women in the professional and technical category.

The description of women’s roles is further presented in Table 11.5 by comparing the sex ratios by industry-occupation groups. When industry is controlled, occupations with low sex ratio (meaning, more females than males) were “clerical”, “technical and associate professional”, and “professional” occupations, with average sex ratios of 50, 64, and 95 males to every 100 females respectively, while when occupation is controlled, industries with low sex ratio were “hotel and restaurant”, “financial intermediation”, “education”, and “health and social work” industries also with average sex ratios of 55, 78, 31 and 30 males to every 100 females.

The employment differentials between men and women given by the variations in the sex ratios are significant across the industry and occupation groups; however, these variations did not show any remarkable sign of marginalization of women. For example, some industry groups such as “construction” and “mining and quarrying” industries had long been male-dominated industries in Guyana because of their physical labour requirements; as such, the wide gap in the sex ratios of these industries was never due to seclusion of females from either particular industries or occupations.

All in all, a total of 22.7 percent of women employed in the categories of “legislators, senior officials and managers”, “professionals”, “technicians and associate professionals” and the predominant senior roles women played in the previously male-dominated occupations or industries was a big gain for women, and to a greater extent indicates the diversification of women’s roles in the Guyanese economy.

Table 11.5: Sex Ratios of Employed Females and Males 15 Years and Over Cross Classified by Industries Worked Past Week Preceding the Census by Occupations, Guyana: 2002

INDUSTRIES	OCCUPATIONS							Total
	Legislators, Senior Officials & Managers	Profession al	Technicians & Associate Professiona ls	Clerks	Service, Shop & Market Sales Wrks	Agricul, Fishery & Farm Workers	All other Occupations	
No.	SEX RATIO {(M/F) x 100}							
1	1,363	400	274	117	455	605	1,528	857
2	2,200	nil	133	72	760	6,870	1,556	2,025
3	971	1,100	354	93	256	4,000	2,866	1,271
4	517	300	290	82	428	699	369	329
5	320	380	567	55	135	500	1,013	354
6	2,489	570	1,400	129	791	200	7,592	5,172
7	225	239	278	59	104	442	176	143
8	188	67	113	23	49	83	56	55
9	274	250	244	64	522	0	3,787	770
10	129	69	104	43	263	0	135	78
11	265	255	319	51	160	325	307	161
12	196	103	115	37	244	490	222	136
13	155	41	26	15	113	300	33	31
14	70	104	24	16	17	100	54	30
15	198	155	299	32	66	818	113	107
Total (SR)	293	95	64	50	132	666	424	238

Note: Sex Ratio = (males/females) x100

Note: 1). Agriculture, hunting and forestry, 2). Fishing, operators of fish hatchery and fish farms, 3). Mining and quarrying, 4). Manufacturing, 5). Electricity, gas, steam and water supply, 6). Construction, 7). Wholesale and retail trades, repair of vehicles, motor & Hh.goods, 8). Hotel and restaurants, 9). Transport, storage and communication, 10). Financial intermediation, 11). Real estate, renting and business activities, 12). Public administration, defense and compulsory social services, 13). Education, 14). Health and social work, 15). All other industries.

11.4 Interrelations of Industry and Employment Status

Cross-classification of employment status, for instance, employee, employer, unpaid family workers or own-account, etc.), with industry is presented in this section to further describe the structural framework within which the various types of economic activities take place in Guyana. These interrelations are important and shed light on the diversity in the organization of activities that can occur within industrial divisions where women work.

Tables 11.6A and B present the cross-classification stated in the preceding paragraph in two categories of analysis:

- (Column percentage) distribution of industry by employment status; and
- (Row percentage) distribution of employment status by industry.

The importance of private and public sectors in the economy of Guyana is immediately established in the table. For instance, over two-fifths and over one half of the females and males

were private sector paid employees, followed by the public sector with 33.2 percent and 21.4 percent (Table 11.6B) females and males, respectively.

As one would expect, the vast majority of the own-account and unpaid family female workers were in agriculture and related industries, while in the “wholesale and retail trade, repair of vehicles, motor and household goods industry, which employed more women than any other industry, the predominant role there was played by women serving as own-account workers (49.9 percent). A large number of women who also engaged in the “manufacturing” and “hotel and restaurant” industries were serving as own-account workers.

The relatively high proportion of female retail and wholesale traders who were own-account workers reflects the importance of small scale businesses for women in the Guyanese economy. Furthermore, the predominance of own-account workers in the “wholesale and retail trade, repair of vehicles, motor and household goods industry” where women mainly work, and the predominance of unpaid family workers in “agriculture, hunting and forestry industry” indicates that the forms of economic organization are yet relatively simple, and symbolic of what appeared to be a simple closed interrelationship between occupation and industry, i.e., where farmers are in agricultural occupation, traders are in sales occupations, etc. as mentioned earlier in section 11.3.

The proportion of women serving as employers was relatively small, but significant, when compared with the achievement women had made in managing their own affairs. The largest proportion of women’s employers were mainly found in “hotel and restaurant industry”, (3.9 percent), “wholesale and retail trade, repair of vehicles, motor and household goods” (3.4 percent), and “mining and quarrying” industry (3.1 percent), and lesser in other industries.

Unlike the females, the unpaid family workers category was less important for males, reflecting that since nearly three quarters of the males who served as head of households, were able to have given better information about their employment status, and answering on behalf of the women, listed their activities either as own-account and unpaid family workers or mainly as keeping home duties as previously discussed.

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Table 11.6: Distribution of Employed Men and Women 15 Years and Over Cross Classified by Industries Worked Past Week Preceding the Census by Employment Status, Guyana: 2002

Industry No.	Paid Employee		Unpaid family workers		Employers		Own Account Workers		Apprentice & Not stated	
	Employee -		- Pvt							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	11,854	718	12,662	888	1,565	1,283	1,137	73	13,017	1,712
2	59	14	3,333	203	63	6	183	4	1,596	32
3	1,287	271	6,176	341	32	7	309	21	793	31
4	5,752	1,024	14,434	4,516	129	136	712	107	2,239	1,310
5	769	220	968	270	0	1	3	2	11	0
6	348	28	12,711	233	42	2	516	5	1,957	35
7	430	241	10,518	6,175	463	718	1,463	523	9,067	7,750
8	30	74	1,157	2,631	77	115	251	140	439	621
9	953	634	9,531	1,161	115	18	716	45	3,433	66
10	297	445	956	1,283	0	1	16	1	70	3
11	481	411	3,390	2,252	18	16	155	24	484	123
12	8,189	6,048	419	313	8	0	2	2	12	2
13	2,597	8,876	434	842	5	8	15	16	47	156
14	840	2,871	323	1,242	1	7	46	41	55	57
15	971	853	6,127	6,621	81	153	191	100	1,489	707
Total	34,857	22,728	83,139	28,971	2,599	2,471	5,715	1,104	34,709	12,605

A). PERCENT DISTRIBUTION BY INDUSTRY

Industry No.	(1)		(2)		(3)		(4)		(5)		(6)	
	Male		Female		Male		Female		Male		Female	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	34.0	3.2	15.2	3.1	60.2	51.9	19.9	6.6	37.5	13.6	23.9	14.1
2	0.2	0.1	4.0	0.7	2.4	0.2	3.2	0.4	4.6	0.3	2.7	0.4
3	3.7	1.2	7.4	1.2	1.2	0.3	5.4	1.9	2.3	0.2	6.8	3.1
4	16.5	4.5	17.4	15.6	5.0	5.5	12.5	9.7	6.5	10.4	7.7	6.2
5	2.2	1.0	1.2	0.9	0.0	0.0	0.1	0.2	0.0	0.0	0.3	0.6
6	1.0	0.1	15.3	0.8	1.6	0.1	9.0	0.5	5.6	0.3	12.9	0.6
7	1.2	1.1	12.7	21.3	17.8	29.1	25.6	47.3	26.1	61.5	15.3	24.4
8	0.1	0.3	1.4	9.1	3.0	4.7	4.4	12.7	1.3	4.9	0.7	4.5
9	2.7	2.8	11.5	4.0	4.4	0.7	12.5	4.1	9.9	0.5	7.7	1.7
10	0.9	2.0	1.1	4.4	0.0	0.0	0.3	0.1	0.2	0.0	0.5	0.6
11	1.4	1.8	4.1	7.8	0.7	0.6	2.7	2.1	1.4	1.0	2.0	3.3
12	23.5	26.6	0.5	1.1	0.3	0.0	0.0	0.2	0.0	0.0	1.4	2.1
13	7.5	39.1	0.5	2.9	0.2	0.3	0.3	1.5	0.1	1.2	0.3	5.4
14	2.4	12.6	0.4	4.3	0.0	0.3	0.8	3.7	0.2	0.5	0.6	5.2
15	2.8	3.8	7.4	22.9	3.1	6.2	3.3	9.1	4.3	5.6	17.4	27.7
Total	100	100	100	100	100	100	100	100	100	100	100	100

Note: 1. Agriculture, Hunting & Forestry 2. Fishing, Operators of Fish hatchery & Fish farms
3. Mining and Quarrying 4. Manufacturing 5. Electricity, Gas, Steam & Water Supply
6. Construction 7. Wholesale & Retail Trade; Repair of Vehicles, Motor & Hh.goods
8. Hotel and Restaurants 9. Transport Storage and Communication 10. Financial Intermediation
11. Real Estate, Renting & Business Activities 12. Public Admin & Defense; Compulsory Soc Sec
13. Education 14. Health & social Work 15. All other industries

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Table 11.6 CONTINUED: B). PERCENT DISTRIBUTION BY EMPLOYMENT STATUS

Table 11.3 CONTINUED: D). PERCENT DISTRIBUTION BY EMPLOYMENT STATUS

INDUSTRY GROUP	Paid Employee		Unpaid	Own Account	Apprentice & Not stated	Total	
	Govt	Private	Family Workers				
Females: (Percent Distribution by Employment Status)							
1. Agriculture, Hunting & Forestry	15.1	18.7	27.0	1.5	36.1	1.5	100
2. Fishing, Operators of Fish hatchery & Fish farms	5.4	77.8	2.3	1.5	12.3	0.8	100
3. Mining and Quarrying	39.4	49.6	1.0	3.1	4.5	2.3	100
4. Manufacturing	14.4	63.4	1.9	1.5	18.4	0.4	100
5. Electricity, Gas, Steam & Water Supply	44.4	54.4	0.2	0.4	0.0	0.6	100
6. Construction	9.2	76.1	0.7	1.6	11.4	1.0	100
7. Wholesale & Retail Trade; Repair of Vehicles, Motor & Hh.goods	1.6	39.8	4.6	3.4	49.9	0.8	100
8. Hotel and Restaurants	2.1	73.0	3.2	3.9	17.2	0.6	100
9. Transport Storage and Communication	32.8	60.1	0.9	2.3	3.4	0.5	100
10. Financial Intermediation	25.6	73.9	0.1	0.1	0.2	0.2	100
11. Real Estate, Renting & Business Activities	14.5	79.2	0.6	0.8	4.3	0.6	100
12. Public Admin & Defense; Compulsory Social Services	94.9	4.9	0.0	0.0	0.0	0.2	100
13. Education	89.4	8.5	0.1	0.2	1.6	0.3	100
14. Health & social Work	67.6	29.3	0.2	1.0	1.3	0.6	100
15. All other industries	9.9	77.2	1.8	1.2	8.2	1.7	100
Total	33.2	42.4	3.6	1.6	18.4	0.8	100
Males: (Percent Distribution by Employment Status)							
1. Agriculture, Hunting & Forestry	29.1	31.1	3.8	2.8	32.0	1.1	100
2. Fishing, Operators of Fish hatchery & Fish farms	1.1	63.1	1.2	3.5	30.2	1.0	100
3. Mining and Quarrying	14.7	70.8	0.4	3.5	9.1	1.5	100
4. Manufacturing	24.6	61.6	0.6	3.0	9.6	0.6	100
5. Electricity, Gas, Steam & Water Supply	43.8	55.1	0.0	0.2	0.6	0.3	100
6. Construction	2.2	80.3	0.3	3.3	12.4	1.6	100
7. Wholesale & Retail Trade; Repair of Vehicles, Motor & Hh.goods	1.9	47.3	2.1	6.6	40.8	1.3	100
8. Hotel and Restaurants	1.5	58.8	3.9	12.8	22.3	0.7	100
9. Transport Storage and Communication	6.4	64.0	0.8	4.8	23.0	1.0	100
10. Financial Intermediation	22.0	70.9	0.0	1.2	5.2	0.7	100
11. Real Estate, Renting & Business Activities	10.5	74.2	0.4	3.4	10.6	0.9	100
12. Public Admin & Defense; Compulsory Soc Sec	94.6	4.8	0.1	0.0	0.1	0.3	100
13. Education	83.7	14.0	0.2	0.5	1.5	0.2	100
14. Health & social Work	65.8	25.3	0.1	3.6	4.3	1.0	100
15. All other industries	10.6	66.6	0.9	2.1	16.2	3.7	100
Total	21.4	51.0	1.6	3.5	21.3	1.2	100

11.5 Household Headship

11.5.1 The Concept

The term, “head of household” is not straightforward; it covers a number of different concepts. At some point, it refers to the chief economic provider, the decision maker, the person designated by other members as the head, etc. DIESA⁴⁷ essentially set three different types of headship:

- Self-definition, that is, classifying as the head of the household the person who nominates himself or herself as the head, or who is designated by other household members;
- Identification of the person in authority, that is, the person who controls the maintenance of the household and exercises the authority to run the household;
- Identification of the economic supporter of the household, that is, the chief earner or the main supporter of the household’s economy.

Furthermore, in many countries, within a married couple household, a man automatically is the head, regardless of his relative earnings or the desire or perception of the respondents. Also, female-headed households were regarded as one without adult men, but, the converse is, of course, a male-headed household may contain adult women⁴⁸.

11.5.2 The Pattern

The household headship is displayed in Table 11.7 and illustrated in Figure 11.3. For comparative purposes, we present the data obtained from the 1991 and 2002 censuses. Accordingly, a large proportion of the households was headed by males, and remained relatively high throughout. In 1991, female headed households constituted 28.5 percent compared to 71.5 percent among the males, but by 2002, the female headed households had increased slightly by 0.6 percentage point. As expected, the largest percentage of household headship was reported for those aged 25-44 years (50.1 percent) and for those aged 45-64 years (32.5 percent), in 2002.

The pattern of the distribution, which shows relatively small female headed households, is probably a typical example of the Guyanese culture. For instance, at most in a married couple household, the male automatically is the head, however, in his absence, then the wife or any most senior member of the household can take the lead. Besides, even in some of the hinterland regions where the majority of the village dwellers live a communal life, not only the household, but the most senior male elder in the village can sometimes designate himself or can be designated as head and apparently assume responsibility for the members of the entire village including children, women and even other adult males.

⁴⁷ Department of International Economic and Social Affairs (1988) Improving Statistics and Indicators on Women Using Household Survey. Series F No.48. Statistical Office and International Research Training Institute for Advancement of Women, United Nations, New York

⁴⁸ Ibid

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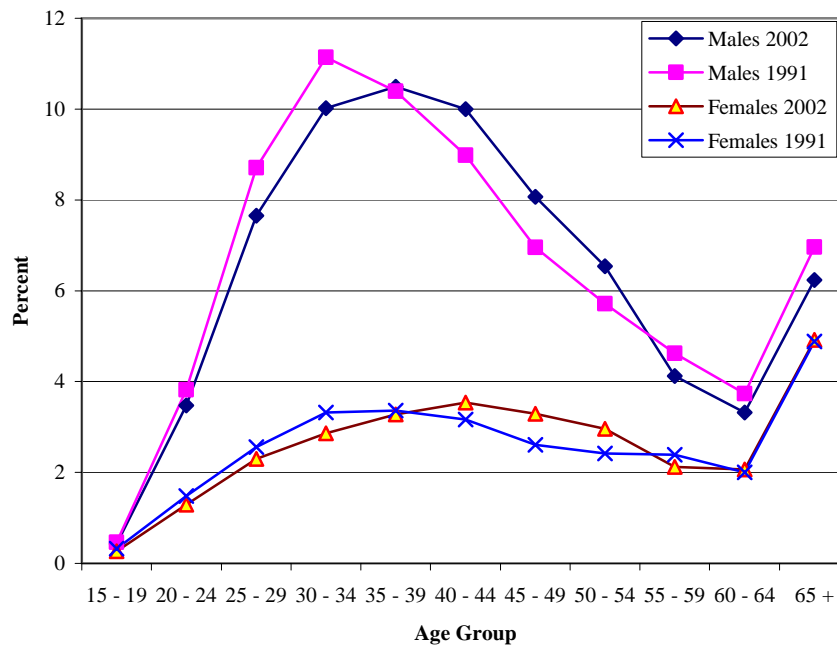
**Table 11.7: Number of Household Heads by Age and Sex,
Guyana: 1991 - 2002**

Age group	2002 Census			1991 Census		
	Male	Female	Total	Male	Female	Total
15 - 19	779	485	1,264	714	495	1,209
20 - 24	6,339	2,360	8,699	5,883	2,286	8,169
25 - 29	13,969	4,192	18,161	13,431	3,946	17,377
30 - 34	18,295	5,220	23,515	17,177	5,121	22,298
35 - 39	19,159	5,980	25,139	16,020	5,176	21,196
40 - 44	18,266	6,463	24,729	13,844	4,878	18,722
45 - 49	14,734	6,005	20,739	10,723	4,018	14,741
50 - 54	11,942	5,401	17,343	8,805	3,722	12,527
55 - 59	7,528	3,876	11,404	7,125	3,677	10,802
60 - 64	6,059	3,766	9,825	5,756	3,090	8,846
65 +	11,384	8,979	20,363	10,733	7,529	18,262
Not stated	1,052	383	1,435	1	3	4
Total	129,506	53,110	182,616	110,212	43,941	154,153
Percent in broad age groups						
15 - 24	3.9	1.6	5.5	4.3	1.8	6.1
25 - 44	38.2	12.0	50.1	39.2	12.4	51.6
45 - 64	22.0	10.4	32.5	21.0	9.4	30.4
65 +	6.2	4.9	11.2	7.0	4.9	11.8
Not stated	0.6	0.2	0.8	0.0	0.0	0.0
Total	70.9	29.1	100	71.5	28.5	100

The most widely suspected reason for the increase in the number of female-headed households are internal migration (see Chapter 3: Population redistribution and internal migration), and broken marital or union status (see Chapter 9: Marriage, divorce and cohabitation). In the case of migration, women remaining behind are assumed to take the leadership role of the households while their husbands are away; at the same time, some of those who migrated to the urban area are believed to be single parents managing their own home affairs.

As given in Table 11.7, the slight increase in the female-headed households was in age group 45-64 years, which coincides with our earlier finding that women in this age range have higher probability of being “was common-law” (meaning they were in the union but no-longer lived together) and widowed.

The overall increase in the female headed households, both in number and percentage, though small, is significant, in the sense that, it offers women the opportunity to excel in decision-making in the home.

Fig. 11.3: Age and Sex Pattern of Household Headship, Guyana: 1991 - 2002

However, though increased, the entire issue of the female-headed households has been a controversial concern, for in many developing countries, poverty stricken women were identified among this sub-group of women. Also, rising female household headship has been attributed partially, if not substantially, to the mounting feminization of poverty among women. For example, Sylvia Chant⁴⁹ wrote, “feminization of poverty has been accentuated, amongst other things, the increase in separation and divorce; added to the tradition of leaving responsibilities for children to the mother, thus, given rise to the increasing incidence of lone parent families headed by women with high incidence of vulnerability”. Davids and Driel⁵⁰ also noted, “lone mothers are often the biggest sub-group of female heads whose poverty is attested not only to affect them, but their children too; it is no surprise that in some circles the culture of single motherhood, has been designated the new poverty paradigm”.

While the interest in this section was simply on the headship distribution for men and women, research on the relationship of female-headed households and vulnerability of women; looking at their income, health, education, violence against them, etc., would be of great significance to adequately identify problems facing Guyanese female-headed households.

⁴⁹ Sylvia Chant (2003), Female Household Headship and the Feminization of Poverty: Facts, Fictions and Forward Strategies. London Institute of Economics, New Working Paper Series, Gender Institute

⁵⁰ Tine Davids and Francien Van Driel (2001), “Globalization and Gender: Beyond Dichotomies”, in Frans J. Schuurman (ed.) Globalization and Development Studies Challenges for the 21 Century (London: Sage)

CHAPTER 12: THE ELDERLY

The shifts in the age distribution of the population towards upper ages as a direct consequence of fertility decline, as well, as mortality decline in the older age groups, is gaining momentum in the developing world, and as a result, formulating policies to address the increasing elderly population is among growing demands facing many less developed countries.

Problems identified by the increase in the elderly population include:

- An increase in the costs associated with the care and income support of the growing aged population;
- A rising number of people caring for the elderly, which has a deep impact on the economy, society and the culture; and
- A shrinking labour force, i.e., the declining proportion of the economically active population relative to the elderly population.⁵¹

Accordingly, aging presents challenges for public health (concerns over possible bankruptcy of Medicare and related programs) as well as for economic development (shrinking and aging of labour force, possible bankruptcy of social security system)⁵².

The definition of retirement age varies from country to country, but the typical cut-off point is 65 years. In Guyana, the retirement age for the gainfully employed labour force varies - 55 years for public sector, but the policy requires the retirees to attain 60 years in order to be eligible for any retirement benefit, and 60 to 65 years for the private sector. As a result, emphasis would be stressed on those 60 years and over as well as those within the cut-off point category.

The objectives of this chapter are therefore to:

- Determine the size of the elderly population;
- Estimate some key indicators of the aging population;
- Determine old-age dependency at the household level;
- Assess the housing conditions and number of persons in the elderly households;
- Determine their sources of livelihood; and
- Analyze the elderly by marital status and disabilities.

12.1 The Size of the Elderly Population

⁵¹Sonkarley T. Beale (2005) Implication of Ageing on Labour Force Participation (Power-Point presentation on seminar of ageing population in Guyana) Unpublished

⁵²Gavrilov L. A and Heuvelink P. "Aging of Population" in Paul Demeny and Geoffrey McNicol (Editors) *The Encyclopedia of Population*, New York, Macmillan Reference USA, 2003/ (PDF file)

Relative to our definition of aging, a population is considered to be old or aging when the proportion of the population aged 65 and over exceeds 8 to 10 percent⁵³. Based on this, the distribution of Guyanese elderly populations presented in Table 12.1 and depicted in Figure 12.1 reveals that the proportion of older population, persons 60 years or 65 years or older has been steadily increasing during the past decades.

In 1970, the number of elderly aged 60 years or older was 37,913, while those 65 years and over was 25,104, increasing to 46,839 and 31,716 in 2002, respectively. The figures represented 5.4 and 3.6 percent of the total population in 1970, compared to 6.2 and 4.2 percent in 2002. The growth during the decades accounted for an increase of 23.5 percent and 26.3 percent (Table 12.1 and Fig. 12.1), respectively.

In general, both the table and the figure reveal that females outnumbered males for each census period in both categories of the elderly people. The sex ratio reflecting the disparities between them, though undulated, indicates that there were deficits of males throughout, with every 100 females to 80 males in 1970; increasing marginally to 84 males to every 100 females by 2002 (Table 12.1).

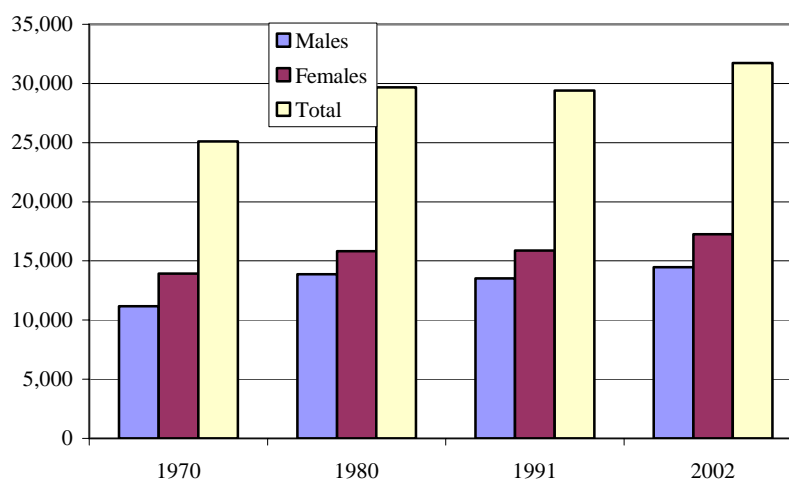
Table 12.1: Number of Elderly People (60+ and 65+), and Sex Ratio, Guyana: 1970 - 2002

Period	Aged 60 +			Aged 65 +		
	Male	Female	Total	Male	Female	Total
1970	17,658	20,255	37,913	11,167	13,937	25,104
1980	20,600	22,569	43,169	13,873	15,811	29,684
1991	20,358	22,569	42,927	13,531	15,871	29,402
2002	21,725	25,114	46,839	14,472	17,244	31,716
Percent of the total population						
1970	5.1	5.8	5.4	3.2	4.0	3.6
1980	5.5	5.9	5.7	3.7	4.1	3.9
1991	5.7	6.1	5.9	3.8	4.3	4.1
2002	5.8	6.7	6.2	3.8	4.6	4.2
Sex ratio						
1970	87					80
1980	91					88
1991	90					85
2002	87					84

Note: Sex ratio = (m/f) x 100, where m = number of males and f = number of females

⁵³ Ibid

Fig. 12.1: Number of Elderly Ppeople, Guyana: 1970 - 2002



12.2 Indicators of Aging Population

Three basic indicators of an aging population are median age, aging index, and age dependency ratio. The median age is a statistical measure of location, and defines exactly the age at which half the population is older and another half is younger.

For the year 2002, the median age in Guyana was 22.9 years compared to 1970, when it was 16.3 years (Table 12.2). This finding indicates that, though the population is still relatively young, it had shown some gradual decline in the proportion of young. The corollary of course is that the proportion of the adult has increased over the period.

Table 12.2: Median Age in Years, Guyana: 1970-2002

Year	Male	Female	Total
1970	16.0	16.5	16.3
1980	18.4	18.8	18.6
1991	21.6	21.9	21.8
2002	22.6	23.2	22.9

As a consequence of the increase in the median age, there was correspondingly an increase in the aging index in Guyana. The aging index compares the number of elderly to the number of children and reflects the long-term decline in fertility as against a decline of mortality in the older ages. The index is a good indicator of changes in the age structure.

The aging index was nearly 8 elderly persons to every 100 children in 1970; but by 2002, it had risen to 12 elderly persons, accounting for an annual growth rate of 0.82 percent during the entire period (Table 12.3).

Also, between 1970 and 2002, there was an 18.3 percent decrease in the number of children aged less than 15 years; in contrast, the number of people aged 65 and over increased by 26.3 percent.

The index has definite policy implications for the planning of future economic activity in Guyana, particularly the potential shortfall of new entrants into the labour force to offset the eventual gap that will arise from the exit of the elderly, due to retirement and death.

Table 12.3: Aging Index by Sex, Guyana: 1970 - 2002

Period	Children 0-14 Years			Aged 65 Yrs & Over			Index of Aging		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970	165,735	164,011	329,746	11,167	13,937	25,104	6.7	8.5	7.6
1980	155,597	154,168	309,765	13,873	15,811	29,684	8.9	10.3	9.6
1991	125,345	126,708	252,053	13,531	15,871	29,402	10.8	12.5	11.7
2002	136,803	132,466	269,269	14,472	17,244	31,716	10.6	13.0	11.8

Note: a). Index of aging = (elderly 65 +/children 0-14)x100

The third indicator of aging is the elderly dependency ratio, also known as the old-age dependency ratio, given in Table 12.4. In contrast, while the aging index compares the number of elderly to the number of children in the population, the old-age dependency ratio (ADR) measures the number of elderly persons to those in the working ages or economically active population, that is, 15-64 years. The main aim is to assess the burden on the retirement system, and furthermore, is used as a proxy to determine intergenerational transfers, taxation policies, and saving behavior.

Table 12.4: Old-Age Dependency Ratio by Sex, Guyana: 1970 - 2002

Period	Aged 60 years and over ^a			Aged 65 years and over ^b		
	Male	Female	Total	Male	Female	Total
1970	10.7	12.1	11.4	6.5	8.0	7.3
1980	10.4	11.0	10.7	6.7	7.4	7.1
1991	9.7	10.4	10.0	6.2	7.1	6.6
2002	10.1	11.6	10.9	6.5	7.7	7.1

Note: a = (aged 60+/15-59)x100 and b = (aged 65+/15-64)x100

In Guyana, the value of this indicator remains relatively constant during the decades (1970 - 2002) at about 7 elderly persons aged 65 and over to every 100 economically active persons. As expected, the dependency burden was higher for the 60 years and above category, with a ratio of every 100 economically active persons to 11 persons, 60 years old and over.

12.3 Old-Age Dependency at Household Level

Living arrangements for the elderly persons have complementary factors which operate concurrently to determine old-age dependency at the household level. Some aged persons use their wealth and financial capability to head the households, others use their old-age wisdom and experiences, while others become dependent due to health and old-age disabilities. Whichever factor influenced the leadership role in the household is not the main focus, but is aimed at using shift in age as a framework to present the momentum of household level of old-age dependency.

National Census Report 2002, Guyana

In 2002, there were 15,227 elderly persons aged 60 years and over who were dependents, that is, they were living in the household where the head was different, but conversely, twice as many (30,349) were household heads. At the same time, about one-third (10,327) of those 65 years and over were also dependents in their respective households (Table 12.5).

The magnitude of household headship, as illustrated in Table 12.6, indicates that 57.7 percent were males, reflecting a high sex ratio (136 males to 100 females) in the control of the household by elderly persons. Household headship decreases with age, signalling the effect of both increases in mortality at the older ages, as well as their inability to remain the head of the family.

Table 12.5: Elderly Persons (60+ and 65+) by Status of Household Headship, Guyana: 2002

Status	Aged 60+	Aged 65+	Aged 60+	Aged 65+
Head	30,349	20,469	64.8	64.5
Dependent	15,227	10,327	32.5	32.6
Not stated	1,263	920	2.7	2.9
Total	46,839	31,716	100	100

Table 12.6: Number of Elderly People Serving as Household Head and Their Sex Ratio in Household Headship, Guyana: 2002

Age group	Number			Percent			Sex Ratio
	Male	Female	Total	Male	Female	Total	
60-64	6,092	3,788	9,880	20.1	12.5	32.6	161
65-69	4,673	3,296	7,969	15.4	10.9	26.3	142
70-74	3,302	2,552	5,854	10.9	8.4	19.3	129
75+	3,441	3,205	6,646	11.3	10.6	21.9	107
Total	17,508	12,841	30,349	57.7	42.3	100	136

Of importance, however, is with whom the elderly resided and who provided the care. In Table 12.8, about a quarter of the elderly (60 + and 65 years or older) seemed to have resided in households headed by females, and three-quarters resided in households headed by males.

Similarly, the age range of household heads where the elderly resided was an important factor in determining age liability. For 60 years and over, 38 percent resided in household headed by someone older or equal to 65 years, followed by 32 and 28 percent residing in homes headed by someone between the ages of 45-64 and 25-44 years respectively (Table 12.7). Also, less than 2 percent resided in households controlled by youths.

Table 12.7: Number of Elderly People (60+ and 65+) Classified by Age of Household Head Where They Live and Sex of the Head, Guyana: 2002

Age of Hh.	Aged 60 + in Hh. Headed by:			Aged 65 + in Hh. Headed by:		
	Female	Male	Total	Female	Male	Total
15-24	74	161	235	54	117	171
25-44	1,244	3,077	4,321	934	2,277	3,211
45-64	1,636	3,302	4,938	1,254	1,962	3,216
65+	746	4,987	5,733	549	3,180	3,729
Total	3,700	11,527	15,227	2,791	7,536	10,327
Percent						
15-24	0.5	1.1	1.5	0.5	1.1	1.7
25-44	8.2	20.2	28.4	9.0	22.0	31.1
45-64	10.7	21.7	32.4	12.1	19.0	31.1
65+	4.9	32.8	37.7	5.3	30.8	36.1
Total	24.3	75.7	100	27.0	73.0	100

12.4 The Elderly Household Size

Apart from leadership viability of household where the elderly live, overcrowded households and status of the dwelling where they live in (whether owned, rented, etc.) are important indicators in determining concentration of poverty among the elderly.

In 2002, about one-fifth resided in two-person households, while an equal proportion (15 percent) lived in one- and three-person households respectively. Of relevance, however, is the fact that, about 11 percent resided in households with greater than or equal to eight persons (Table 12.8).

However, in the absence of information on assignment of bedrooms, mere household size does not seem to explain well the discomfort of the elderly. As data to prove this is not available, further research is needed to study this relationship.

It is also befitting to note that the elderly living in oversized households is one form of old-age social security provided by the family members in developing countries. While it may seem less important in developed countries, it is psychological for the elderly in less developed countries, for it gives them pleasures to share funs and happiness with their grand and great grand children.

Table 12.8: Number of Elderly (Aged 60+ and 65+) by Household Size and Sex, Guyana: 2002

Household Size	Aged 60 +			Aged 65+		
	Male	Female	Total	Male	Female	Total
One person	2,966	3,216	6,182	2,134	2,479	4,613
Two persons	4,528	5,141	9,669	3,122	3,445	6,567
Three persons	3,292	3,846	7,138	2,100	2,517	4,617
Four persons	2,628	3,168	5,796	1,642	2,117	3,759
Five persons	2,356	2,809	5,165	1,568	1,869	3,437
Six persons	1,891	2,230	4,121	1,216	1,531	2,747
Seven persons	1,303	1,589	2,892	853	1,105	1,958
Eight persons & over	2,230	2,644	4,874	1,456	1,804	3,260
Total	21,194	24,643	45,837	14,091	16,867	30,958
Percent						
One person	14.0	13.1	13.5	15.1	14.7	14.9
Two persons	21.4	20.9	21.1	22.2	20.4	21.2
Three persons	15.5	15.6	15.6	14.9	14.9	14.9
Four persons	12.4	12.9	12.6	11.7	12.6	12.1
Five persons	11.1	11.4	11.3	11.1	11.1	11.1
Six persons	8.9	9.0	9.0	8.6	9.1	8.9
Seven persons	6.1	6.4	6.3	6.1	6.6	6.3
Eight persons & over	10.5	10.7	10.6	10.3	10.7	10.5
Total	100	100	100	100	100	100

12.5 Housing the Elderly

Housing the elderly presents challenges to both the family and individual members caring for them. In the developed countries, social security schemes provided formal institutions like old-age nursing homes, but in contrast, the elderly are cared for in informal institutions provided by relatives in less developed countries. In the wake of this, the status of the premises occupied by the elderly (whether owned, rented, squatted, etc.) is important and could be determined to some degree by their intergenerational transfers and cumulated interests and saving during their active lifespan. Also, it helps to indicate the poverty range among older citizens.

In 2002, a significant proportion of the elderly (82 percent) owned the dwelling unit where they lived, 8 percent lived rent-free, 7 percent rented from private individuals, 1 percent squatted, and less than 1 percent fell into each of the remaining categories (Table 12.9). Sex differential exist with more females (44 percent) possessing ownership of the dwelling unit occupied, as compared to 38 percent of the males. The sex differential can possibly be explained by the longevity of females in Guyana, which entitles elderly women to inherit property of their deceased husband.

Table 12.9: Distribution of Elderly (60+ and 65+) by Tenure Status of Dwelling Unit Where They Reside, Guyana: 2002

Ownership Status	Aged 60 & Over			Aged 65 & Over		
	Male	Female	Total	Male	Female	Total
Owned	17,450	20,173	37,623	11,720	13,887	25,607
Squatted	256	271	527	147	170	317
Rented-Pvte	1,447	1,946	3,393	893	1,285	2,178
Rented-Govt	43	47	90	21	32	53
Leased	95	104	199	56	69	125
Rent Free	1,766	1,928	3,694	1,151	1,303	2,454
Not Stated	101	151	252	77	104	181
Other	36	23	59	25	16	41
Total	21,194	24,643	45,837	14,090	16,866	30,956
Percent						
Owned	38.1	44.0	82.1	37.9	44.9	82.7
Squatted	0.6	0.6	1.1	0.5	0.5	1.0
Rented-Pvte	3.2	4.2	7.4	2.9	4.2	7.0
Rented-Govt	0.1	0.1	0.2	0.1	0.1	0.2
Leased	0.2	0.2	0.4	0.2	0.2	0.4
Rent Free	3.9	4.2	8.1	3.7	4.2	7.9
Not Stated	0.2	0.3	0.5	0.2	0.3	0.5
Other	0.1	0.1	0.1	0.1	0.1	0.1
Total	46.2	53.8	100	45.5	54.5	100

As in the case of the overall households in Guyana, about 49 percent of the elderly (65 and over) constructed their dwellings when they were in their prime working age groups or before 1970, about 28 percent 1970-1995, 13 percent toward the end of the period, while 11 percent did not state the year of construction (Table 12.10).

The finding is an important indication that earnings during the prime life of the elderly were invested into providing homes. However, it is significant to re-emphasize that the proportion without owner occupied dwelling units could be elderly living below minimum standards, and it would be necessary to design policies to alleviate their impoverished conditions.

National Census Report 2002, Guyana

Table 12.10: Number of Elderly (60+ and 65+) Classified by Ownership of Dwelling Unit and Year Since Dwelling Built, Guyana: 2002

Ownership Status	Year Dwelling Unit Built									
	Aged 60 & Over					Aged 65 & Over				
	Before 1970	1970 - 1995	1996 - 2002	Not Stated	Total	Before 1970	1970 - 1995	1996 - 2002	Not Stated	Total
	1970	1995	2002	Stated	Total	1970	1995	2002	Stated	Total
Owned	17,620	11,997	5,270	2,736	37,623	12,759	7,526	3,406	1,916	25,607
Squatted	112	211	151	53	527	76	117	91	34	318
Rented-Pvte	1,488	515	149	1,241	3,393	974	324	88	792	2,178
Rented-Govt	37	14	11	28	90	29	5	4	15	53
Leased	75	58	40	25	198	48	38	26	13	125
Rent Free	1,756	806	388	744	3,694	1,174	528	254	498	2,454
Not Stated	71	41	24	115	251	55	28	14	84	181
Other	29	12	8	10	59	16	10	7	8	41
Total	21,188	13,654	6,041	4,952	45,835	15,131	8,576	3,890	3,360	30,957
PERCENT										
Owned	46.8	31.9	14.0	7.3	100	49.8	29.4	13.3	7.5	100
Squatted	21.3	40.0	28.7	10.1	100	23.9	36.8	28.5	10.7	100
Rented-Pvte	43.9	15.2	4.4	36.6	100	44.7	14.9	4.0	36.4	100
Rented-Govt	41.1	15.6	12.2	31.1	100	54.7	9.4	7.5	28.3	100
Leased	37.9	29.3	20.2	12.6	100	38.4	30.6	20.8	10.4	100
Rent Free	47.5	21.8	10.5	20.1	100	47.8	21.5	10.4	20.3	100
Not Stated	28.3	16.3	9.6	45.8	100	30.4	15.5	7.8	46.4	100
Other	49.2	20.3	13.6	16.9	100	39.0	24.4	17.1	19.5	100
Total	46.2	29.8	13.2	10.8	100	48.9	27.7	12.6	10.9	100

12.6 Sources of Livelihood for the Elderly

12.6.1 Working Elderly

Generally, the propensity to participate in the work force tends to decline with age, irrespective of health status, but working until later in life helps to increase both labour supply and living standards in the old age. The higher participation rates will translate into a lower risk of falling into poverty for elderly people.

The analysis of the 2002 data for Guyana, shows that 31.4 percent and 9.4 percent of the elderly men and women respectively are economically active, and continue to work beyond the age of 60 years. Among those who still have the need for work, about 94 percent (males and females separately) were gainfully employed, another 6 percent unemployed (Table 12.11).

The participation rate for elderly Guyanese is slightly lower, compared to the overall world experience of 42 percent and 16 percent respectively, among elderly men and women who work outside of the home to earn a living⁵⁴. The deviation may be linked to the official retirement age in Guyana which commences from age 55 years. Besides, the health status of the aged plays an important role in determining whether or not they participate in the work force; for instance, as people age, and suffer from different types of disabilities in the old age, their labour force participation is severely affected.

⁵⁴ Rajagopal Dhar Chakraborti, The Greying of India: Population Ageing in the Context of Asia (PDF file)

In general, insufficient social security coverage coupled with meager incomes for the elderly may have caused those beyond 65 to continue seeking for work. As a matter of fact, most developing countries have pension coverage that is restricted to small segments of the workforce, such as, those working for government or large companies⁵⁵. As such, those who are self-employed or employed in small business enterprises have no age limit for retirement; they work as long as their health conditions permit or so long their employers are still satisfied with their performances.

**Table 12.11: Employment Status of Elderly People (Aged 60 yrs + and 65 yrs +)
Past Week Preceding the Census, Guyana: 2002**

Employment Status	Aged 60 yrs & over			Aged 65 yrs & over		
	Male	Female	Total	Male	Female	Total
Total	21,194	24,643	45,837	14,091	16,867	30,958
Labour Force	6,664	2,322	8,986	3,050	1,001	4,051
Employed	6,277	2,181	8,458	2,887	937	3,824
Unemployed	387	141	528	163	64	227
Not in Labour Force	14,530	22,321	36,851	11,041	15,866	26,907
Percent						
Total	100	100	100	100	100	100
Labour Force	31.4	9.4	19.6	21.6	5.9	13.1
Employed	94.2	93.9	94.1	94.7	93.6	94.4
Unemployed	5.8	6.1	5.9	5.3	6.4	5.6
Not in Labour Force	68.6	90.6	80.4	78.4	94.1	86.9

12.6.2 Income Recipient Elderly

While aging population is a success story for mankind, massive survival to old ages also poses greater challenges to individuals and public institutions, because as people tend to live longer, the pension industry or individual family members are required to support a greater number of elderly for longer periods. As written by Chakraborti⁵⁶, long-term care of the elderly has traditionally been regarded as a responsibility that falls primarily on families, and some experts have also raised concerns that mankind may become a “global nursing home”⁵⁷.

In contrast to dependence on family support as mentioned above, a large segment of the elderly income receipts for those 65 and over in Guyana in 2002 (66 percent) came from old-age retirement schemes. The reflection is important for future planning, because with the increase in the number of elderly people, the pension industry would be required to support a greater number of pensioners for longer periods, thus, expected to increase pressure on the provision of pension funds (Table 12.12).

⁵⁵ Toshiko Kaneda (2006) A Critical Window for Policymaking on Population Aging in Developing Countries

⁵⁶ Rajagopal Dhar Chakraborti, The Greying of India: Population Ageing in the Context of Asia (PDF file)

⁵⁷ Eberstadt, N. 1997. “World population implosion?” Public Interest, 129: 3-22. (PDF file)

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Financial dependence on relatives or friends was second, for instance, parental or spousal support was 5.3 percent, remittances from relatives and friends abroad, 3.1 percent and support from other persons 8.9 percent (Table 12.12). In addition, direct employment, either through own account businesses, contributed 11.3 percent, while nearly 2 percent of the elderly did not state their sources of livelihood.

The pattern of livelihood was similar for those 60 years and over, but with less intensity for dependence on pension coverage, because, accordingly, a significant proportion was still in the work force.

Of importance, is the fact that only a very small percentage (1.4 percent) reported to have supported themselves through cumulated savings and interest, indicating that some elderly continue to work even beyond 65 years because of the meager incomes. As life expectancy continues to rise for both males and females, greater demands are expected to be made on the pension funds.

Table 12.12: Distribution of Elderly Persons (60 + and 65 +) by Source of Livelihood Past Year Preceding the Census, Guyana: 2002

Source of Livelihood	Aged 60 yrs & over			Aged 65 yrs & over		
	Male	Female	Total	Male	Female	Total
Employment/Own account	6,020	1,994	8,014	2,658	826	3,484
Remittances	486	968	1,454	318	646	964
Pension benefits	11,729	12,870	24,599	9,495	11,002	20,497
Saving/Interest on Saving	485	406	891	229	197	426
Disability benefits	181	192	373	100	102	202
Parental/Spousal support	332	3,536	3,868	183	1,466	1,649
Other persons	1,287	3,628	4,915	701	2,065	2,766
Others	233	568	801	120	254	374
Not Stated	441	481	922	287	309	596
Total	21,194	24,643	45,837	14,091	16,867	30,958
Percent						
Employment/Own account	28.4	8.1	17.5	18.9	4.9	11.3
Remittances	2.3	3.9	3.2	2.3	3.8	3.1
Pension benefits	55.3	52.2	53.7	67.4	65.2	66.2
Saving/Interest on Saving	2.3	1.6	1.9	1.6	1.2	1.4
Disability benefits	0.9	0.8	0.8	0.7	0.6	0.7
Parental/Spousal support	1.6	14.3	8.4	1.3	8.7	5.3
Other persons	6.1	14.7	10.7	5.0	12.2	8.9
Others	1.1	2.3	1.7	0.9	1.5	1.2
Not Stated	2.1	2.0	2.0	2.0	1.8	1.9
Total	100	100	100	100	100	100

12.7 Marital Status of the Elderly Citizens

Marital status is one indicator which is used to gauge the well-being of the elderly, measures the index of isolation, and besides, signals many important features of their health. For example,

Chakraborti⁵⁸ found out that married people have consistently lower rates of mortality than single, widowed and divorced people of the same age and sex. While the objective is neither to derive the index, nor compute correlation matrix between mortality and union status, the proportion of married elderly people would augur well for the prolonged life of elderly Guyanese.

In general, a higher proportion of the elderly were married. Both among the 60 plus and 65 plus groups respectively, more than 50 percent males were married compared to 32 and 28 percent elderly females, respectively. In contrast, more females were widowed, reflecting the difference in life expectancy for the two sexes (Table 12.13). Also, the lower proportion of widowed elderly males may be the result of the higher probability for remarriage among men compared to women.

Table 12.13: Distribution of Elderly People (Aged 60 + and 65 +) by Union Status, Guyana: 2002

Union Status	Aged 60 yrs & over			Aged 65 yrs & over		
	Male	Female	Total	Male	Female	Total
Married	11,567	7,979	19,546	7,336	4,704	12,040
Common Law	2,490	1,287	3,777	1,451	711	2,162
Divorced	608	671	1,279	369	364	733
Separated	162	156	318	111	95	206
Widowed	3,118	10,561	13,679	2,591	8,288	10,879
Married (Not in Union)	1,015	884	1,899	708	543	1,251
Was Common Law	613	2,061	2,674	396	1,382	1,778
Never In Union	1,246	810	2,056	863	599	1,462
Not Stated	375	234	609	266	181	447
Total	21,194	24,643	45,837	14,091	16,867	30,958
Union Status	Percent			Percent		
	Male	Female	Total	Male	Female	Total
Married	54.6	32.4	42.6	52.1	27.9	38.9
Common Law	11.7	5.2	8.2	10.3	4.2	7.0
Divorced	2.9	2.7	2.8	2.6	2.2	2.4
Separated	0.8	0.6	0.7	0.8	0.6	0.7
Widowed	14.7	42.9	29.8	18.4	49.1	35.1
Married (Not in Union)	4.8	3.6	4.1	5.0	3.2	4.0
Was Common Law	2.9	8.4	5.8	2.8	8.2	5.7
Never In Union	5.9	3.3	4.5	6.1	3.6	4.7
Not Stated	1.8	0.9	1.3	1.9	1.1	1.4
Total	100	100	100	100	100	100

As the probability to remain single universally decreases with advance in age, in the 65 plus age group, only 5 percent of both sexes was never married, less than 1 percent was separated, 4 percent were married, but for one reason or the other the union was broken, while 6 percent “was common law”, meaning they once lived together in a “common-law” relationship but no longer lived in that union (Table 12.13).

⁵⁸ Rajagopal Dhar Chakraborti, The Greying of India: Population Ageing in the Context of Asia (PDF file)

12.8 Disabled Elderly

Aging is associated with many forms of disabilities, because the older a person becomes, the higher the probability of exhaustion (physical, mental or emotional), illness, poor health or poor fitness.

In 2002, a total of 18,052 elderly, who constituted 39.4 percent of the 60 plus age group and 14,417 elderly, 46.6 percent of the 65 plus age group, had some form of impairment. The proportion of elderly females who had disabilities (56.4 percent) was higher than the males (43.6 percent).

Table 12.14: Distribution of Elderly People (Aged 60 + and 65 +) With Disability, Guyana: 2002

Disability Type	Aged 60 & Over			Aged 65 & Over		
	Male	Female	Total	Male	Female	Total
Sight	2,485	3,190	5,675	1,921	2,508	4,429
Hearing	914	1,019	1,933	766	867	1,633
Speech	399	364	763	312	288	600
Mobility	1,634	2,242	3,876	1,279	1,861	3,140
Body Movement	1,015	1,476	2,491	807	1,243	2,050
Gripping	559	688	1,247	424	574	998
Learning	174	250	424	134	200	334
Mental	318	463	781	243	363	606
Sense of Taste	91	122	213	72	101	173
Others	279	370	649	188	265	453
Total	7,868	10,184	18,052	6,146	8,270	14,416
Percent						
Sight	13.8	17.7	31.4	13.3	17.4	30.7
Hearing	5.1	5.6	10.7	5.3	6.0	11.3
Speech	2.2	2.0	4.2	2.2	2.0	4.2
Mobility	9.0	12.4	21.5	8.9	12.9	21.8
Body Movement	5.6	8.2	13.8	5.6	8.6	14.2
Gripping	3.1	3.8	6.9	2.9	4.0	6.9
Learning	1.0	1.4	2.3	0.9	1.4	2.3
Mental	1.8	2.6	4.3	1.7	2.5	4.2
Sense of Taste	0.5	0.7	1.2	0.5	0.7	1.2
Others	1.5	2.0	3.6	1.3	1.8	3.1
Total	43.6	56.4	100	42.6	57.4	100

As reflected in Table 12.14, elderly people were mainly affected by visual impairment (31 percent), followed by mobility (22 percent), body movement (14 percent), hearing difficulty (11 percent), gripping (7 percent), and less than 5 percent in the other forms of disabilities, respectively.

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Generally, the proportions of impaired females were shown to be higher than males in all disability categories. As previously mentioned, this can be explained by the higher number of females who survived up to the terminal ages, as compared to the males.

APPENDIX A:

CONCEPTS AND DEFINITIONS

1. Census Day

It is the reference date to which the data or information collected in the census refers. This day was set at midnight on 15th September 2002. However, this cannot be logically accomplished satisfactorily in any one day, since it was impossible to canvass all the households in the country in one given day. In order to accomplish this task, enumeration begins the day after the designated Census Day, which accordingly is the reference date for all that was collected.

2. Sex Ratio

Sex ratio or masculinity ratio means the number of males to every 100 females within the population. One hundred is the point of balance of the sexes according to this measure. A sex ratio above 100 denotes an excess of males and below 100 denotes an excess of females. Accordingly, greater excess of males indicates higher sex ratio, while the greater the excess of females, the lower the sex ratio.

3. Household

The household consists of all persons who live together and share at least one meal daily, and at the time of enumeration, includes persons who were present on Census night but are no longer there, i. e., those who moved to other households, emigrated or died by the time of enumeration. All those persons who usually live in the household even if they did not spend census night with that household are included, as are those who were visiting the household and spent Census night there.

4. Visitation Record

The Visitation Record is used to monitor field visits made during the enumeration phase of the Census and to provide a register of all buildings, dwelling units, households, institutions, businesses and agricultural holdings visited in each Enumeration District. It also serves as a quick record of and the first source of establishing a population count for a particular area.

5. Institutional Population

The institutional population comprises the group of persons who are living and/or working, studying under prescribed rules and regulations on Census night. Examples include:

- i. Public Hospitals, House of Refuge, Sanatoria, Mental Homes, Leprosaria, and Nursing Homes with more than six beds;
- ii. Alms Houses, Poor Houses, Homes for the Aged, etc.;
- iii. Orphanages, Boarding Schools;

- iv. Monasteries, Nunneries, Convents, Presbyteries;
 - v. Hostels for Nurses, Working people and others;
 - vi. Hotels and Guest Houses accommodating more than six persons;
 - vii. Police Barracks and Stations, Military Barracks;
 - viii. Prisons, Reformatories, Detention Camps, etc.
 - ix. Youth Camps;
 - x. Homes for the Physically Handicapped and mentally Retarded;
 - xi. University Campus, Teachers' Colleges.
6. De Facto Census
All persons present in the household or other living quarters at midnight of the census day or all who passed night there are listed; in general, all persons are listed where they are found on the census day.
7. De Jure Census
All persons who usually live in the household are listed on the form whether they are present or not. Visitors who have a usual residence elsewhere are excluded from the listing but are counted at their usual residence; in short, persons are counted according to their usual place of residence.
8. Building
A building is a physical structure, which is separated and independent of any other structure. It must be covered by a roof and enclosed within external walls. A building may be a factory, shop, detached dwelling, apartment building, warehouse, repair shop, etc. Also, detached rooms relating to main buildings are treated as part of the main buildings, for example, detached kitchens, toilets, servant quarters, garages, etc.

Probability of Marriage

The Method

Marriage probabilities specific for age, indicate the chances that a person of a given age will marry during the period, usually a year⁵⁹. Since in this case, the marital status data is available for five year age group, the relationship is approximate, and assumes that the persons will change their marital status, that is, married, divorced, etc. anywhere during the interval of the five year period.

Firstly, to derive the central marriage rates used in the relationship between never married and married, the numerator for each age group is the ever married men or women separately, and the denominator is the total population in that age group. Relating marriage to either of the marital status, for instance, that marriage ends in divorce; the numerator is divorced persons by age, while the denominator is the summation of divorced and married. Similarly, the relationship, 'common-law' ends in 'was common-law', the numerator is 'was common-law' and

⁵⁹ Henry S. Shryock et al (1971) The Methods and Materials of Demography US Government Printing Office

denominator is the summation of both. Here, the method is limited to first marital status, that is, first marriage, divorce, etc.

Once the central rates are obtained as in the preceding paragraphs, the next step is to convert the rates into probabilities, which are obtained analogically, using the Greville's method⁶⁰, developed for transforming age specific death rates into probabilities of death (${}_nq_x$).

The Probabilities

Table 9.5 shows the probabilities of marriage for males and females in Guyana. As expected, the probability that teenage girls' premarital relations end in marriage is higher than boys. However, for either of them, the probability of remaining single decreases with increasing age, that by 25-29 years, only 4 percent remain who have never had their first marriage. Similarly, the probabilities that first marriage ends in divorce or separation was stronger among teenage boys than girls, but divorce became twice as high for females with increasing age, while separation was done with an almost equal degree of probabilities across the age groups. In all the union categories under review, besides the teenage group, the disruption of first marriage including common-law by divorce or widowhood, was more likely higher for females than males. In particular, common-law marriage's disruption by "was common-law" or no longer living together, is significant, that for females, only one fifth of them maintain the relationship, compared with an average of about three-fifths among the males who stay in the union. The period before the dissolution of such a union is important, but unavailability of appropriate data limited our investigation.

Appendix A 1: Probabilities That Never Married Will Lead To Marriage, Marriage To Divorced, Common-Law To Was Common-Law, Marriage To Separation and Marriage To Widowhood, For Males And Females, Guyana: 2002

Age Group	Never married				Common-law					
	ends into		Marriage ends		Marriage ends		Marriage ends		ends into was	
	Marriage		in Divorced		into separation		into widowhood		common-law	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
15 - 19	11.3	61.8	4.7	2.0	13.4	2.0	9.2	4.1	64.6	74.2
20 - 24	75.8	95.9	4.6	5.3	1.9	2.4	4.0	7.4	39.7	78.3
25 - 29	95.8	95.5	5.3	9.4	3.4	3.0	3.7	13.0	36.9	81.8
30 - 34	96.1	94.4	8.0	13.2	2.7	3.9	3.2	11.6	37.4	80.1
35 - 39	95.4	94.0	9.0	18.2	3.8	4.8	4.4	18.4	40.4	83.1
40 - 44	94.9	93.9	12.4	28.2	4.6	5.9	6.4	28.9	44.6	87.3
45 - 49	94.4	93.7	17.8	33.4	4.6	7.9	9.1	43.1	50.8	89.3
50 - 54	94.2	93.8	21.5	36.8	4.7	8.8	18.0	65.6	46.8	91.0

The probability that more older women, 30 years and over divorce than younger women, disrupt their marriage by requires investigation, as it may relate to status and development of women or some form of violence against older women. Unlike divorce, a higher proportion of women as widows is more likely the result of two concomitant factors as mentioned earlier (see section 9.1), that is, higher life expectancy of women than men, and most men seem to marry younger women.

⁶⁰ Ibid

On the one hand, the fact that there is no legal binding in common-law union, suggests the higher probability that any one party can quit after sensing the least sign of dissatisfaction. But, higher probability of males to maintain the relationship means males' cohabitations seem somehow stable than females, and may eventually lead to legal marriage. However, the social and economic characteristics of these men too are necessary for an in depth understanding of their intentions in keeping the relationships.

APPENDIX B:

DATA TABLES

Appendix B.2.1: Distribution of the Population by Ethnic Groups and Regions, 2002: Guyana

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Both Sexes											
African/Black	556	6,605	21,883	129,317	17,064	26,045	2,043	706	237	22,606	227,062
Amerindian	15,109	8,012	2,067	5,231	1,023	2,019	7,337	7,662	17,294	2,920	68,674
East Indian	341	23,599	67,477	116,481	30,283	84,948	1,565	218	97	1,268	326,277
Chinese	6	46	168	821	57	218	5	3	7	64	1,395
Mixed	8,220	10,868	11,358	57,026	4,000	10,348	6,612	1,406	1,716	14,175	125,729
Portuguese	19	105	69	1,060	1	61	24	94	17	47	1,497
White	21	19	36	294	0	54	9	5	17	21	476
Other	2	0	2	89	0	2	2	0	2	13	112
Total	24,274	49,254	103,060	310,319	52,428	123,695	17,597	10,094	19,387	41,114	751,222
Male											
African/Black	421	3,401	10,943	63,169	8,388	12,905	1,214	538	169	11,452	112,600
Amerindian	7,718	3,957	1,012	2,327	495	1,004	3,852	4,100	8,841	1,537	34,843
East Indian	216	11,889	34,152	58,246	15,280	42,830	826	156	65	582	164,242
Chinese	4	29	97	496	30	123	3	3	6	42	833
Mixed	4,422	5,504	5,680	27,088	2,013	5,152	3,454	869	904	7,217	62,303
Portuguese	17	60	42	608	1	32	18	80	11	24	893
White	15	7	17	158	0	33	4	3	13	15	265
Other	1	0	0	45	0	1	1	0	1	6	55
Total	12,814	24,847	51,943	152,137	26,207	62,080	9,372	5,749	10,010	20,875	376,033
Female											
African/Black	135	3,204	10,940	66,149	8,676	13,140	829	168	68	11,154	114,463
Amerindian	7,391	4,055	1,055	2,904	528	1,015	3,484	3,562	8,453	1,383	33,830
East Indian	125	11,710	33,325	58,235	15,003	42,117	739	63	32	686	162,035
Chinese	2	17	71	326	26	96	2	0	1	22	563
Mixed	3,798	5,363	5,678	29,937	1,987	5,195	3,158	536	812	6,958	63,422
Portuguese	2	45	27	452	0	29	6	13	6	24	604
White	6	12	18	137	0	21	4	2	4	6	210
Other	1	0	2	44	0	1	1	0	1	6	56
Total	11,460	24,406	51,116	158,184	26,220	61,614	8,223	4,344	9,377	20,239	375,183

Note: No-Contact persons (5,505) and ethnic group not stated (7,026) have been prorated.

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Appendix B.2.2: Distribution of the Population by Religious Affiliation, Guyana: 2002

Religious Affiliation	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Males											
Anglican	941	2,397	1,712	10,361	1,890	2,710	1,813	566	1,830	1,618	25,838
Methodist	23	456	680	3,418	473	409	62	30	20	415	5,986
Pentecostal	3,444	3,573	5,443	27,299	2,918	6,236	1,556	499	159	6,496	57,624
Catholic	5,341	1,513	1,148	11,378	308	1,193	640	2,724	5,824	620	30,689
Jehovah Witnesses	78	173	432	1,635	226	583	52	21	46	388	3,636
SDA	350	1,805	1,232	5,706	1,145	2,534	1,932	153	119	2,679	17,655
Bahai	0	9	36	114	2	24	2	1	13	20	222
Muslim	42	1,807	6,675	10,304	2,586	6,266	193	34	39	254	28,201
Hindu	60	9,182	22,544	36,588	10,282	28,825	424	75	27	262	108,270
Rastafarian	45	24	226	1,860	72	199	45	61	18	419	2,970
Other											
Christians	1,591	2,515	9,456	28,840	4,758	10,591	1,015	928	1,641	4,036	65,371
None	311	803	1,470	11,505	1,219	1,753	708	185	217	3,023	21,195
Other	302	400	397	1,347	215	481	841	437	3	321	4,743
Not Stated	286	189	492	1,781	113	273	88	34	52	324	3,634
Total	12,814	24,846	51,943	152,136	26,207	62,077	9,371	5,748	1,008	20,875	376,034
Females											
Anglican	766	2,367	1,790	11,274	1,969	2,838	1,563	351	1,718	1,461	26,096
Methodist	6	432	662	3,947	495	472	34	25	11	410	6,494
Pentecostal	3,401	3,954	6,172	34,542	3,758	7,305	1,676	368	171	7,860	69,207
Catholic	4,736	1,449	1,162	12,423	290	1,200	447	2,137	5,475	550	29,869
Jehovah Witnesses	74	216	513	2,145	303	699	68	20	62	451	4,550
SDA	314		1,427	7,003	1,459	2,823	1,840	74	138	2,883	19,897
Bahai	3	13	26	156	3	28	1	1	15	31	278
Muslim	22	1,708	6,283	9,089	2,446	5,912	142	17	20	208	25,849
Hindu	14	8,914	21,742	35,841	9,936	28,004	331	24	6	200	105,012
Rastafarian	7	7	85	684	14	89	5	12	11	120	1,035
Other											
Christians	1,421	2,529	9,631	31,487	4,617	10,649	923	814	1,612	4,045	67,727
None	183	308	672	6,305	496	808	379	57	105	1,423	10,738
Other	298	399	442	1,641	315	523	752	430	3	337	5,141
Not Stated	215	173	509	1,648	118	265	64	14	31	260	3,297
Total	11,460	24,405	51,116	158,185	26,219	61,615	8,225	4,344	9,378	20,239	375,186

Note: No-contact persons (5,505) and institutional popn. (7,403) have been proportional distributed.

SDA = Seven Day Adventist.

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Appendix B.2.3: Population Distribution by Age and Sex, Guyana: 1980 - 2002

Age group	1980			1991			2002		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	48,986	48,675	97,662	42,555	43,178	85,733	45,291	43,698	88,989
5-9	53,465	53,193	106,658	39,639	39,832	79,471	49,120	47,546	96,666
10-14	53,146	52,300	105,446	43,151	43,698	86,849	41,218	40,274	81,492
15-19	47,701	48,974	96,675	40,732	42,195	82,927	33,497	33,425	66,922
20-24	37,538	39,793	77,331	37,165	39,252	76,417	31,910	32,505	64,415
25-29	28,499	29,075	57,574	33,086	34,459	67,545	30,232	30,858	61,090
30-34	21,583	22,512	44,095	28,104	28,863	56,967	29,086	28,857	57,943
35-39	16,381	17,235	33,616	22,007	22,557	44,564	26,438	26,297	52,735
40-44	13,911	14,371	28,282	17,897	17,924	35,821	23,337	23,153	46,490
45-49	12,664	13,139	25,803	13,116	13,413	26,529	17,952	17,862	35,814
50-54	11,487	11,475	22,962	10,452	10,479	20,931	14,208	13,943	28,151
55-59	9,265	8,965	18,230	8,275	8,699	16,974	8,980	9,150	18,130
60-64	6,727	6,758	13,485	6,827	6,698	13,525	7,191	7,814	15,005
65-69	6,291	6,484	12,775	5,633	6,671	12,304	5,575	6,167	11,742
70-74	3,615	3,900	7,515	3,715	3,871	7,586	3,965	4,578	8,543
75 +	3,967	5,427	9,394	4,183	5,329	9,512	4,807	6,375	11,182
NS	1,155	910	2,065	4	16	20	3,226	2,686	5,912
Total	376,381	383,186	759,567	356,541	367,134	723,675	376,033	375,188	751,221

Note: NS =not stated

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Appendix B.2.4.: Distribution of the Population by Age Group, Sex and Region, Guyana: 2002

Age Group	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Both Sexes											
0-4	4,953	5,893	11,359	33,658	6,313	14,009	2,601	1,644	3,286	5,272	88,988
5-9	4,150	6,936	12,932	36,575	7,105	16,443	2,319	1,381	3,188	5,637	96,666
10-14	2,801	5,964	11,110	32,198	5,870	12,959	2,056	1,219	2,751	4,563	81,491
15-19	1,867	4,722	9,061	28,171	4,502	10,576	1,558	881	1,832	3,754	66,924
20-24	1,718	3,797	8,673	28,320	4,321	10,211	1,575	878	1,290	3,631	64,414
25-29	1,528	3,349	8,572	27,097	4,112	10,008	1,347	782	1,124	3,171	61,090
30-34	1,378	3,501	8,382	24,602	3,989	9,986	1,324	695	1,027	3,060	57,944
35-39	1,353	3,434	7,676	21,801	3,620	9,392	1,209	687	956	2,606	52,734
40-44	1,044	3,048	6,897	19,533	3,158	8,168	918	552	818	2,355	46,491
45-49	821	2,237	5,227	15,601	2,397	5,871	724	390	724	1,823	35,815
50-54	626	1,853	4,050	12,309	2,011	4,504	471	250	688	1,389	28,151
55-59	431	1,113	2,357	7,675	1,356	3,199	335	207	474	984	18,131
60-64	352	1,029	2,168	6,082	1,096	2,608	284	149	378	860	15,006
65-69	354	811	1,506	4,965	789	2,034	238	101	266	678	11,742
70-74	240	609	1,186	3,480	615	1,453	171	77	221	490	8,542
75+	276	710	1,478	4,665	904	1,913	213	102	304	617	11,182
NS	382	248	427	3,586	270	362	254	99	61	223	5,912
Total	24,274	49,254	103,061	310,318	52,428	123,696	17,597	10,094	19,388	41,113	751,223
Males											
0-4	2,467	3,023	5,855	16,956	3,229	7,191	1,329	851	1,663	2,728	45,292
5-9	2,102	3,520	6,583	18,583	3,515	8,406	1,177	739	1,619	2,877	49,121
10-14	1,448	3,001	5,630	16,232	3,006	6,568	1,026	595	1,394	2,317	41,217
15-19	959	2,398	4,485	14,083	2,205	5,294	794	476	942	1,860	33,496
20-24	914	1,880	4,275	13,765	2,119	5,087	859	531	661	1,818	31,909
25-29	850	1,637	4,306	12,988	2,041	5,010	740	467	594	1,600	30,233
30-34	757	1,768	4,233	11,952	2,028	5,115	726	474	545	1,490	29,088
35-39	758	1,759	3,870	10,480	1,869	4,708	710	452	521	1,311	26,438
40-44	609	1,554	3,517	9,432	1,567	4,156	529	332	445	1,196	23,337
45-49	457	1,150	2,753	7,454	1,204	2,931	417	245	380	962	17,953
50-54	364	965	2,047	6,067	956	2,265	271	156	383	734	14,208
55-59	246	565	1,150	3,710	704	1,573	179	128	225	501	8,981
60-64	189	509	1,056	2,802	541	1,227	154	91	200	422	7,191
65-69	176	379	758	2,281	376	933	121	53	141	359	5,577
70-74	135	273	580	1,534	289	639	92	46	110	269	3,967
75+	142	334	643	1,854	419	799	105	48	161	301	4,806
NS	244	132	203	1,964	138	178	146	65	26	130	3,226
Total	12,817	24,847	51,944	152,137	26,206	62,080	9,375	5,749	10,010	20,875	376,040

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Appendix B.2.4 Cont'd: Distribution of the Population by Age Group, Sex and Region, Guyana: 2002											
Age Group	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Females											
0-4	2,487	2,869	5,504	16,703	3,084	6,818	1,272	793	1,623	2,545	43,698
5-9	2,048	3,416	6,349	17,992	3,590	8,037	1,142	642	1,569	2,760	47,545
10-14	1,352	2,964	5,480	15,966	2,864	6,391	1,030	624	1,357	2,246	40,274
15-19	908	2,323	4,576	14,088	2,297	5,281	764	405	889	1,894	33,425
20-24	803	1,917	4,398	14,556	2,202	5,124	716	347	629	1,813	32,505
25-29	678	1,712	4,267	14,109	2,071	4,998	608	315	530	1,571	30,859
30-34	622	1,733	4,148	12,650	1,961	4,871	599	221	483	1,570	28,858
35-39	596	1,675	3,806	11,321	1,751	4,684	499	235	435	1,295	26,297
40-44	435	1,494	3,379	10,101	1,591	4,011	389	219	373	1,159	23,151
45-49	364	1,087	2,474	8,147	1,193	2,940	307	145	344	861	17,862
50-54	262	888	2,003	6,242	1,055	2,239	200	94	305	655	13,943
55-59	185	548	1,207	3,965	652	1,626	157	79	249	483	9,151
60-64	164	521	1,112	3,280	554	1,381	131	57	178	437	7,815
65-69	179	432	748	2,685	414	1,101	118	48	125	319	6,169
70-74	105	336	606	1,947	326	815	78	31	111	222	4,577
75+	134	376	835	2,811	485	1,114	107	54	143	316	6,375
NS	138	116	224	1,622	132	184	108	34	35	93	2,686
Total	11,460	24,407	51,116	158,185	26,222	61,615	8,225	4,343	9,378	20,239	375,190

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Appendix 2.5: Distribution of Institutional Population by Age and Sex and Regions, 2002: Guyana

Age Group	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Both Sexes											
0 -4	7	6	1	65	0	8	4	0	0	1	92
5-9	5	4	3	104	0	44	3	0	0	1	164
10-14	5	130	6	228	0	70	197	123	0	22	781
15-19	55	136	10	511	0	126	135	14	0	26	1,013
20-24	139	18	21	477	0	90	120	1	0	82	948
25-29	142	9	9	307	0	75	136	1	0	114	793
30-34	91	14	7	283	0	72	107	0	0	122	696
35-39	94	13	5	194	0	57	104	1	0	155	623
40-44	67	6	7	151	0	35	57	3	0	129	455
45-49	32	4	2	114	0	29	35	0	0	82	298
50-54	30	3	4	99	1	38	22	0	0	52	249
55-59	10	3	4	62	0	26	10	0	0	30	145
60-64	5	2	2	60	0	31	2	0	0	11	113
65 +	31	24	41	771	0	81	44	0	26	15	1,033
Total	713	372	122	3,426	1	782	976	143	26	842	7,403
Males											
0 -4	4	3	1	37	0	3	3	0	0	1	52
5-9	4	1	3	59	0	22	2	0	0	1	92
10-14	1	65	6	118	0	40	80	40	0	8	358
15-19	46	88	10	281	0	114	64	3	0	17	623
20-24	122	13	19	323	0	74	111	1	0	76	739
25-29	123	4	9	240	0	62	126	1	0	111	676
30-34	79	5	5	247	0	44	104	0	0	117	601
35-39	79	5	3	168	0	38	99	1	0	149	542
40-44	59	2	3	122	0	23	56	3	0	122	390
45-49	28	3	2	85	0	19	34	0	0	79	250
50-54	26	2	1	75	0	23	18	0	0	49	194
55-59	10	2	4	51	0	19	10	0	0	30	126
60-64	4	0	0	36	0	23	2	0	0	11	76
65 +	28	17	15	446	0	48	37	0	26	14	631
Total	613	210	81	2,288	0	552	746	49	26	785	5,350
Females											
0 -4	3	3	0	28	0	5	1	0	0	0	40
5-9	1	3	0	45	0	22	1	0	0	0	72
10-14	4	65	0	110	0	30	117	83	0	14	423
15-19	9	48	0	230	0	12	71	11	0	9	390
20-24	17	5	2	154	0	16	9	0	0	6	209
25-29	19	5	0	67	0	13	10	0	0	3	117
30-34	12	9	2	36	0	28	3	0	0	5	95
35-39	15	8	2	26	0	19	5	0	0	6	81
40-44	8	4	4	29	0	12	1	0	0	7	65
45-49	4	1	0	29	0	10	1	0	0	3	48
50-54	4	1	3	24	1	15	4	0	0	3	55
55-59	0	1	0	11	0	7	0	0	0	0	19
60-64	1	2	2	24	0	8	0	0	0	0	37
65 +	3	7	26	325	0	33	7	0	0	1	402
Total	100	162	41	1,138	1	230	230	94	0	57	2,053

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Appendix B.2.6: Population Distribution by Single Year and Sex, Guyana: 2002

Age	Males	Females	Total	Age	Males	Females	Total	Age	Males	Females	Total
0	8,708	8,494	17,202	35	5,320	5,371	10,691	70	970	1,109	2,079
1	8,317	8,080	16,397	36	5,399	5,413	10,812	71	832	982	1,815
2	9,198	8,724	17,921	37	5,208	5,166	10,374	72	896	998	1,894
3	9,030	8,623	17,653	38	5,297	5,123	10,420	73	639	755	1,394
4	10,038	9,778	19,816	39	5,213	5,224	10,437	74	628	733	1,361
5	9,593	9,041	18,634	40	5,100	5,146	10,246	75	614	719	1,333
6	9,712	9,258	18,969	41	4,652	4,698	9,350	76	556	621	1,178
7	10,346	9,995	20,340	42	4,953	4,973	9,925	77	505	602	1,107
8	10,143	10,085	20,228	43	4,393	4,313	8,706	78	448	539	987
9	9,327	9,167	18,494	44	4,240	4,023	8,263	79	386	465	851
10	8,770	8,590	17,360	45	4,030	4,086	8,116	80	353	454	807
11	8,178	7,825	16,002	46	3,642	3,725	7,367	81	324	460	784
12	7,977	7,852	15,829	47	3,569	3,575	7,144	82	285	394	679
13	8,375	8,279	16,654	48	3,357	3,287	6,643	83	200	302	502
14	7,920	7,728	15,647	49	3,354	3,190	6,544	84	140	256	396
15	7,405	7,479	14,884	50	3,399	3,149	6,548	85	150	245	395
16	6,829	6,917	13,746	51	2,819	2,744	5,562	86	116	184	300
17	6,932	6,813	13,745	52	2,925	2,985	5,910	87	153	176	329
18	5,998	5,879	11,877	53	2,471	2,461	4,932	88	121	204	325
19	6,333	6,337	12,671	54	2,594	2,606	5,200	89	113	159	272
20	6,478	6,777	13,255	55	2,180	2,237	4,417	90	86	145	231
21	6,454	6,573	13,027	56	1,923	2,010	3,933	91	57	92	149
22	6,585	6,617	13,201	57	1,808	1,775	3,583	92	47	82	129
23	6,312	6,332	12,644	58	1,398	1,408	2,806	93	42	61	104
24	6,081	6,206	12,287	59	1,672	1,719	3,391	94	32	52	85
25	5,994	6,235	12,229	60	1,801	2,104	3,905	95	15	35	50
26	6,166	6,142	12,308	61	1,508	1,703	3,212	96	18	35	53
27	6,063	6,243	12,306	62	1,570	1,654	3,224	97	23	34	57
28	5,940	6,130	12,070	63	1,154	1,119	2,273	98	22	56	79
29	6,069	6,108	12,178	64	1,158	1,234	2,392	NS	3,226	2,686	5,912
30	6,436	6,446	12,882	65	1,233	1,385	2,618	Total	376,034	375,189	751,223
31	5,808	5,849	11,658	66	1,301	1,363	2,664				
32	6,112	5,969	12,081	67	1,121	1,278	2,399				
33	5,264	5,269	10,533	68	997	1,045	2,042				
34	5,466	5,324	10,790	69	923	1,096	2,019				

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Appendix B.3.1: Place of Birth of Persons Born in Guyana by Place of Residence, Guyana: 2002

Appendix B.5.1: Place of Birth of Persons Born in Guyana by Place of Residence, Guyana 2002

Age Group	PLACE OF BIRTH										Not stated	Total
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10		
Both Sexes												
0-4	5,067	5,925	10,957	32,837	6,203	13,834	2,602	1,664	3,125	5,140	12	87,366
5-9	4,444	6,991	12,300	34,789	6,983	16,198	2,450	1,415	3,052	5,603	10	94,235
10-19	5,661	11,176	18,992	54,348	10,392	23,115	3,706	2,016	4,641	8,434	20	142,501
20-29	4,347	8,813	16,886	47,726	9,008	20,857	3,082	1,380	2,586	7,094	21	121,800
30-39	3,574	8,820	16,638	38,911	8,471	20,731	2,393	961	2,079	5,058	25	107,661
40-49	2,524	6,815	13,316	28,761	6,707	15,235	1,601	671	1,619	3,005	15	80,269
50-59	1,485	3,875	7,500	15,897	4,168	8,740	680	345	1,167	1,222	11	45,090
60+	1,569	4,098	7,362	15,421	4,239	8,928	673	343	1,056	1,113	11	44,813
NS	253	183	196	703	168	328	117	89	77	121	3,093	5,328
Total	28,924	56,696	104,147	269,393	56,339	127,966	17,304	8,884	19,402	36,790	3,218	729,063
Males												
0-4	2,538	3,006	5,669	16,541	3,156	7,086	1,320	866	1,579	2,667	8	44,436
5-9	2,241	3,571	6,231	17,732	3,438	8,282	1,245	746	1,539	2,839	5	47,869
10-19	2,860	5,583	9,600	27,323	5,276	11,556	1,820	1,033	2,363	4,222	11	71,647
20-29	2,032	4,330	8,410	23,151	4,511	10,303	1,473	724	1,333	3,434	13	59,714
30-39	1,715	4,403	8,390	18,965	4,291	10,421	1,141	535	1,109	2,454	12	53,436
40-49	1,260	3,377	6,752	14,077	3,357	7,604	799	326	832	1,527	11	39,922
50-59	744	1,951	3,628	7,904	2,112	4,288	350	167	602	651	9	22,406
60+	775	1,879	3,491	6,913	2,037	3,981	313	161	526	572	5	20,653
NS	157	95	98	387	92	162	56	51	28	72	1,605	2,803
Total	14,322	28,195	52,269	132,993	28,270	63,683	8,517	4,609	9,911	18,438	1,679	362,886
Females												
0-4	2,529	2,919	5,288	16,296	3,047	6,748	1,282	798	1,546	2,473	4	42,930
5-9	2,203	3,420	6,069	17,057	3,545	7,916	1,205	669	1,513	2,764	5	46,366
10-19	2,801	5,593	9,392	27,025	5,116	11,559	1,886	983	2,278	4,212	9	70,854
20-29	2,315	4,483	8,476	24,575	4,497	10,554	1,609	656	1,253	3,660	8	62,086
30-39	1,859	4,417	8,248	19,946	4,180	10,310	1,252	426	970	2,604	13	54,225
40-49	1,264	3,438	6,564	14,684	3,350	7,631	802	345	787	1,478	4	40,347
50-59	741	1,924	3,872	7,993	2,056	4,452	330	178	565	571	2	22,684
60+	794	2,219	3,871	8,508	2,202	4,947	360	182	530	541	6	24,160
NS	96	88	98	316	76	166	61	38	49	49	1,488	2,525
Total	14,602	28,501	51,878	136,400	28,069	64,283	8,787	4,275	9,491	18,352	1,539	366,177

Note: Institutional population (7,403) and No-contact persons (5,505) are not included.

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Appendix B.5.1: School Attending and School-Going Age Population by Sex and Region, Guyana: 2002

Region	School attending population					School-going age population				
	5-9	10-14	15-19	20-24	Total	5-9	10-14	15-19	20-24	Total
Both Sexes										
Region 1	3,533	2,306	353	39	6,231	4,128	2,784	1,804	1,572	10,288
Region 2	6,602	5,342	1,645	221	13,810	6,883	5,793	4,553	3,752	20,981
Region 3	12,531	10,185	3,409	557	26,682	12,875	11,058	9,014	8,617	41,564
Region 4	35,465	30,121	13,145	3,711	82,442	36,132	31,673	27,402	27,584	122,791
Region 5	6,922	5,379	1,672	203	14,176	7,075	5,846	4,483	4,303	21,707
Region 6	15,950	11,736	3,751	411	31,848	16,278	12,794	10,373	10,047	49,492
Region 7	2,167	1,699	450	54	4,370	2,307	1,851	1,417	1,449	7,024
Region 8	1,264	1,015	202	27	2,508	1,375	1,091	863	873	4,202
Region 9	2,958	2,642	903	38	6,541	3,175	2,740	1,824	1,285	9,024
Region 10	5,432	4,334	1,889	420	12,075	5,565	4,484	3,681	3,504	17,234
Total	92,824	74,759	27,419	5,681	200,683	95,793	80,114	65,414	62,986	304,307
Males										
Region 1	1,771	1,174	184	19	3,148	2,087	1,440	908	788	5,223
Region 2	3,347	2,684	809	103	6,943	3,493	2,914	2,293	1,853	10,553
Region 3	6,355	5,142	1,616	251	13,364	6,551	5,600	4,456	4,238	20,845
Region 4	18,006	15,102	6,298	1,543	40,949	18,344	15,957	13,668	13,311	61,280
Region 5	3,413	2,733	800	88	7,034	3,499	2,993	2,195	2,110	10,797
Region 6	8,156	5,895	1,842	150	16,043	8,320	6,478	5,141	4,975	24,914
Region 7	1,111	856	219	20	2,206	1,171	942	727	745	3,585
Region 8	680	510	113	16	1,319	736	554	471	528	2,289
Region 9	1,495	1,348	508	24	3,375	1,612	1,388	938	658	4,596
Region 10	2,772	2,189	906	178	6,045	2,838	2,279	1,819	1,719	8,655
Total	47,106	37,633	13,295	2,392	100,426	48,651	40,545	32,616	30,925	152,737
Females										
Region 1	1,762	1,132	169	20	3,083	2,041	1,344	896	784	5,065
Region 2	3,255	2,658	836	118	6,867	3,390	2,879	2,260	1,899	10,428
Region 3	6,176	5,043	1,793	306	13,318	6,324	5,458	4,558	4,379	20,719
Region 4	17,459	15,019	6,847	2,168	41,493	17,788	15,716	13,734	14,273	61,511
Region 5	3,509	2,646	872	115	7,142	3,576	2,853	2,288	2,193	10,910
Region 6	7,794	5,841	1,909	261	15,805	7,958	6,316	5,232	5,072	24,578
Region 7	1,056	843	231	34	2,164	1,136	909	690	704	3,439
Region 8	584	505	89	11	1,189	639	537	392	345	1,913
Region 9	1,463	1,294	395	14	3,166	1,563	1,352	886	627	4,428
Region 10	2,660	2,145	983	242	6,030	2,727	2,205	1,862	1,785	8,579
Total	45,718	37,126	14,124	3,289	100,257	47,142	39,569	32,798	32,061	151,570

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Appendix B.5.2: Distribution of Population 15 Years and Over by Highest Level of Qualification and Region, Guyana: 2002

Region	Highest Qualification										Total
	None	School Leaving	Junior Cambridge	GCE O/L or CXC	GCE A/L or CAPE	Higher Sch Cert	Cert/Dip Tertiary	Bachelor Degree	Post Graduate		
									Other		
Both Sexes											
Region 1	9,525	1,057	11	353	16	5	222	25	3	61	11,278
Region 2	22,935	2,228	78	3,187	64	27	978	122	3	166	29,788
Region 3	50,947	3,524	179	7,870	184	68	2,813	686	209	406	66,887
Region 4	125,495	16,172	1,068	27,934	1,184	742	18,368	6,360	818	1,691	199,833
Region 5	25,147	1,887	55	3,573	67	17	1,614	183	35	152	32,731
Region 6	59,385	2,419	157	9,749	255	82	5,830	543	8	266	78,693
Region 7	6,640	1,135	31	614	12	4	1,090	31	3	33	9,595
Region 8	4,512	831	7	235	4	1	76	30	0	13	5,709
Region 9	3,857	5,434	0	386	183	0	126	47	0	0	10,033
Region 10	15,045	2,454	135	3,351	104	34	2,550	423	3	207	24,306
Total	323,489	37,143	1,721	57,251	2,072	981	33,667	8,450	1,083	2,996	468,853
Males											
Region 1	5,021	553	7	171	10	3	133	16	3	29	5,947
Region 2	11,747	1,086	35	1,438	30	14	445	79	3	52	14,929
Region 3	26,051	1,722	89	3,438	111	37	1,367	364	140	156	33,473
Region 4	62,489	7,377	498	12,069	583	339	8,008	3,245	516	565	95,690
Region 5	12,846	903	34	1,427	36	10	786	116	25	64	16,247
Region 6	30,121	1,126	69	4,267	127	46	2,714	375	4	110	38,960
Region 7	3,618	558	19	290	6	2	516	21	2	14	5,047
Region 8	2,779	490	6	128	4	0	43	21	0	7	3,479
Region 9	1,906	2,937	0	205	100	0	80	28	0	0	5,256
Region 10	7,716	1,171	74	1,286	45	19	1,235	266	3	90	11,904
Total	164,294	17,923	830	24,720	1,052	470	15,329	4,530	695	1,087	230,932
Females											
Region 1	4,504	505	4	181	6	2	88	9	0	32	5,331
Region 2	11,189	1,142	42	1,748	33	13	532	43	0	115	14,859
Region 3	24,896	1,803	90	4,432	73	31	1,446	322	70	250	33,414
Region 4	63,006	8,795	570	15,864	601	403	10,360	3,115	302	1,126	104,143
Region 5	12,301	984	22	2,146	31	7	828	68	10	87	16,484
Region 6	29,264	1,293	88	5,482	128	35	3,115	168	4	156	39,733
Region 7	3,022	577	12	324	6	2	574	10	1	19	4,548
Region 8	1,733	340	1	107	0	1	33	8	0	6	2,230
Region 9	1,951	2,497	0	181	83	0	46	19	0	0	4,777
Region 10	7,329	1,283	61	2,064	59	15	1,315	158	0	117	12,402
Total	159,195	19,220	891	32,531	1,020	511	18,338	3,920	387	1,909	237,921

Note: Age not stated (5,341) excluded and qualification not stated (11,533 persons) prorated.

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Appendix B.6.1: Distribution of the Population by Principal Activities One Week Preceding the Census by Sex, Guyana: 2002

Age Group	Worked	Had Work	Looked for work	Wanted work	Attended School	Home Duties	Retired	Disabled	Other Activity	Not stated	Total
Both Sexes											
15 - 19	14,405	24	6,679	1,561	27,300	14,425	24	364	634	0	65,416
20 - 24	32,821	55	5,570	1,109	3,218	19,157	25	488	547	0	62,990
25 - 29	34,430	53	3,426	688	673	18,773	27	553	453	777	59,853
30 - 34	33,955	51	2,575	515	241	17,722	14	654	404	694	56,825
35 - 39	31,804	36	2,138	472	141	15,646	32	694	279	488	51,730
40 - 44	28,476	47	1,679	417	71	13,412	58	776	285	474	45,695
45 - 49	21,642	41	1,230	274	43	10,447	185	798	249	341	35,250
50 - 54	16,073	18	819	268	16	8,387	607	988	211	306	27,693
55 - 59	8,493	11	468	117	10	5,666	1,728	909	120	329	17,851
60 - 64	4,615	4	228	73	12	4,491	4,079	929	73	276	14,780
65 - 69	2,278	2	97	37	18	2,763	5,266	865	40	188	11,554
70 - 74	934	2	30	18	4	1,408	5,025	750	22	185	8,378
75 +	582	2	36	9	9	877	7,429	1,483	39	372	10,838
Total	230,508	346	24,975	5,558	31,756	133,174	24,499	10,251	3,356	4,430	468,853
Males											
15 - 19	10,407	16	3,794	998	13,461	3,222	12	213	495	0	32,618
20 - 24	22,823	43	3,086	694	1,507	2,046	10	312	404	0	30,925
25 - 29	24,491	32	1,927	417	265	1,093	17	361	342	381	29,326
30 - 34	24,319	32	1,508	293	73	975	4	425	316	319	28,264
35 - 39	22,265	27	1,298	286	44	833	23	477	213	233	25,699
40 - 44	19,605	37	1,095	279	22	749	26	511	222	227	22,773
45 - 49	14,811	34	874	180	16	640	118	558	184	149	17,564
50 - 54	11,220	14	600	186	6	565	359	652	156	147	13,905
55 - 59	6,166	9	359	89	4	402	946	563	85	162	8,785
60 - 64	3,374	4	176	48	1	391	2,385	492	43	145	7,059
65 - 69	1,695	1	75	24	11	242	2,891	422	25	84	5,470
70 - 74	703	2	21	13	4	144	2,586	304	14	92	3,883
75 +	464	2	23	7	3	108	3,319	550	15	170	4,661
Total	162,343	253	14,836	3,514	15,417	11,410	12,696	5,840	2,514	2,109	230,932
Females											
15 - 19	3,998	8	2,885	563	13,839	11,203	12	151	139	0	32,798
20 - 24	9,998	12	2,484	415	1,711	17,111	15	176	143	0	32,065
25 - 29	9,939	21	1,499	271	408	17,680	10	192	111	396	30,527
30 - 34	9,636	19	1,067	222	168	16,747	10	229	88	375	28,561
35 - 39	9,539	9	840	186	97	14,813	9	217	66	255	26,031
40 - 44	8,871	10	584	138	49	12,663	32	265	63	247	22,922
45 - 49	6,831	7	356	94	27	9,807	67	240	65	192	17,686
50 - 54	4,853	4	219	82	10	7,822	248	336	55	159	13,788
55 - 59	2,327	2	109	28	6	5,264	782	346	35	167	9,066
60 - 64	1,241	0	52	25	11	4,100	1,694	437	30	131	7,721
65 - 69	583	1	22	13	7	2,521	2,375	443	15	104	6,084
70 - 74	231	0	9	5	0	1,264	2,439	446	8	93	4,495
75 +	118	0	13	2	6	769	4,110	933	24	202	6,177
Total	68,165	93	10,139	2,044	16,339	121,764	11,803	4,411	842	2,321	237,921

Note: Age 'not stated' (5,341) and 'No-Contact' (5,505) of the entire popn & "Institutional Popn" (6,366) were excluded.

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Appendix B.6.2: Principal Activities of the Population 15 Years and Above, by Sex and Region, Guyana: 2002

Principal Activities	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Both sexes											
Worked	5,499	13,701	32,836	104,295	13,487	34,700	5,625	2,808	5,621	11,936	230,508
Had Work	5	18	77	134	27	48	7	1	5	24	346
Looked for work	598	1,943	2,281	12,154	1,919	3,270	442	361	207	1,800	24,975
Wanted work	494	568	576	1,837	395	636	184	309	223	336	5,558
Attended School	362	1,762	3,915	15,749	1,960	4,233	503	220	887	2,165	31,756
Home Duties	3,381	9,314	21,420	47,048	11,891	28,213	2,182	1,568	2,175	5,982	133,174
Retired/Too Old	498	1,326	3,685	10,618	1,681	4,713	320	170	282	1,206	24,499
Disabled	227	734	1,448	4,197	929	1,966	157	89	91	413	10,251
Other Activity	61	174	283	1,791	299	406	70	56	51	165	3,356
Not Stated	153	248	366	2,010	143	508	105	127	491	279	4,430
Total	11,278	29,788	66,887	199,833	32,731	78,693	9,595	5,709	10,033	24,306	468,853
Males											
Worked	4,127	10,526	24,939	66,789	10,762	27,045	3,980	2,309	3,951	7,915	162,343
Had Work	4	10	61	88	26	38	5	1	4	16	253
Looked for work	433	1,123	1,460	6,693	1,224	2,284	223	294	146	956	14,836
Wanted work	241	300	419	1,111	299	527	87	202	120	208	3,514
Attended School	188	892	1,867	7,506	945	2,092	239	122	505	1,061	15,417
Home Duties	403	720	1,348	3,916	1,108	2,711	152	311	195	546	11,410
Retired/Too Old	271	673	2,037	5,200	1,004	2,476	149	76	132	678	12,696
Disabled	128	402	900	2,280	553	1,157	91	53	48	228	5,840
Other Activity	53	138	218	1,300	233	318	54	48	29	123	2,514
Not Stated	99	145	224	807	93	312	67	63	126	173	2,109
Total	5,947	14,929	33,473	95,690	16,247	38,960	5,047	3,479	5,256	11,904	230,932
Females											
Worked	1,372	3,175	7,897	37,506	2,725	7,655	1,645	499	1,670	4,021	68,165
Had Work	1	8	16	46	1	10	2	0	1	8	93
Looked for work	165	820	821	5,461	695	986	219	67	61	844	10,139
Wanted work	253	268	157	726	96	109	97	107	103	128	2,044
Attended School	174	870	2,048	8,243	1,015	2,141	264	98	382	1,104	16,339
Home Duties	2,978	8,594	20,072	43,132	10,783	25,502	2,030	1,257	1,980	5,436	121,764
Retired/Too Old	227	653	1,648	5,418	677	2,237	171	94	150	528	11,803
Disabled	99	332	548	1,917	376	809	66	36	43	185	4,411
Other Activity	8	36	65	491	66	88	16	8	22	42	842
Not Stated	54	103	142	1,203	50	196	38	64	365	106	2,321
Total	5,331	14,859	33,414	104,143	16,484	39,733	4,548	2,230	4,777	12,402	237,921

Note: Institutional popn. (6,366) and Age "not stated" (5,341) were excluded.

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Appendix B.6.4: Distribution of the Employed Persons 15 Years and Over by Major Occupation Group One Week Preceding the Census, by Region and Sex, Guyana: 2002

No.	Occupations	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Males												
	Legislators, Senior Officials &											
1	Managers	46	224	499	2,770	243	548	114	79	99	167	4,789
2	Professionals	14	68	279	1,940	73	225	20	7	51	70	2,747
	Associate											
3	Professionals	170	395	818	3,553	347	902	120	76	191	441	7,013
4	Clerks	37	203	852	3,236	172	577	49	10	19	241	5,396
	Service Workers, Shop & Market											
5	Sales Workers	304	1,132	2,616	10,197	1,046	2,647	358	148	122	934	19,504
	Skilled Agricultural & Fishery											
6	Workers/Farmers	1,323	2,075	3,363	4,120	1,993	4,220	879	641	2,788	838	22,240
	Craft and Related											
7	Trades Workers	815	1,712	4,702	16,656	1,730	4,113	856	652	260	2,258	33,754
	Plant & Machine Operators &											
8	Assemblers	300	1,454	3,074	8,123	1,268	3,022	436	176	145	1,776	19,774
9	Elementary Occup.	1,116	3,265	8,788	15,767	3,911	10,821	1,152	518	276	1,196	46,810
10	Not Stated	6	8	9	515	5	8	1	3	4	10	569
	Total	4,131	10,536	25,000	66,877	10,788	27,083	3,985	2,310	3,955	7,931	162,596
Females												
	Legislators, Senior Officials &											
1	Managers	8	40	109	1,223	23	110	19	5	33	63	1,633
2	Professionals	6	60	275	2,153	89	143	21	2	40	90	2,879
	Associate											
3	Professionals	237	718	1,339	4,910	707	1,622	229	121	185	931	10,999
4	Clerks	54	308	1,399	7,099	309	975	123	13	53	539	10,872
	Service Workers, Shop & Market											
5	Sales Workers	200	578	1,523	8,565	562	1,538	362	114	93	1,190	14,725
	Skilled Agricultural & Fishery											
6	Workers/Farmers	398	267	198	348	101	298	456	151	1,007	115	3,339
	Craft and Related											
7	Trades Workers	62	202	508	2,260	109	318	65	21	61	210	3,816
	Plant & Machine Operators &											
8	Assemblers	6	21	159	604	37	44	7	2	3	57	940
9	Elementary Occup.	401	987	2,399	10,183	787	2,615	364	66	195	833	18,830
10	Not Stated	1	2	4	207	2	2	1	4	1	1	225
	Total	1,373	3,183	7,913	37,552	2,726	7,665	1,647	499	1,671	4,029	68,258

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Appendix B. 6.5: Percent Distribution of Employed Persons 15 Years and Over by Employment Status, by Region and Sex, Guyana: 2002

Region	Paid Employee Govt	Paid Employee - Pvt	Unpaid family worker	Trainee	Employer	Own Account	Total
Both Sexes							
Region 1	849	2,521	570	1	100	1,463	5,504
Region 2	2,357	7,448	553	17	468	2,875	13,719
Region 3	8,761	16,458	471	24	970	6,229	32,913
Region 4	23,897	57,523	1,047	135	3,364	18,465	104,429
Region 5	4,648	5,358	320	22	372	2,794	13,514
Region 6	12,129	13,127	531	26	884	8,051	34,748
Region 7	705	2,518	455	2	180	1,772	5,632
Region 8	266	1,523	102	0	91	826	2,809
Region 9	665	874	845	4	93	3,145	5,626
Region 10	3,769	5,560	208	10	343	2,069	11,960
Total	58,046	112,910	5,103	241	6,866	47,688	230,854
Males							
Region 1	435	2,110	279	1	85	1,221	4,131
Region 2	1,130	6,421	293	11	407	2,274	10,536
Region 3	5,833	13,091	302	20	869	4,886	25,000
Region 4	12,526	38,703	520	110	2,699	12,319	66,877
Region 5	3,314	4,617	223	20	346	2,268	10,788
Region 6	9,124	10,655	356	25	781	6,142	27,083
Region 7	283	2,057	132	1	155	1,357	3,985
Region 8	113	1,370	57	0	83	686	2,310
Region 9	366	638	351	3	68	2,529	3,955
Region 10	2,029	4,151	121	7	269	1,353	7,931
Total	35,152	83,814	2,635	199	5,762	35,035	162,596
Females							
Region 1	415	411	290	0	15	242	1,373
Region 2	1,227	1,027	261	6	61	601	3,183
Region 3	2,929	3,367	170	4	101	1,343	7,913
Region 4	11,371	18,820	527	25	664	6,146	37,552
Region 5	1,333	741	97	2	27	526	2,726
Region 6	3,005	2,473	175	1	103	1,909	7,665
Region 7	422	461	323	1	26	415	1,647
Region 8	153	153	45	0	8	140	499
Region 9	299	236	494	1	25	616	1,671
Region 10	1,740	1,409	87	2	75	716	4,029
Total	22,894	29,096	2,468	42	1,104	12,653	68,258

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Appendix B.7.1: Distribution of Households By Size and Number of Bedrooms, Guyana: 2002

Household size	Number of Bedrooms								Total
	Br = 1	Br = 2	Br = 3	Br = 4	Br = 5	Br = 6	Br = 7	Br = 8 +	
1 Person	10,317	6,937	3,911	819	191	44	44	65	22,328
2 Persons	8,826	10,007	6,106	1,162	247	59	61	96	26,564
3 Persons	9,149	12,365	7,567	1,322	288	57	83	129	30,960
4 Persons	9,160	13,826	9,391	1,628	354	79	74	137	34,649
5 Persons	6,486	10,642	7,689	1,580	378	73	63	126	27,037
6 Persons	3,955	6,358	4,909	1,129	303	65	31	80	16,830
7 Persons	2,439	3,646	2,867	727	229	45	26	44	10,023
8 Persons	1,467	1,940	1,534	449	115	30	24	36	5,595
9 Persons	830	1,136	884	281	75	26	9	20	3,261
10 Persons	459	610	524	171	51	18	6	9	1,848
11 Persons	236	329	316	115	43	14	3	8	1,064
12 Persons +	297	444	380	183	71	26	11	16	1,428
Not Stated	412	360	213	22	15	0	0	0	1,022
Total	54,033	68,600	46,291	9,588	2,360	536	435	766	182,609

Note: Br = bedroom

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Appendix B. 8.1: Distribution of Disabled Citizens by Types of Disability Classified by Region and Sex, Guyana: 20

Region	Body							Sense of			Total
	Sight	Hearing	Speech	Mobility	Movement	Gripping	Learning	Mental	Taste	Others	
Both Sexes											
Region 1	745	363	218	325	237	208	198	231	172	47	2,744
Region 2	1,378	354	254	524	306	181	166	240	43	219	3,665
Region 3	1,898	569	517	1,086	716	382	324	529	67	169	6,257
Region 4	5,553	1,588	1,432	3,140	1,946	1,119	975	1,591	253	1,250	18,847
Region 5	1,141	375	283	631	392	229	195	364	61	192	3,863
Region 6	2,232	665	663	1,519	941	585	418	693	160	342	8,218
Region 7	269	88	68	106	56	38	41	54	10	40	770
Region 8	169	77	48	76	63	48	45	52	10	34	622
Region 9	216	76	80	128	73	43	45	59	1	9	730
Region 10	976	255	200	386	216	151	157	204	40	118	2,703
Total	14,577	4,410	3,763	7,921	4,946	2,984	2,564	4,017	817	2,420	48,419
Males											
Region 1	394	194	111	188	124	110	107	130	96	25	1,479
Region 2	582	177	150	273	155	86	85	118	24	101	1,751
Region 3	848	282	276	571	369	223	161	272	32	98	3,132
Region 4	2,339	756	759	1,511	912	576	491	817	117	600	8,878
Region 5	505	179	154	314	183	132	104	195	31	95	1,892
Region 6	954	332	371	778	464	318	206	349	76	193	4,041
Region 7	137	50	42	59	28	21	22	33	5	19	416
Region 8	97	42	28	40	32	29	24	37	6	18	353
Region 9	124	44	49	74	38	18	21	38		8	414
Region 10	422	124	98	198	105	81	79	120	16	53	1,296
Total	6,402	2,180	2,038	4,006	2,410	1,594	1,300	2,109	403	1,210	23,652
Females											
Region 1	351	169	107	137	113	98	91	101	76	22	1,265
Region 2	796	177	104	251	151	95	81	122	19	118	1,914
Region 3	1,050	287	241	515	347	159	163	257	35	71	3,125
Region 4	3,214	832	673	1,629	1,034	543	484	774	136	650	9,969
Region 5	636	196	129	317	209	97	91	169	30	97	1,971
Region 6	1,278	333	292	741	477	267	212	344	84	149	4,177
Region 7	132	38	26	47	28	17	19	21	5	21	354
Region 8	72	35	20	36	31	19	21	15	4	16	269
Region 9	92	32	31	54	35	25	24	21	1	1	316
Region 10	554	131	102	188	111	70	78	84	24	65	1,407
Total	8,175	2,230	1,725	3,915	2,536	1,390	1,264	1,908	414	1,210	24,767

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Appendix B.8.2: Distribution of Disability Persons by Age, Sex and Types, Guyana: 2002

Age Group	Sight	Hearing	Speech	Mobility	Body Movement	Gripping	Learning	Mental	Sense of Taste	Others	Total
Males											
0 - 4	139	71	147	103	69	63	76	84	44	63	859
5 - 9	194	109	226	143	80	65	116	131	42	79	1,185
10 - 14	226	146	165	120	63	59	127	125	36	70	1,137
15 - 19	191	80	136	90	61	55	117	113	23	54	920
20 - 24	195	113	157	122	86	62	112	143	22	57	1,069
25 - 29	235	102	148	152	84	72	108	183	22	56	1,162
30 - 34	254	106	153	171	113	90	119	215	21	68	1,310
35 - 39	285	105	124	213	125	98	102	217	26	68	1,363
40 - 44	501	137	134	276	151	109	77	193	14	99	1,691
45 - 49	594	99	73	291	172	109	67	156	23	116	1,700
50 - 54	574	98	80	359	197	133	57	119	19	117	1,753
55 - 59	464	90	83	323	189	115	37	90	11	79	1,481
60 - 64	554	146	86	353	208	134	39	74	19	91	1,704
65 - 69	537	191	90	362	231	134	34	82	18	81	1,760
70 - 74	487	193	83	307	191	98	33	44	16	42	1,494
75 yrs +	865	376	137	605	382	190	66	114	36	64	2,835
NS	107	18	16	16	8	8	13	26	11	6	229
Total	6,402	2,180	2,038	4,006	2,410	1,594	1,300	2,109	403	1,210	23,652
Females											
0 - 4	123	52	84	74	48	39	40	41	26	42	569
5 - 9	196	121	185	114	76	65	110	94	42	79	1,082
10 - 14	272	88	123	102	73	36	110	104	35	67	1,010
15 - 19	251	76	100	76	52	37	90	110	23	48	863
20 - 24	274	110	142	76	59	49	108	117	31	55	1,021
25 - 29	285	137	139	88	62	43	105	129	22	51	1,061
30 - 34	317	90	119	91	65	42	101	140	14	49	1,028
35 - 39	400	100	116	113	70	48	87	160	26	69	1,189
40 - 44	675	124	144	155	102	71	94	175	15	82	1,637
45 - 49	712	87	83	201	112	72	53	127	17	79	1,543
50 - 54	784	100	66	291	162	99	62	129	21	103	1,817
55 - 59	620	115	51	286	173	96	47	106	13	114	1,621
60 - 64	672	151	76	379	232	114	49	99	20	105	1,897
65 - 69	652	153	68	455	286	135	46	92	25	91	2,003
70 - 74	627	193	73	452	289	120	36	70	20	73	1,953
75 yrs +	1,191	513	145	947	661	315	117	198	54	100	4,241
NS	124	20	11	15	14	9	9	17	10	3	232
Total	8,175	2,230	1,725	3,915	2,536	1,390	1,264	1,908	414	1,210	24,767

Note: NS = not stated

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Appendix B.9.1: Distribution of the Population 15 Years and Over by Union Status, by Sex, Guyana: 2002

Guyana: 2002

Age Group						Married	Was		Total
	Married	Common Law	Divorced	Separated	Widowed	(Not in Union)	Common Law	Never in Union	
Males									
15 - 19	206	559	2	6	4	11	139	31,691	32,619
20 - 24	3,215	4,767	31	12	27	142	525	22,206	30,925
25 - 29	8,138	8,422	90	56	62	325	838	11,395	29,326
30 - 34	10,840	9,363	184	60	71	375	947	6,425	28,264
35 - 39	11,954	7,954	229	92	109	464	899	3,998	25,699
40 - 44	12,341	5,935	333	117	164	490	773	2,619	22,773
45 - 49	10,485	3,743	424	99	202	497	599	1,516	17,564
50 - 54	8,485	2,688	427	83	349	534	377	961	13,905
55 - 59	5,389	1,472	322	57	399	359	268	519	8,785
60 - 64	4,261	1,051	241	52	535	311	220	389	7,059
65 - 69	3,120	710	176	45	668	261	168	321	5,470
70 - 74	2,130	411	108	33	662	204	120	216	3,883
75 yrs +	2,164	352	85	34	1,318	255	115	339	4,661
Total	82,729	47,427	2,651	747	4,570	4,227	5,988	82,595	230,933
Females									
15 - 19	2,271	3,482	9	9	19	92	1,199	25,717	32,798
20 - 24	8,514	8,453	94	41	133	319	3,402	11,107	32,064
25 - 29	10,854	9,716	218	68	310	473	4,521	4,369	30,527
30 - 34	12,064	9,054	351	97	304	584	3,925	2,182	28,561
35 - 39	12,458	6,955	518	123	523	599	3,426	1,428	26,031
40 - 44	11,558	4,872	808	142	835	678	2,974	1,054	22,922
45 - 49	9,089	3,044	790	151	1,126	694	2,109	683	17,686
50 - 54	6,819	1,853	675	128	1,751	610	1,458	494	13,788
55 - 59	4,185	1,057	387	69	1,785	367	937	280	9,066
60 - 64	3,269	577	308	61	2,273	342	681	209	7,721
65 - 69	2,216	313	195	44	2,401	218	520	178	6,084
70 - 74	1,280	195	92	26	2,248	166	349	138	4,495
75 yrs +	1,212	209	75	24	3,690	160	522	284	6,177
Total	85,789	49,780	4,520	983	17,399	5,301	26,024	48,123	237,920

Note: Union status "not stated" (5,309) was prorated and age "not stated" (5,341) was excluded.

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