CHAPTER II: POPULATION COMPOSITION

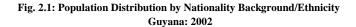**2.1   Race/Ethnic Composition**

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 laborers. 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 nationality backgrounds have been fused together by a common language, that is, English.
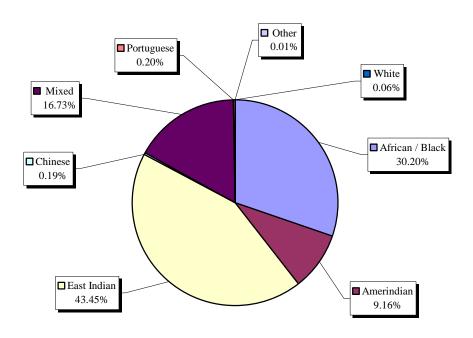
In addition to persons of at least five distinct nationality backgrounds and the native Amerindian population, over the centuries, there has been intermarriage between the various groups and as a result, a group of 'mixed heritage' persons has emerged. This is now a significant and growing group within the population comprising the various combinations of groups. Unlike the situation that exists in the sister Caribbean nation of Belize, which labels such combinations, for example, as Creoles (a mix of white and black) and so on, no such labels are officially recognized in Guyana. This group of persons is generically referred to as 'mixed.'

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 476 persons), the Portuguese (0.20 percent or 1497) and the Chinese (0.19 percent or 1396). A small group (0.01 percent or 112 persons) did not identify their race/ethnic background. (see Figure 2.1)

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/	Population			Percentage		
Background	2002	1991	1980	2002	1991	1980
African / Black	227,062	233,465	234,094	30.20	32.26	30.82
Amerindian	68,675	46,722	40,343	9.16	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	43.45	48.63	51.93
Mixed	125,727	87,881	84,764	16.73	12.14	11.16
Portuguese	1,497	1,959	3,011	0.20	0.27	0.4
White	477	308	779	0.06	0.04	0.1
Other	112	107	294	0.01	0.01	0.04
Total	**751,223**	**723,671**	**759,566**	**100**	**100**	**100**

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 22,097 persons between 1991 and 2002. This represents an increase of 47.3 percent or an annual growth of 3.5 percent. Similarly, the 'Mixed' population increased by 37,788 persons, representing a 43.0 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 54.4 percent (168 persons) and 8.1 percent (105 persons) respectively. However, because of their relatively small sizes, 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 is found in every region (see also Figure 2.2).

Table 2.2: Percentage Distribution by Nationality Background/Ethnicity and Region, 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
African/Black	0.07	0.88	2.91	17.21	2.27	3.47	0.27	0.09	0.03	3.01	30.21
Amerindian	2.01	1.07	0.28	0.70	0.14	0.27	0.98	1.02	2.30	0.39	9.14
Chinese	0.00	0.01	0.02	0.11	0.01	0.03	0.00	0.00	0.00	0.01	0.19
East Indian	0.05	3.14	8.98	15.51	4.03	11.31	0.21	0.03	0.01	0.17	43.45
Mixed	1.09	1.45	1.51	7.59	0.53	1.38	0.88	0.19	0.23	1.89	16.73
Portuguese	0.00	0.01	0.01	0.14	0.00	0.01	0.00	0.01	0.00	0.01	0.20
White	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.06
Other	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Total %	3.23	6.56	13.72	41.31	6.98	16.47	2.34	1.34	2.58	5.47	100
Number	**24,275**	**49,254**	**103,061**	**310,320**	**52,428**	**123,694**	**17,597**	**10,094**	**19,388**	**41,114**	**751,223**
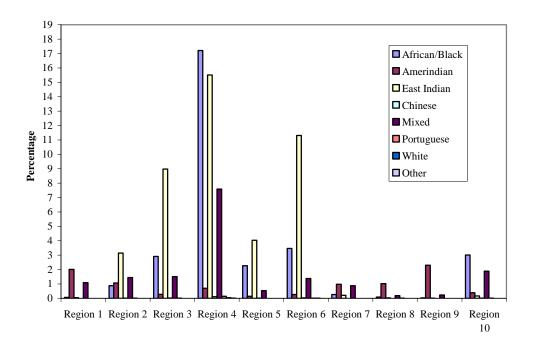
Fig. 2.2: Population by Nationality Background/Ethnicity by Region of Residence, Guyana: 2002

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 Table2.3).

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

Ethnicity/ Background	Region 1	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	30.21
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	43.45
Mixed	33.86	22.06	11.02	18.38	7.63	8.37	37.58	13.92	8.85	34.48	16.73
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 the Africans, 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 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 of mixed heritage in Regions 2, 3, 6, and 10.

To the extent that nationality background/race/ethnicity have social and economic relationships, 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

While the collection of data on religion gives the administrators of those faiths some sense of how effective they are attracting and maintaining their followers, it is also important in explaining demographic dynamics. The religious composition of the country gives policymakers an understanding of the possible extent of the social ramifications of decisions that may affect one faith or another.

2.2.1   Changes in the Size of Religious Groups
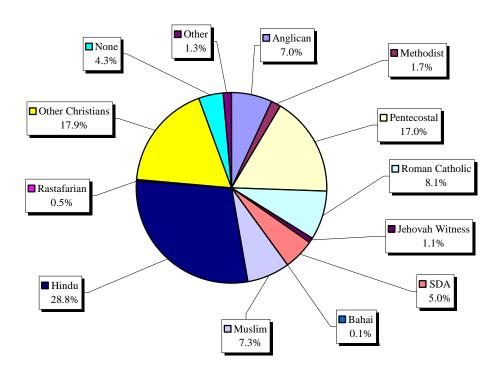
The distribution of the population by religious affiliation is presented in Table 2.5, both in absolute and percentage terms. As in the case of the data collected on nationality background/race/ethnicity, religious affiliation is one of perception and does not necessarily mean that persons who identify 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.

The single largest religious group is the Hindus, whose membership represents almost 28 percent of the population reporting a religions affiliation and followed by the Pentecostal faith (16.8 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 Muslim seems to have slightly declined from 8 percent in 1991 to about 7 percent in 2002. Once again, the social, economic and political dimensions of development, which may come from the presence of these groups, could be of some consideration to policymakers (see Table 2.5 and Figure 2.3).

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	51,935	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 Witness*	3,636	4,550	8,185	0.5	0.6	1.1
Seventh Day Adventist	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	4.3
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	751,223	50.1	49.9	100
	1991 CENSUS					
Anglican	49,285	50,671	99,956	6.8	7.0	13.8
Methodist	8,947	10,093	19,039	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 Adventist	13,429	16,047	29,476	1.9	2.2	4.1
Muslim	29,106	28,563	57,669	4.0	3.9	8.0
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	81,366	5.4	5.9	11.2
Total	356,540	367,133	723,673	49.3	50.7	100

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

The smallest religious groups are from the Bahai (0.1 percent or 499 members) and Rastafarian (0.5 percent or 3,989 members) faiths. In the past, the Seventh-Day Adventists would have been added to these 'small' populations and the numbers of Jehovah 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 with these religious practices. Also of note is the fact that the 'Other Christian' group, consisting in the past of Baptists, Moravians, Brethren, Methodists 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 is 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 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 made 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. Unlike the first, it tells the membership of a particular religious group in a region, for example, what percentage of the Anglican members found in Region 3, 4, etc.? 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 seem to have slight different pattern. Besides Region 4 where 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 those two regions.

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	26.0	15.3	10.6	19.9	12.7	10.9	18.4	8.0	1.7	34.1	16.7
Roman 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

Religious Affiliation	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total %	Number
	B. Percentage of Each Religious Affiliation in a Region											
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
Johovah 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 female, 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 improved 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 livelihoods is mining and quarrying, which requires physical labor and generally involves the recruitment of men in their prime working ages.

The remaining nine regions show higher sex ratios, some narrowly, while others diverted by wide margin. In descending order, 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).
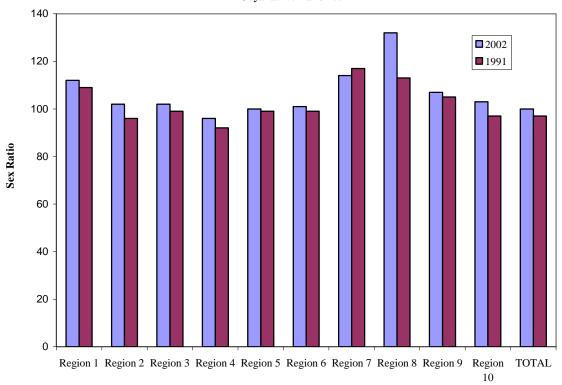
Table 2.7: Sex Ratios by Regions, 1991 & 2002

Region	Sex Ratio 2002	1991	Deficit/Excess 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) x 100

m = number of males & f = number of females

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 at the young ages 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.

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 7 have recorded a higher sex ratio in 2002 as 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 labeled 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.

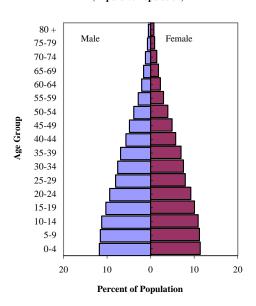**Fig. 2.5: Population of Venezuela: 2000**
(Expansive Population)

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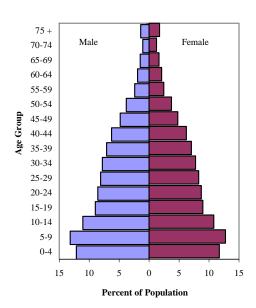**(expansive)**

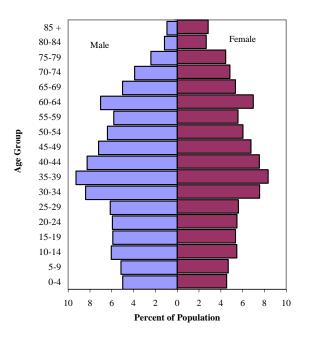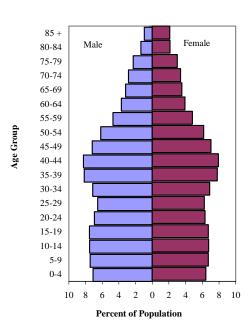**Fig. 2.7: Population of Germany:**
2001 (Stationary)

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

41

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 compared 1980 and 2002, while in the case of 1991 and 2002 the percentage share was identical for 0-4 years but noted slight increase in 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 census 1991. These declines are usually difficult to account for immediately and require further research.

The census survival rates shown earlier (see Table1.2) are also useful for understanding this phenomenon. Life expectancy is now estimated at over 60 years for the country, we expect, therefore, that 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.

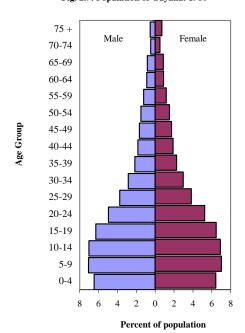**Fig. 2.9: Population of Guyana: 1980**

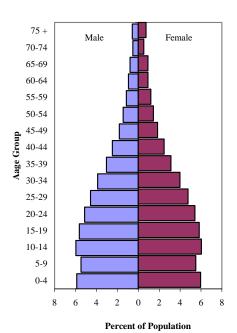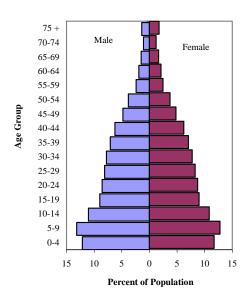**Fig. 2.10: Population of Guyana: 1991**

Fig. 2.11: Population of Guyana: 2002

All of the pyramids show that the numbers of those 65 years and over have raised proportionally, though small in number, that is, from 3.9 percent in 1980 to 4.3 percent in 2002 (see Table 2.9). 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).

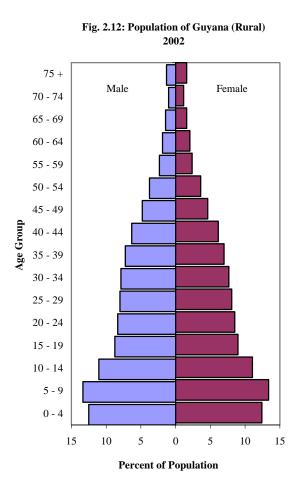**Table 2.9: Population Distribution by Age and Sex, Guyana: 1980 - 2002**

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	66,923
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	67,546	30,232	30,858	61,090
30-34	21,583	22,512	44,095	28,104	28,863	56,967	29,086	28,857	57,944
35-39	16,381	17,235	33,616	22,007	22,557	44,564	26,438	26,297	52,734
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	26,528	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	13,524	7,191	7,814	15,005
65-69	6,291	6,484	12,775	5,633	6,671	12,303	5,575	6,167	11,743
70-74	3,615	3,900	7,515	3,715	3,871	7,586	3,965	4,578	8,544
75 +	3,967	5,427	9,394	4,183	5,329	9,513	4,807	6,375	11,181
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**	**723,673**	**376,034**	**375,189**	**751,223**

	PERCENT								
	1980			1991			2002		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
0-4	6.4	6.4	12.9	5.9	6.0	11.8	6.0	5.8	11.8
5-9	7.0	7.0	14.0	5.5	5.5	11.0	6.5	6.3	12.9
10-14	7.0	6.9	13.9	6.0	6.0	12.0	5.5	5.4	10.8
15-19	6.3	6.4	12.7	5.6	5.8	11.5	4.5	4.4	8.9
20-24	4.9	5.2	10.2	5.1	5.4	10.6	4.2	4.3	8.6
25-29	3.8	3.8	7.6	4.6	4.8	9.3	4.0	4.1	8.1
30-34	2.8	3.0	5.8	3.9	4.0	7.9	3.9	3.8	7.7
35-39	2.2	2.3	4.4	3.0	3.1	6.2	3.5	3.5	7.0
40-44	1.8	1.9	3.7	2.5	2.5	4.9	3.1	3.1	6.2
45-49	1.7	1.7	3.4	1.8	1.9	3.7	2.4	2.4	4.8
50-54	1.5	1.5	3.0	1.4	1.4	2.9	1.9	1.9	3.7
55-59	1.2	1.2	2.4	1.1	1.2	2.3	1.2	1.2	2.4
60-64	0.9	0.9	1.8	0.9	0.9	1.9	1.0	1.0	2.0
65-69	0.8	0.9	1.7	0.8	0.9	1.7	0.7	0.8	1.6
70-74	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.6	1.1
75 +	0.5	0.7	1.2	0.6	0.7	1.3	0.6	0.8	1.5
NS	0.2	0.1	0.3	0.0	0.0	0.0	0.4	0.4	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 as the proportion of 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).
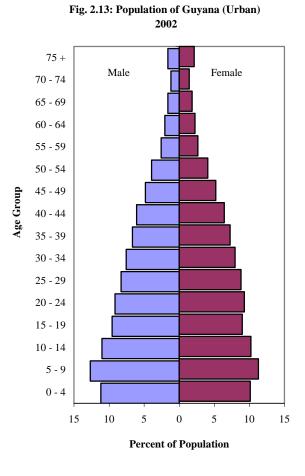
Fig. 2.12: Population of Guyana (Rural) 2002

Fig. 2.13: Population of Guyana (Urban) 2002

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**	**264,568**	**537,373**	**103,229**	**110,621**	**213,850**
			PERCENT			
0-4	4.5	4.3	8.9	1.5	1.5	3.0
5-9	4.8	4.7	9.5	1.7	1.6	3.4
10-14	4.0	3.9	7.9	1.5	1.5	3.0
15 - 19	3.2	3.1	6.3	1.3	1.3	2.6
20 - 24	3.0	3.0	6.0	1.2	1.4	2.6
25 - 29	2.9	2.8	5.7	1.1	1.3	2.4
30 - 34	2.8	2.7	5.5	1.0	1.2	2.2
35 - 39	2.6	2.4	5.1	0.9	1.1	2.0
40 - 44	2.3	2.1	4.4	0.8	0.9	1.8
45 - 49	1.7	1.6	3.4	0.7	0.8	1.4
50 - 54	1.4	1.3	2.6	0.5	0.6	1.1
55 - 59	0.8	0.8	1.7	0.3	0.4	0.7
60 - 64	0.7	0.7	1.4	0.3	0.3	0.6
65 - 69	0.5	0.6	1.1	0.2	0.3	0.5
70 - 74	0.4	0.4	0.8	0.2	0.2	0.4
75 +	0.4	0.5	1.0	0.2	0.3	0.5
NS	0.2	0.2	0.4	0.2	0.2	0.4
Total	**36.3**	**35.2**	**71.5**	**13.7**	**14.7**	**28.5**

For the four regions however, the pattern is completely different. The population distribution for Region 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.

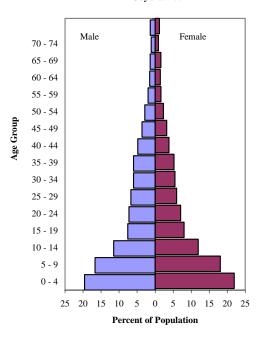**Fig. 2.14: Population Distribution (Region 1)**
Guyana: 2002
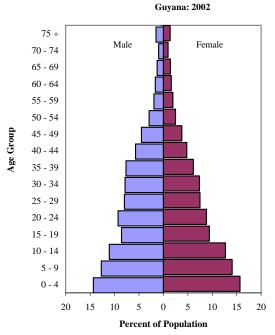

Fig. 2.15: Population Distribution (Region 7)
Guyana: 2002

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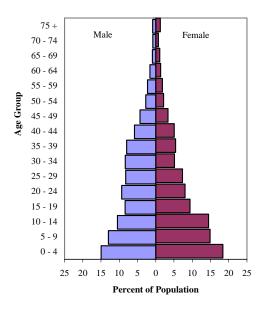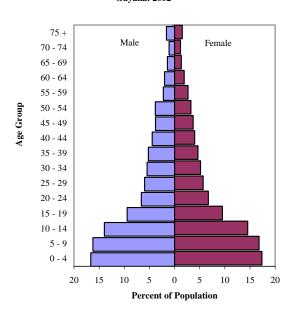**Guyana: 2002**

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 are 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 labor 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.

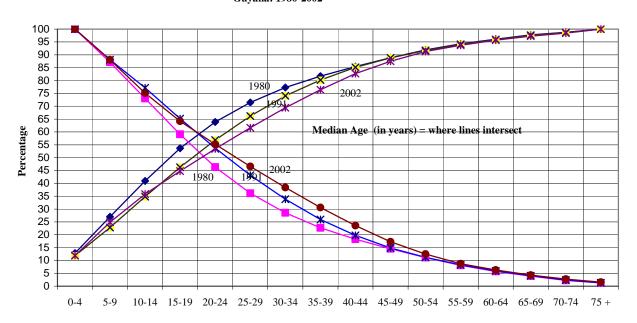**Table 2.11: Age Dependency Ratio, Guyana: 1980 - 2002**

	Ratio		
Year	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

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

49