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**POPULATION AGEING IN THE CARIBBEAN:
AN INVENTORY OF POLICIES, PROGRAMMES
AND FUTURE CHALLENGES**

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INTRODUCTION

“We must be fully aware that while the developed countries became rich before they became old, the developing countries will become old before they become rich”. This statement made by Gro Harlem Brundtland, World Health Organization (WHO) Director-General, at the World Assembly on Ageing in 2002 in Madrid, reflects the challenges that the developing world is facing in the twentieth century.

Population ageing is a global phenomenon, which is having and will have major implications on all aspects of human life in every society. This process is enduring and irreversible, as observed from differing patterns and distinct paces in various regions and countries all over the world. The United Nations has undertaken various efforts to repeatedly draw governments’ attention to the growing demand for answers to these encompassing and profound demographic changes. Various initiatives on the global as well as on the regional and subregional level have been undertaken to highlight the pressing need for concerted action. Of importance in this regard are the numerous agreements reached at the global conferences on social development, population and women orchestrated by the United Nations in the 1990s, which all refer to ageing as an issue of particular concern. The year 1999 was proclaimed by the General Assembly¹ of the United Nations as the Year of Older Persons to recognize ageing as one of the major achievements but, at the same time, as one of the major challenges all populations have to cope with in the twentieth century. This continuous call for action culminated in the Second World Assembly on Ageing, which was held in Madrid 2002, where governments agreed to the implementation of a global action plan. This new Plan of Action focuses both on political priorities such as improvements in living conditions of older persons, combating poverty, social inclusion, individual self-fulfilment, human rights and gender equality. To an increasing degree attention is also devoted to such holistic and overarching themes as intergenerational solidarity, employment, social security, health and well-being. Mandated by the Second World Assembly on Ageing, the Population Division of the Economic Commission for Latin America and the Caribbean (ECLAC/CELADE) has convened the Regional Intergovernmental Conference on Ageing in November 2003 in Santiago, where a regional strategy for the implementation (ECLAC, 2003b) of the commitments reached in Madrid has been adopted. Further, a background document (ECLAC 2003a) on the situation of the elderly in the Latin American and Caribbean region, of which this document is a substantive part, has been presented to the meeting. Participating government officials formally committed themselves to work on a national follow-up strategy and to report on the progress made in the implementation of their commitments to the Ad hoc Committee on Population and Development to be convened in 2004.

Of importance for the Caribbean is the Caribbean Regional Charter on Ageing and Health, which was adopted in 1999 by the Caribbean Community (CARICOM). This charter calls on all governments in the subregion to acknowledge ageing as an issue of priority in the areas of health and social planning. In response to these calls for action, this office conducted in 1999 an expert group meeting on ageing and has embarked on this study on the situation of the elderly in the Caribbean.

The present study offers a demographic analysis of the ageing process in the Caribbean by presenting the development of selected indicators from the past to the present and projections into the future covering a time-span of 100 years from 1950 until 2050. The second part of the study provides an inventory of national and subregional policies and programmes in the areas of social security, pension schemes and welfare programmes as well as labor force participation and health. Further two regional initiatives to collect data on the socio-economic well-being as well as on the health conditions of the elderly are introduced. Finally the study identifies critical areas of major concern for policy makers, such as the need for more data and research and a thorough overhaul of existing policies and programmes. The

¹ General Assembly Resolution 47/5 of October 1992

assessment also calls for the design of new approaches to cope with the implications these dramatic changes in the age-structure are having on the lives of the entire populations in the subregion.

I. DEMOGRAPHIC AGEING

1. Population ageing – Overview over global trends

A study conducted by the Department of Economic and Social Affairs' Population Division in 2001² summarizes the global trends on ageing:

- The trend towards older population is largely irreversible, with the young populations of the past unlikely to occur again.
- The increase in the older population is the result of the demographic transition from high to low levels of fertility and mortality.
- Globally, the population of older persons is growing considerably faster than the population as a whole.
- As the pace of population ageing is much faster in developing countries than in developed countries, developing countries will have less time to adjust to the consequences of population ageing. Moreover, population ageing in the developing countries is taking place at much lower levels of socio-economic development than was the case in the developed countries.
- The older population itself is ageing. The fastest growing age group in the world is the oldest-old, those aged 80 years and older. By the middle of this century, one fifth of all older persons will be 80 years and older.
- The majority of older persons are women, as female life expectancy is higher than that for men. In 2000, there were worldwide 63 million more women than men aged 60 years or older, and at the oldest ages, there are two to five times as many women than men.
- The health of older persons typically deteriorates with increasing age, including greater demand for long-term care as the number of the oldest-old grows.
- Due to the provision of pension schemes and welfare systems in the developed world, older persons tend to have lower labour-force-participation-rates than in the developing countries, where such schemes often do not exist or provide only limited coverage. Thus the elderly in the developing countries are generally much more dependent on the family support network or on their own economic activity well beyond their sixtieth birthday than their counterparts in the developed countries.

² United Nations (2002b), Department of Economic and Social Affairs, United Nations Population Division, World Population Ageing: 1950-2050, Executive Summary, New York (ST/ESA/SER.A/207/ES)

2. Population ageing – Overview of demographic trends in the Caribbean

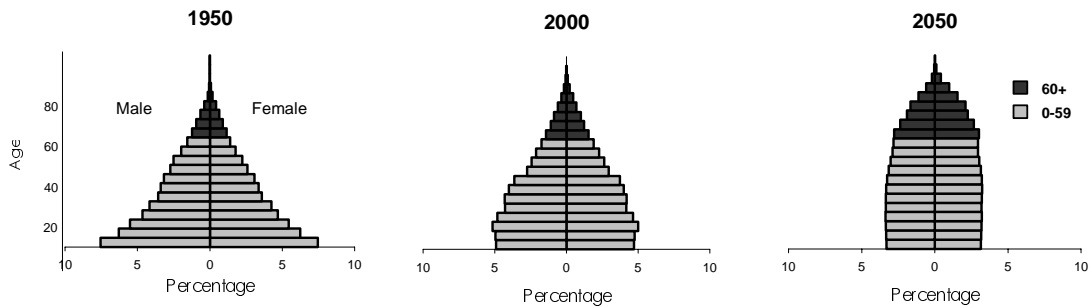
Data on the situation of the elderly³ are still scarce in the Caribbean, in spite of the fact that the region has, outside Europe and North America, the highest percentage of elderly people in its population. Since no national time series are available to allow for such an analysis, the discussion is based on population estimates and projections provided by the Population Division (United Nations, 2002a). The Population Division provides estimates and projections by age only for countries with a population greater than 140,000, thus no such data are available for Anguilla, Antigua and Barbuda, Montserrat, St. Kitts and Nevis, Saint Vincent and the Grenadines, the British Virgin Islands and the United States Virgin Islands. However, these countries are included in the regional and subregional totals.

Population ageing in the Caribbean generally follows the global trends outlined above. It is estimated that the Caribbean will experience absolute and relative increases in the elderly population over the next 50 years and that the elderly population, which constituted 4.5% in 1950, will increase to 18% in 2050. To better understand the dynamics of the process it is important to look at the past, present and future development of this phenomenon. To visualize these changes, three population pyramids for the Caribbean for the years 1950, 2000 and 2050 are presented. Population pyramids are composed of consecutive five-year age-groups from age zero to age 100 and represent the age structure for both sexes of any given population at a given time. Pyramids representing young and growing populations typically consist of a large base and subsequently decreasing older age-groups. In the 1950s, the populations of all countries in the Caribbean could fit into such a model. An ageing and shrinking population however is characterized by an increasingly smaller base and a growing percentage of its people in the older age-groups. Such pyramids represent the situation of all societies in Western Europe and Northern America as well as in the developed countries in Asia, such as Japan and South Korea, today. Many countries in the developing world, particularly in Asia, Latin America and the Caribbean, are showing signs of such a transition. However, the timing of the onset of the demographic transition as well as the pace of this process varies considerably from region to region as well as from country⁴ to country and within regions and subregions.

³ The age-group 'older persons' is defined by the United Nations as the group of those persons who are 60 years and older, whereas the 'oldest old' age group comprises persons aged 80 years and over. Others, for example the WHO, define older persons as those who are over 65 years old.

⁴ The term 'country' as used in the text of this publication also refers, as appropriate, to territories or areas.

Population pyramids for the Caribbean



Source: United Nations Population Division, 2000 Revision⁵

Individual countries in the Caribbean differ considerably in the timing of the onset of this process as well as in its pace. Relatively advanced are Barbados, Cuba and Puerto Rico, whereas Haiti, Belize, the Dominican Republic and Guyana still have rather young populations. The analysis of country-specific data published in the ‘World Population Ageing 1950-2050’ report (United Nations, 2002b), shows the following patterns:

- (a) Only 50 years ago, in 1950, all countries in the subregion had rather young and growing populations and in all cases found less than 10% of their population older than 60 years of age.
- (b) In the following years, the age-composition began to change considerably: Already 25 years later, in 1975, Barbados was the first country with more than 10% of its population being elderly, followed closely by Cuba and Puerto Rico.
- (c) In 2000, already six countries find more than 10% of their population aged over 60 years, including now the Netherlands Antilles.
- (d) In 2025, Barbados and Cuba are projected to be the first countries in the Caribbean with a quarter of its population older than 60 years.
- (e) Projections suggest that in the year 2050 a third of the population of six countries will be older than 60 years. These countries are Barbados, Cuba, Trinidad and Tobago and Guyana.
- (f) Generally speaking, over the course of the observed 100 years, Haiti, Saint Lucia and the Dominican Republic have been and will be the youngest countries in the region.
- (g) Over the next 50 years the entire subregion will experience at least a doubling of the percentage of older aged people. Governments in the Dominican Republic, Trinidad and Tobago, Belize, Suriname and Guyana will have to deal with an even more drastic increase of their older population.

⁵ The United Nations Population Division does not include Guyana, Suriname and Belize in the Caribbean subregion thus these countries are not reflected in the Caribbean subregional totals. However, the French overseas territories, Martinique and Guadeloupe, are included in the subregional totals.

3. Selected demographic indicators

Adequate, timely and reliable demographic data are the basis to address concerns and problems arising for policy makers from the ageing process. It is of utmost importance to understand the pace and the patterns of this process as well as to recognize that ageing affects men and women differently. Consequently policies and programmes need to be based on country and gender-specific analyses to guarantee the efficiency and effectiveness of various concepts developed to provide support to the elderly in all aspects of their lives. To discuss population ageing, selected indicators are presented which illustrate this process from different perspectives. Definitions for the various indicators are provided in the Annex. The aim of this study is to offer an overview over past, present and future ageing trends for the subregion, as a whole, as well as for individual countries to provide policy makers with the necessary background information to address ageing coherently and efficiently. The following indicators have been selected: life expectancy at birth and at various ages, median age, ageing index, sex-ratio, total fertility rate, support and dependency ratios, percentage of the population in older age groups, illiteracy and labor force participation.

3.1. Life expectancy

This paragraph discusses life expectancy at birth as well as at ages 60 and 80.

Life expectancy at birth

Life expectancy at birth has increased in all countries in the Caribbean. The average numbers of years a newborn in the Caribbean could expect to live in the early 1950s was 52.1 years. Already 50 years later considerable progress has been made, since life expectancy has increased by 16 years and is at present 68 years. Projections for the year 2050 indicate a further gain of eight years to a total of 75 years a newborn in the Caribbean will be expected to live.

In the early 1950s life expectancy in two countries, Haiti and the Dominican Republic, was well below the regional average, whereas in the case of Puerto Rico, the Netherlands Antilles and the Bahamas life expectancy reached values well beyond the regional average. The difference between the country with the highest life expectancy, Puerto Rico and Haiti, the country with the lowest value is 27 years. At present Haiti still ranks lowest with 53 years, followed by Guyana and the Dominican Republic with about 70 years, whereas Barbados has reached the highest values, with a newborn expected to live 77 years. Over the last 50 years the difference between the country with the highest and the lowest life expectancy has remained stable with 24 years between Haiti and Puerto Rico. Projections into the future indicate further gains of life years for all countries in the Caribbean however with no changes foreseen in the ranking of the countries with the highest and the lowest values. Haiti, Guyana and the Dominican Republic will remain at the lower end with about 70 years, whereas the Bahamas and the Netherlands Antilles will see life expectancy reach values well beyond 80 years.

It is a well-known fact that women generally live longer than men. This is also true for the countries in the Caribbean. In the early 1950s the Caribbean average difference in life expectancy between men and women was three years, with the widest gap to be found in Barbados (4.5 years) and the lowest in Belize and Trinidad and Tobago (less than two years). An interesting finding is that the gender-gap has increased considerably over the past 50 years and is found to be nine years in the case of the Bahamas, Guyana and Puerto Rico. Available population projections indicate a further slight increase of the gender-gap for the entire Caribbean within the next 50 years from 5.5 to 5.9 years. Individual countries will vary considerably with the largest gaps expected for Guyana, the Bahamas and the

Dominican Republic with around seven years and the lowest difference with less than five years forecasted for Belize, Jamaica and Suriname.

Life expectancy at age 60

To meet the growing demand for more demographic information on the elderly, the Population Division in its 2000 Revision (United Nations, 2001) for the first time estimated gender-specific life expectancy rates for the elderly at ages 60 and 80. Contrary to the findings regarding life expectancy at birth, no considerable differences are evident between the countries in the Caribbean. Almost all elderly who reach their sixtieth birthday today (2000-2005) are expected to live on the average another 20 years, with the exception of Haiti and Guyana. The difference between the country with the highest life expectancy at age 60, Cuba, and the lowest life expectancy at this age, Haiti, is at present six years. A look at gender-specific data however shows larger differences between men and women. Whereas women in almost all countries by the age of 60 can easily expect to live another 20 years (exception are Haiti, the Dominican Republic and Suriname), men in only three countries (Belize, Cuba and Jamaica) can expect the same. Presently the largest gender gap is found in Puerto Rico, where women on the average live more than four years longer than men. Comparatively small gender-gaps with less than two years difference can be found in Haiti, Belize and the Dominican Republic.

From today until the year 2050, life expectancy for the elderly is expected to increase by another two years for the entire Caribbean, however with decreasing variations between the individual countries. The elderly in the Bahamas, Barbados and Jamaica can expect to live at least 24 more years, whereas a 60 year old in Haiti, the Dominican Republic, Suriname and Saint Lucia can possibly expect to live another 22 years. Gender gaps are expected to grow along with increasing overall life expectancy. Women in the Bahamas, Barbados and Puerto Rico will live longest with another 26 additional years while men in these countries are expected to live another 23 years on average. At the lower end, men in Guyana, Suriname and the Dominican Republic are expected to live another 20 years while women in Haiti, the Dominican Republic and Guyana can expect to live another 23 years.

Life expectancy at age 80

Life expectancy at age 80 varies less among countries as well as between the two sexes. Men and women in the Caribbean as of today can expect to live another eight years beyond their eightieth birthday and 50 years later, by 2050, another nine years. Data for the year 2000 for Puerto Rico, the Bahamas and Belize forecast for both sexes combined another eight years of life whereas the old aged population in Haiti, the Dominican Republic and Guyana can expect to live another seven years. Slight gender-gaps are evident, with a difference of two years on the average for the entire subregion. Almost the same number of additional years can be expected for both sexes in Suriname, Haiti and the Dominican Republic, whereas on the average a gap of two years is found for the Netherlands Antilles and Barbados. Men in the Bahamas, Jamaica and Puerto Rico are expected to live longest (eight more years) whereas men in Haiti, the Netherlands Antilles and the Dominican Republic will only live another six years. Women in Puerto Rico, Jamaica and Saint Lucia who have reached their eightieth birthday are expected to add another nine years. A look at the forecasts for the year 2050 reveals similar patterns, with small differences among countries, but slightly increasing gender gaps. Women in Puerto Rico, the Netherlands Antilles, Barbados and Saint Lucia will outlive men by about 2.5 years, whereas in Haiti, the Dominican Republic and Cuba this difference will be less than 1.5 years.

3.2. Percentage of population in older age groups

Percentage of population in the age-group 60 and over

As a consequence of the continuous increase in longevity the percentage as well as the absolute number of the population in older age groups will grow. Presently 10% of the population in the Caribbean is over 60 years of age, with the highest percentages found in Puerto Rico (14%), Cuba (14%) and Barbados (13%) and the lowest in Haiti and Belize (6%) and the Dominican Republic (7%). Projections for the year 2050 forecast that Haiti and the Dominican Republic will still remain the two countries with the youngest populations in the Caribbean, however with a growing share of people over 60. The countries with the oldest population will be Barbados, followed by Cuba, Trinidad and Tobago, Guyana and Suriname, which will all have experienced a rapid growth of their elderly population to the extent that every third person in these countries will be found in the cohorts over 60 years of age.

Whereas the process of demographic ageing has commenced at a slow pace in all countries in the Caribbean, it is expected to continue much faster in the years to come. By 2025 in almost all countries considered at least twice as many people will be 60 years and older than today. Since life expectancy for women is found to be generally higher than for men, more women than men will be found in this age group.

Available data point to a widening gender-gap in the group of the elderly in the years to come. In the 1950s, the gender-gap within the group of the elderly was considerably small, and only began to emerge in Barbados and the Netherlands Antilles, which were already relatively advanced in this process with 10% of their population over age 60. Presently the gender-gap has not much changed for almost all countries concerned, however, with the graying of the population considerable changes in the sex-structure of the elderly are expected: Guyana will have a 10% surplus of women over age 60, followed by Puerto Rico and the Bahamas with 6% and 7%, respectively.

Interesting to mention is the fact that the percentage of older persons in the population of Haiti and Suriname actually decreased between 1950 and 2000. This is probably due to the impact of massive emigration in earlier years from both countries. This shows that migration has impacted and will continue to impact on the demographic age-structure of the populations in the Caribbean. Recent retirees who have spent most of their lives abroad have begun to return to their countries of origin, but not much is known about the size of these flows as well as the age and sex structure of those who will retire back home.

Percentage of population in the age-group 80 and over

In the early 1950s, very few people in the Caribbean reached their eightieth birthday and at present only about 2% of the entire population in the Caribbean is 80 years or older. However, this is expected to change dramatically in the next 50 years with about 5% of the entire population in the Caribbean then belonging to this age-group. As is the case for the other indicators discussed, this is expected to vary considerably between the individual countries with the oldest aged growing to about 10% of the entire population in Cuba and Barbados whereas Haiti, Belize, the Dominican Republic and Saint Lucia will see only 3% of their population belonging to the oldest aged.

A very interesting finding is the pace at which the oldest age population is expected to grow. The entire subregion will experience a growth of 10% in this age-group, with several countries to undergo major and rapid changes of the age structure of their population. Jamaica will experience 20 times more people over age 80 than at present while Cuba will have 15 times more people in these cohorts by the year

2050. Even countries with a young population, such as Haiti, Belize, the Dominican Republic and Saint Lucia will experience a significant increase in their old aged population.

Almost no gender-differences were manifest in the early 1950s in the then relatively small group of the old aged population. The same can be said for the old aged at present. With the growing proportion of the oldest old, male-female differences are expected to increase over the next 50 years with over 4% more women than men in these age-groups in the case of Guyana, Puerto Rico, Barbados and the Netherlands Antilles.

3.3. Median age

The median age of a given population is another indicator to analyze the process of ageing in a given population. The population of the Caribbean has been relatively young over the last 50 years, with a median age of 21 years in the 1950s and 26 years at present. As already illustrated above, all populations in the Caribbean will age at a much faster pace than ever before. Within the next 50 years, the median age for the entire region will have increased to 38 years, an increment of 12 years over the next 50 years. In 1950 the highest median age could be found in Barbados, the Netherlands Antilles, Cuba and Haiti where 50% of the population was older than 25 years. The countries with half of their population still under age 20 were the Dominican Republic, Puerto Rico, Guyana and Suriname. Over the last 50 years the median age has increased in all countries and is now highest in Barbados, Cuba, the Netherlands Antilles and Puerto Rico with half of their population being 30 years and older. Today the youngest populations live in Haiti, Belize, the Dominican Republic and Saint Lucia where half of the people are younger than 23 years. In 2050 about 50% of the population of Barbados and Cuba will be older than 45 years, whereas Haiti, the Dominican Republic, Belize and the Bahamas are forecasted to be still relatively young, with half of their population still being under age 30. As already indicated, several populations in the Caribbean have been experiencing rapid changes in their demographic age-structure. Since 1950 Barbados, the Dominican Republic, Haiti and Guyana have seen their median age increasing by more than nine years on the average. Over the next 50 years rapid demographic transformations are expected for Trinidad and Tobago and Suriname, whose median age will increase by about 20 years to 44 years. Generally more than half of the countries observed will see 50% of their population being older than 40 years. These countries are Barbados, Cuba, Trinidad and Tobago, Guyana, Suriname, Puerto Rico and the Netherlands Antilles.

3.4. Ageing index

The ageing index is another variable used to assess the process of ageing. In 1950 the ratio between the young and the old population for the entire Caribbean was six younger people per every elderly person. This proportion has changed considerably over the last 50 years with on average three persons under age 15 per every elderly 60 years and over. More dramatic changes are forecasted which will actually lead to a situation where the older age groups will outgrow the younger age groups. Five countries will have experienced such a transition already by the year 2025. These are Barbados, Cuba, the Netherlands Antilles, Puerto Rico and Trinidad and Tobago. Almost all countries will follow suit within another 25 years, with the exception of Haiti and the Dominican Republic. By then the oldest countries, Barbados and Cuba, will have more than two people over 60 years of age per every person under age 15.

3.5. Sex-ratio

As already discussed in relation to the various ageing indicators, ageing cannot be seen as gender neutral. The findings above clearly point out that male and female populations follow distinct ageing

patterns and are evolving at different paces. The fact that elderly women outnumber elderly men all over the world is also true for the Caribbean.

Sex-ratio at age 60 and over

At the end of the 100 years observed, almost all countries, as their population grows older, will have experienced major transformations of the gender-balance in their old aged population. Whereas in some countries the percentage of women in the older age groups will have considerably increased, others will experience a more balanced sex-ratio. Cuba, Suriname, the Dominican Republic, Puerto Rico, Belize, Trinidad and Tobago, Haiti and Guyana will have seen considerable increases in the percentage of women in the older age-groups. Bahamas, Jamaica, Saint Lucia, the Netherlands Antilles and Barbados are expected to experience a male biased sex-ratio. Two arguments might help to explain this rather unexpected trend: One reason could be that more women than men have left these countries at younger years to find a job abroad. Another explanation to explore further could be that more men than women return to their country of origin to retire. Three countries, Belize, Bahamas and Suriname will have experienced major shifts in the sex composition of the elderly population from a bias towards one sex to a bias towards the other. Whereas Belize and Bahamas underwent an increase in the percentage of older men over the last 50 years, these two countries are now expected to see the female share in the old aged age-groups grow. Suriname on the other hand will have gone the opposite direction from a more female biased sex-ratio towards an increase in the male proportion.

Sex-ratio at age 80 and over

Data for the Caribbean old aged clearly coincide with the global trends of feminization of the oldest aged. In 1950, the sex-ratio in this age group was equal in Guyana, Suriname and Puerto Rico, whereas it was found to be already strongly skewed towards women in Barbados, the Netherlands Antilles and Saint Lucia. By 2050 women will outnumber men by about two in almost all countries. However, as already indicated above, possibly due to emigration and return migration, individual countries follow different growth patterns in the development of their respective sex ratios. While over the observed century an increase in absolute numbers as well as in the percentage of old-aged women will be found in Puerto Rico, Suriname, Guyana, Cuba, the Dominican Republic, Belize, Haiti and the Bahamas. Barbados, the Netherlands Antilles, Saint Lucia, Jamaica and Trinidad and Tobago will see a growth of the share of older men amongst the oldest aged.

3.6. Total fertility rate

To understand the process of demographic ageing and thus the demographic transition from generally young populations to increasingly older populations, two mechanisms are of importance: the onset of a mortality decline in infancy and early childhood as well as increased longevity in older ages and a continuous decline in fertility levels. With a decline in mortality while maintaining the present fertility (beyond replacement) levels, any given population will experience increasing population growth rates. This process followed by a decline in fertility will finally slow down the population growth⁶. In the Caribbean today different fertility levels can be observed. Four countries, Barbados, Trinidad and Tobago, Cuba and Puerto Rico have already reached below replacement fertility rates of less than 2.1 children per woman. Suriname and the Netherlands Antilles have reached the replacement level with 2.1

⁶ A number of countries in the developed world, lead by Italy, Spain and Germany in Europe and Japan in Asia are currently even experiencing negative growth rates and thus a decline in their total population.

children per woman. Haiti is the only country in the Caribbean with a TFR of more than four children whereas women in all other countries observed are having less than three children at present. Fertility levels in the region were considerably higher 50 years ago when a woman in the Caribbean had five children on the average, with a minimum of four children in the Bahamas and more than seven children in the Dominican Republic. Over the observed period major transitions are foreseen for all countries since all are expected to reach replacement levels or decline even further. According to the projections available fertility in the Dominican Republic, Guyana, Suriname and Belize will decrease by five children, whereas women in the Bahamas, Cuba and Jamaica will have two children less in 2050 than they had at the beginning of the observation period in 1950. Almost all countries, with the exception of Haiti, have already reduced their fertility considerably, with the largest reductions (on the average of four children) evident in the Dominican Republic, Guyana and Suriname. An interesting finding is that not all countries are expected to embark on a continuous downward trend of their fertility rates: Cuba, Barbados and Trinidad and Tobago are expected to experience slight increases in their total fertility rates over the decades to come.

3.7. Support and dependency ratios

The following dependency and support ratios will be discussed:

Dependency ratios

Total dependency ratio

At the beginning of the observation period in 1950, the lowest dependency ratios could be found in Barbados, Jamaica and Cuba with an average of one support provider for two dependants, while the highest ratios were experienced in the Dominican Republic, Puerto Rico and Suriname. In the early 1950s because these populations were rather young, it is not surprising that the majority of the dependants in these countries was the young population under age 15. Over the last 50 years almost all countries in the region experienced a decrease in the dependency ratios (with the exception of Haiti and Belize whose dependency rates will begin to decrease within the next 25 years with the onset of a considerable fertility decline). Several countries, Barbados, Cuba, the Netherlands Antilles, Trinidad and Tobago and Puerto Rico, particularly those which have already seen a serious decline in their fertility rates, are experiencing at present (in the year 2000) the lowest dependency ratios ever. Most other countries, Jamaica, Belize, Saint Lucia, the Bahamas, Guyana, Suriname and the Dominican Republic will experience similar favourable rates within the next 25 years. According to the projections available, the dependency ratios of all countries will increase again but now with a growing share of elderly dependants.

Youth dependency ratio

Over the entire period observed, all countries will have experienced major transformations from relatively high youth dependency ratios to considerably lower ratios. The available data suggest that over the past 50 years most of the countries have already gone through major transformations, with the exception of Saint Lucia, Jamaica, Belize and Haiti.

At the beginning of the observation period, the Dominican Republic, Puerto Rico, Guyana and Suriname had the highest youth dependency ratios, with two young persons under age 15 over one person between ages 15-64. In the case of Barbados, Jamaica, the Netherlands Antilles and Cuba both age-groups were almost equal in size. Generally the burden of the youth on the supportive age-groups will decrease significantly and reach considerable lower levels in all countries concerned.

Old age dependency ratio

As the youth dependency ratios are expected to decrease, the weight of the old aged has been increasing and is expected to follow this trend. The countries with the relatively highest old age dependency ratio in the 1950s were Suriname, the Netherlands Antilles and Barbados whereas the burden was found lowest for the Dominican Republic, Belize, Jamaica and Saint Lucia. The same can be stated for the present situation, with Haiti, the Dominican Republic, Belize and Saint Lucia still having a rather young population. Barbados, Cuba and Guyana have already seen a growth in the share of their aged and this trend is expected to continue. Over the next decade still relatively low ratios will be found in Haiti, the Dominican Republic, Belize and Saint Lucia with less than one elderly over four people aged 15 – 64. Considerably higher levels of dependency, with about one elderly over two support people are expected for Barbados, Cuba and Guyana.

Support ratios

Parent support ratio

The parent support ratio will increase in all countries over the observed period of time. While some countries will experience only a slight increase until the year 2050, others will see a rapid growth of the weight on the shoulders of those who will have to take care of the elderly. Saint Lucia, Suriname, Haiti and Belize will see two to five times more elderly per potential caretaker, whereas Jamaica will have to deal with a tenfold increment in those who need to be taken care of per potential support provider. At the beginning of the observation period in 1950 the parent support ratios were generally low. This has changed over the past 50 years, since a result of increased life expectancy, the numbers of those reaching higher ages have grown and are expected to rise further in all countries concerned. The impact of ageing and the growth in the absolute numbers in the group of the oldest aged is already visible in a number of countries in the Caribbean. Barbados, Jamaica and Puerto Rico are presently exposed to the highest numbers of old aged per potential caretaker which ranges from eight to 11 possible dependants. Most of these countries have already experienced a rapid growth in the number of those aged 85 years and over and have now to take care of more than four times more oldest aged than 50 years ago. The numbers are still considerably small for the Dominican Republic and Haiti, with only two oldest elderly per potential support person. More rapid and dramatic changes are expected for the next 50 years. The population aged 50-64 in Cuba, Barbados, the Netherlands Antilles and Trinidad and Tobago will have to take care of at least 15 more people per person, a three to fivefold increase forecasted until the year 2050.

Potential support ratio

Another indicator in the list of variables to discuss ageing is the potential support ratio. This ratio compares the same age-groups as the old age dependency ratio, but switches numerator and denominator. While the old age dependency ratio measures the weight of the elderly on those in the economically productive age groups, the potential support ratio assesses the scope of the possible support to be given to the older generation by those in the economically productive age-groups.

3.8. Illiteracy

A widely and commonly used indicator to assess the level of education of any given population is the literacy rate. However, over the past decade concerns have been raised if current measurements

indeed reflect the true level of literacy in the Caribbean. Since there are no other comparable time-series available apart from those data regularly published by the United Nations Educational, Scientific and Cultural Organization (UNESCO), these data will still need to be used to assess literacy in the Caribbean.

The present discussion focuses on illiteracy of the elderly aged 70 years and over, over a time-frame of 30 years between 1980 and 2010. With the exception of Haiti, the Dominican Republic and Jamaica, illiteracy rates for the elderly have been low for the entire Caribbean over the past 20 years and are expected to decline further. In Haiti, Jamaica and the Dominican Republic more than 50% of the population 70 years and older was considered illiterate according to data available for the year 1980. Considerably lower illiteracy rates were found in the Netherlands Antilles, Bahamas and Cuba with less than 20% of the elderly in those age groups not able to read and write. According to the data available, illiteracy rates went down for all countries observed and reached illiteracy rates of 10% and less in the Netherlands Antilles, the Bahamas and Trinidad and Tobago. Comparably high levels of illiteracy are found in Haiti, the Dominican Republic and Jamaica with still about one third of this age group to be illiterate. The present decade will see a further decrease in general illiteracy for the older aged. According to the projections available the situation in Haiti, where about 80% of all elderly over age 70 still will not be able to read and write, is not expected to change much. The Dominican Republic and Jamaica will find about one third of their oldest aged population illiterate. All other countries in the Caribbean will experience remarkable increases in their literacy rates with generally about 90% of this age-segment of their population able to read and write.

In the Caribbean gender gaps in illiteracy have been small and are expected to decrease further. More or less equal literacy rates for both sexes could be observed for the Netherlands Antilles, Cuba and the Bahamas over the past 30 years. Only two countries, Guyana and the Dominican Republic, experienced high gender gaps over the same period of time, with more than 10% more women than men illiterate 20 years ago and still more than 7% more women than men illiterate today. Jamaica seems to be the only country in the region with consistently higher illiteracy rates for men than for women for the entire period observed. By the year 2010 Bahamas will follow the same trend and will thus find more elderly men than women to be illiterate, while a comparably higher percentage of older women than men will be found illiterate in Haiti.

3.9. Labour force participation

Data available provide information on labour force participation rates for the elderly aged 65 years and older. These rates are generally higher for men than for women and have decreased in the entire region over the last 50 years. In 1950 on the average 40% of the elderly population in the Caribbean was employed, with the highest rates in Haiti (71.5%) and the lowest rates in the Netherlands Antilles (less than 10%), followed by Barbados and Guyana with less than 30%. At present, the highest labour force participation rates are found in Haiti, where more than three quarters of all elderly beyond age 65 are economically active, whereas in Cuba these rates today are the lowest in the entire subregion. Projections for the year 2010 indicate a further decrease in the overall labour force participation rates with less than 3% projected for Puerto Rico and still about half of those aged 65 expected to be formally employed in Haiti.

Female labour force participation rates are found to be the highest in the case of Haiti, where in the 1950s 60% of all elderly women were employed. Considerably lower were female labour force participation rates (under 5%) in these age groups in the Dominican Republic and Puerto Rico. Presently in the Caribbean every twelfth woman over age 65 is formally employed, with the highest rates in Haiti and Jamaica (more than 20%) and the lowest participation rates in Cuba, Suriname and Puerto Rico (less than 3%). Available gender specific data point to the fact that female labour force participation has

increased over the last 50 years in the Dominican Republic and Jamaica, where presently a higher percentage of women over age 65 is formally employed than 50 years ago. In the case of all other countries with data available female labour force participation decreased between 2% in the case of the Netherlands Antilles and Puerto Rico and about 20% in Haiti and Guadeloupe.

Relatively large gender gaps have been a reality in many countries in the Caribbean. In 1950 the largest gaps could be observed in the Dominican Republic, Belize and Suriname. Presently little differences in male and female employment rates can be observed in the case of Cuba, Puerto Rico and Barbados with less than 10 percentage points difference between both sexes. Still large gaps are being observed in the Dominican Republic and Belize, where seven times more elderly men than women are working in the case of the Dominican Republic and 10 times more elderly men than women in the case of Belize.

The data provided need to be considered with caution, since these statistics cover only the formal labour market and exclude all those employed in the informal sector. Therefore it can be assumed that generally labour force participation of the elderly is higher than reflected in the data presented. A decrease in formal employment opportunities as well as a lowering of the mandatory retirement age are possible explanations for the general decline in labour force participation of the aged. As concerns gender specific data, female labour force participation data most certainly underestimate the true level of economic activity of elderly women, since many more women than men have spent their entire economically active lives in jobs outside the formal labour market, such as care givers, family helper and/or agricultural workers and continue to do so in older ages, a fact that is not reflected in official labour force statistics.

II. POPULATION AGEING: POLICIES AND PROGRAMMES

1. Economic development and poverty

Caribbean economies are characterized by small domestic markets, insularity and remoteness and the dependence on a narrow range of goods and services produced. The recent globalization process poses significant challenges to small developing economies, which are already dealing with a number of issues in their pursuit of sustainable development.

Since the early 1980s economic conditions in almost all countries in the Caribbean have been rather volatile with low or negative growth rates over extended periods of time (World Bank, 1996). Performance in terms of economic growth rates (measured in GDP per capita) has varied considerably over the past decade, with the average growth rates declining in eight of the 13 countries with data available⁷. This is due to external shocks, changes in demands for the subregion's exports and natural disasters, such as hurricanes, floods and volcanic eruptions. Consequently, many people in the Caribbean have been living all their lives at the subsistence level or even below. Poverty in the Caribbean has been predominantly a rural phenomenon, however with recently rising levels of urban poverty. In 1996 the World Bank (World Bank, 1996) estimated 38% of the total population (or 25% including Haiti) in the Caribbean or more than seven million people to be poor. This ranged from 65% in Haiti to a low of 5% in the case of the Bahamas. More recently conducted country poverty assessments report that an average of 30% of the population lives below the poverty line (CDB, 2002)⁸, with Guyana and Grenada reported to be the most seriously affected countries. Income distribution appears to be quite uneven, particularly given the relatively high per capita income in the Caribbean. The average Gini coefficient for those countries with data available⁹ is approximately 46, with the most uneven distribution found in Saint Vincent and the Grenadines, Belize and Saint Lucia and a more equal distribution in the case Anguilla, Dominica and Jamaica (CDB, 2002 and UNDP, 2002).

Responding to major external and internal shocks to their economic systems, several governments in the Caribbean have adopted in the late 1970s and early 1980s structural adjustment programmes to change the course of their economies in the direction of faster growth and development. In spite of the shifts towards privatization of substantial public sectors and considerable decreases in overall public spending, governments in the Caribbean have remained committed to continue to provide basic social services for all. This is evidenced by the fact that public expenditures on health and education (as a % of GNP) have remained constant over the last decade in almost all countries observed¹⁰. However, with overall decreasing national outputs, resources in absolute terms allocated to the social sector have declined considerably.

The importance of economic growth for poverty reduction has been widely documented (for example, World Bank, 1990/1996). Findings of these studies suggest that economic growth has reduced

⁷ The countries with data available are Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago

⁸ More recent data are available for Barbados (1997, 13.9%), Grenada (1999, 32.1%), Guyana (1999, 35.0%), Jamaica (2001, 16.8%), Nevis (2000, 32.0%), St. Kitts (2000, 30.5%).

⁹ Income distribution data for the Caribbean are derived from country poverty assessment (CPA) studies conducted by the CDB. The countries with income distribution data available are Anguilla (31/2002), Barbados (39/1997), Belize (51/1996), British Virgin Islands (0.23/2002), Dominica (0.35/2002), Grenada (45/1999), the Dominican Republic (47.4/1998), Guyana (40.2/1993), Jamaica (37.9/2001), Saint Lucia (42.6/ 1995), St. Kitts (40/2000), Nevis (37/2000), St. Vincent and the Grenadines (56/1995), Trinidad and Tobago (40.3/1993).

¹⁰ Public expenditures as % of GNP on health (1990 and 2002) and education (1995 and 2002). Figures taken from various UNDP Human Development Reports.

poverty through rising employment, increased labour productivity and higher real wages. Countries that have experienced positive growth rates and thus had the resources to invest in the development of their human resources, such as the Bahamas, Barbados, Antigua and Barbuda and St. Kitts and Nevis are likely to have reduced poverty. Countries that have suffered over the last two decades a serious decline in their GDP growth rates have most probably suffered most. This list of countries includes the Organisation of Eastern Caribbean Countries (OECS) countries, the Dominican Republic, Guyana, Haiti, Jamaica, Suriname and, at times, Trinidad and Tobago (ECLAC, 2002d).

Data to assess poverty are rare and even more difficult to get for specific population subgroups, such as the elderly. The most common concept applied to assess poverty is the “percentage of the population living under one dollar per day”, a definition adopted by the World Bank. However, this measure has been heavily criticized by experts in the field (ECLAC/CDCC, 2003) as well as by government officials in the subregion. Repeatedly it has been stated that this indicator limits the assessment of poverty only to economic terms and excludes any other dimension of the same. However, for reasons of compatibility and availability this indicator is still by far the most commonly used.

2. Social development and poverty

Caribbean countries generally score relatively high on most of the human development indicators commonly used to assess progress made in various dimensions of development. According to the ranking of the Human Development Index (UNDP, 2002) over the last 10 years, five countries in the Caribbean, Barbados, Bahamas, St. Kitts and Nevis, Trinidad and Tobago and Antigua and Barbuda are in the group of those countries considered to be relatively advanced in their human development. All other countries, with the exception of Haiti, are considered to have reached levels of ‘medium human development’. While, according to this indicator, some countries seem to even have slightly improved their overall conditions¹¹, others have experienced some fall-backs¹² over the last decade.

Despite the impressive success in improving overall living conditions in many Caribbean countries, poverty still persists throughout the region. Factors contributing to the persistence of poverty are low economic growth, macroeconomic shocks and inappropriate policy response, deficiencies in the labour market and a deterioration in the overall quality in social services delivered. With the erosion in the value of lifetime savings and pension benefits, the elderly, and among those women, unskilled workers, small-scale farmers and the disabled have become particularly vulnerable to macroeconomic changes. Changes in the family structure, growing violence and crime and a drop in the real value of social assistance benefits have further enhanced the exclusion of considerable segments of the population from social and economic development. The poor are heterogeneous and several common subgroups have emerged, which are, among others, the elderly, women, unskilled workers, small-scale farmers, the disabled and the indigenous population. The elderly in any of these subgroups are experiencing an even greater possibility to be or to become destitute. The main risk factors affecting the elderly in these subgroups are discussed in the following paragraphs.

Women: For many elderly women, poverty has been a life-long companion. Teenage pregnancies caused higher rates of morbidity and thus jeopardized educational and job opportunities. Existing gender-based discrimination in the labor market in their younger years, such as higher unemployment rates for women and wage discrimination along with the need to fulfil family commitments have considerably contributed to the poverty of today’s elderly women. These unfavorable conditions made it difficult and

¹¹ These are: St Kitts and Nevis, Antigua and Barbuda, Cuba, Belize, Dominica, Saint Lucia, Suriname, the Dominican Republic and Haiti.

¹² These are: Barbados, the Bahamas, Trinidad and Tobago, Grenada, Jamaica, St. Vincent and the Grenadines.

in many cases even impossible to build up savings for retirement. Elderly women from disadvantaged families are even more affected. In addition, discriminatory property and land ownership rights have been placing many rural women lifelong in rather unstable economic situations.

Unskilled workers: Most countries have mandatory retirement ages, but these only apply to the formal sector and at times only to the public service. A considerable proportion of the population in the Caribbean is employed in the informal sector where such rules do not apply and most of the people work, for various reasons, far beyond the formal retirement age. Many unskilled workers participate in the informal sector where work is irregular and where there is no form of social insurance. Generally wages for the unskilled are low, and thus often insufficient to support an individual or even an entire family.

Small-scale farmers: Most of the poor in the region live in rural areas, with the majority working as small-scale farmers in agriculture well beyond their sixtieth birthday. Many of these farmers only own micro plots, quite often in mountainous areas which are often rather infertile. They face problems of inadequate legal land titling, inequitable distribution of land, limited access to markets, and in some countries unequal access to basic health and other social services.

Disabled population: Although today they constitute a relatively small proportion of the population, the disabled are particularly vulnerable, because quite often they have limited access to health care and other basic social services. However, disability increases within the older and oldest age-groups in any society and thus will increasingly become a matter of growing concern.

Indigenous population: Among indigenous groups in the Caribbean (Dominica, Guyana, Suriname), the incidence of poverty is rather high, with the elderly population particularly vulnerable to illness and malnutrition. In addition, quite often indigenous populations live in rural and rather remote areas, where basic social and health services are not easily available and accessible.

Migration: Migration in the Caribbean has been affecting all aspects of life over the last decades. Apart from the positive effects of migration, such as the improvement of the economic conditions of a household through remittances, migration also impacts negatively on the lives of those left behind. Particularly vulnerable are the elderly, who are affected by the departure of the younger generation. Families often split up when one or several members leave and elderly are left with the responsibility to take care of one or several grandchildren with quite often no family support system or other source of regular income. This is particularly difficult when the elderly do not qualify to benefit from public welfare programmes and/or are not covered by national pension schemes or other support mechanisms. Not much is known about the living conditions of those elderly who themselves lived as migrants at least part of their lives abroad and who now opt to retire back home.

2.1. Formal social safety nets

Social security schemes in the Caribbean are rather young particularly in the English-speaking Caribbean where they were only established after independence in the late 1960s and early 1970s. The majority of these schemes are government-funded, with some exceptions, particularly in the OECS countries, where contributions are to be made by employer and employee. The social safety net systems in the Caribbean countries typically combine three elements: (i) social insurance concerned with the provision of security and the spreading of income over a life cycle, (ii) means-tested social assistance designed to alleviate poverty, and (iii) categorical transfers directed at redistribution between specific groups. The benefits are granted as in-kind transfers, cash payments or the provision of services. On the whole, the existing social security schemes offer inadequate coverage and level of benefits. So far no

systematic and consolidated reform programmes have been adopted to overhaul the social security schemes in the Caribbean.

However, in spite of the economic downturn and the scarce resources available, governments in the subregion have always shown strong commitment to providing free basic social services, especially health and education. However, due to the lack of sufficient resources the quantity as well as the quality of the services rendered has begun to suffer in many countries.

Most of the countries in the subregion provide assistance to the elderly through one or several of the following safety-net programmes (World Bank 1996, p. 32):

- Social insurance schemes;
- Contributory and non-contributory old-age pensions;
- Social or public assistance;
- In-kind assistance, food stamps;
- Social funds (communities, elderly, low income families);and
- Residential homes.

The table below presents available safety net programmes in selected countries in the Caribbean:

Table 1
Country safety net programmes: Overview

Target Group and Programs	Anguilla	BVI*	Barbad.	Belize	Dominica	Dom. Republ.*	Grenada	Guyana	Jamaica	St. Lucia	Trinidad & Tobago
Elderly											
Non-contrib. Pension	X	X	X	X	X		X	X	X	X	X
NIS Pension	X	X	X	X	X	X	X	X	X	X	X
In-kind assist.			X		X			X	X	X	X
Homes for the aged	X	X	X	X	X		X	X	X	X	X
Disabled											
NIS			X	X	X		X	X	X	X	X
Social Assist.			X	X	X		X	X	X	X	X
Resid. Care			X	X	X		X	X	X	X	X

World Bank (1996), p. 132 and *information provided by the Government

Although social insurance plays a key role in poverty alleviation, particularly among the elderly, the real value of benefits has declined over time, and individuals in the informal labour market, the self-employed, rural workers and the non-economically active are generally not covered by such schemes. Consequently the proportion of the population in receipt of public assistance is low as is the level of benefits. For example, the proportion of the population in receipt of benefits does not exceed 3.5% in Barbados and is much lower in other countries, with around 1.5% in Belize, Grenada and Saint Lucia. Even if the criteria for social assistance are met, people may be still excluded due to the lack of funds. For example, in Grenada there is a waiting list for the welfare allowance for the aged, leaving persons in need waiting for another recipient to die before they can receive the allowance.

Over the last decade, several governments have embarked on additional social assistance programmes for the elderly. In addition, national councils on ageing have been established and national policies on ageing have been adopted or are in the process of being adopted. Cuba (1974) was the first country in the subregion to adopt its National Policy on Older People and Jamaica (1976) was the first country to establish a National Council on Ageing to advise on and to develop programmes to improve the quality of life for seniors. The following paragraphs provide an overview of the most recent initiatives undertaken by various governments in the Caribbean¹³.

- *Anguilla*: Ageing has been endorsed as a priority issue in the Strategic Country Programme 2000 – 2005 as agreed between the United Kingdom Government and the Government of Anguilla. The Department of Social Services has been restructured to that of Social Development thus offering a more holistic approach to the delivery of social services. Institutional care arrangements are provided by the government, however, there is strong emphasis to support family care to allow for the elderly to live in their communities as long as possible.
- *Antigua and Barbuda*: The amendment of the Social Security Act of 1972 in 1995 provides for financial assistance to those elderly persons who would normally not qualify for old age pension because they did not contribute to the Social Security Scheme during their working life. In order to qualify a person must have an income below EC\$5000 per year and thus be classified as destitute. The Citizens Welfare Division of the Ministry of Home Affairs introduced a home help programme for the elderly. A number of small private homes for the aged emerged to supplement services provided by the Fiennes Institute, a Government institution.
- *Bahamas*: In 1999, a National Council on Older Persons was established. Various public and private residential care facilities, including independent and assisted living facilities have become available. The Government has enacted legislation to regulate residential care facilities to ensure appropriate quality standards.
- *Barbados*: The Government of Barbados has drafted a National Policy on Ageing in 2001 which is being reviewed for submission to cabinet. In 1997 a National Housing Corporation as well as an Urban and Rural Development Commissions were established to address poverty with programmes aimed at improving housing conditions for the poor, of whom many are elderly.
- *Belize*: Belize adopted the 1998 – 2003 National Poverty Elimination Strategy and Action Plan. This includes programmes on tourism and culture to provide opportunities to engage older persons and encourage greater participation in community development. Recently a National Council on Ageing was established.
- *British Virgin Islands*: A compulsory social security scheme, with mandatory contributions from both, employees and employers, covers all paid employees. Self-employed workers also are required to enrol in the plan. This plan provides a wide range of benefits, including old-age pensions, food grants, housing assistance and funeral assistance. The Social Department of the Ministry of Health and Welfare offers residential care, day care and home care services. The Government's Home Care Programme was established in 1997 to provide training for caregivers. No comprehensive national policy and legal framework exists to address the needs of the elderly.

¹³ This information is drawn from two sources: 1) Information provided to the UNFPA Field Inquiry, which was conducted in early 2003 in the framework of the global ICPD+10 Review and Appraisal exercise. 2) Statements made by the official national delegations at the World Summit on Ageing held in Madrid in 2002 and at the Regional Intergovernmental Conference on Ageing, Santiago, Chile, November 2003.

- *Cuba*: The Government of Cuba has increased attention to the elderly living alone and without family support system. Through various programmes food and portable water are distributed to those in need.
- *Dominica*: The social security scheme in Dominica was extended to the self-employed in 1989. Although participation in the scheme is mandatory, few of the self-employed have joined. At the end of 1993 there were only 5,370 self-employed registered with the scheme. The 'National Health Plan 2001-2005' also addresses the needs of the elderly. In 1999 a National Policy on Ageing was adopted.
- *Dominican Republic*: The Government of the Dominican Republic is currently in the process of establishing a social security system which also will provide assistance to needy elderly. The General Health Law (42-01) has been amended to include health care for the elderly.
- *Guyana*: The Government of Guyana has recently established a 'National Commission on the Elderly' and has introduced under the Social Impact Amelioration Programme a scheme that is targeting mainly the vulnerable, and among those the elderly. The 'Food for the Poor Incorporated' Programme is offering food and other items to communities, the main target groups and, among others, the elderly in difficult economic circumstances.
- *Jamaica*: The Government of Jamaica is recognizing the importance of retaining older persons in the family and is in the process of developing social programmes to assist affected families. The 'Senior Citizens' Month' is commemorated annually.
- *Puerto Rico*: The Department of Family Services assists elderly people through the Economic Assistance Programme. The Office of the Under-Secretary for Family Services within the Department of Family Services administers a programme to help blind, disabled, and elderly adults to achieve greater well-being.
- *St. Kitts and Nevis*: St. Kitts and Nevis has recently increased social security benefits and also introduced non-contributory pension schemes for those who are in financial need. The Home Care Programme for Older Persons assists older persons in their homes with hot meals, food packages, medical assistance and social interaction.
- *Saint Lucia*: The Government has articulated a commitment to introducing home-based care services for older persons and has supported the establishment of day-care services for the elderly. The 'Housing Repairs and Enhancement Programme' was set up in 2000 to improve the quality of housing for the elderly in need.
- *Saint Vincent and the Grenadines*: The Ministry of Social Development of Saint Vincent and the Grenadines in 2002 launched a "Home Help Programme" for the elderly.
- *Suriname*: Social security benefits for persons 60 years and older have been increased recently.
- *Trinidad and Tobago*: Persons older than 65 years are, based on income criteria, eligible for the provision of social security assistance. In 1997, welfare grants to the elderly have been increased considerably. Insurance premium tax for those aged 60 years and over has been removed and free public transportation for the elderly is offered. The Homes for Older Persons Act was assented in 2000 to provide for the licensing, regulation and control of homes for the elderly. A Division for Ageing has been established in 2003 in the Ministry of Social Planning and Development. A draft national policy on ageing was formulated in 2001 and is expected to be finalized by 2004.

2.2. Informal social safety nets

In none of the countries in the region does the level of public assistance come close to providing a living income, therefore many recipients of public benefits have other sources of income.

There has always been a strong tradition of self-help and mutual aid in the Caribbean. However, these informal systems cannot substitute for the formal support schemes, but are vital for almost all elderly. Many people will not be able to rely on such support, because they either do not have a family anymore, have never been married, or the children have died or migrated. In many instances the communities provide support for those elderly. A study in Barbados found that more than three-quarters of the elderly surveyed received help from their family, which includes cash and in-kind support. In Dominica 37% of the elderly received assistance from a family member. An interesting phenomenon is the fact that more women than men seem to be supported by their families. However, with changes in the economic, social and demographic environment, particularly with urbanization and migration, family support systems will be weakened and increasingly less available to support the elderly in need.

2.3. Pensions

Revenues from public pension schemes are in many instances one important source of income for many elderly in the Caribbean. There are mainly two pension schemes available: Contributory and non-contributory plans. Contributory old age pension systems provide income for later in life for those who have contributed over a certain period of their working lives. However, they exclude informal sector workers, the self-employed and those who never worked. Coverage is quite often low and benefits are in many cases inadequate. Non-contributory old age pension systems supply income for retirement for all those who are not covered by the contributory schemes. Generally they offer broad entitlements but are quite often not well targeted (World Bank, 1996).

Along with the development of the public service sector in the English-speaking Caribbean, formal pension schemes only came into effect after independence, i.e. in the 1960s (in the case of Jamaica for example in 1962) and 1970s. For many of today's oldest aged, these efforts came too late in their lives. Presently only about one third of all elderly in the Caribbean are receiving any form of government pension. Since a considerable part of the elderly population has been self-employed or has worked in the informal sector without pension coverage this population is now dependent on other sources of income to make a living. More women than men have been excluded from such provisions, since the percentage of women in the informal sector is generally higher than that of men along with generally higher unemployment rates for women than for men. Quite often women are and have been heads of households and thus the only breadwinner in a family and as a result no resources were left to invest into their future financial security.

The following table provides an overview of the coverage of public pensions in various countries and of the percentage of GDP spent on such pensions in each country listed.

Table 2
Coverage of public pensions and pension expenditure

Country	Proportion of population of pensionable age in receipt of pension income	Public pension spending as a% of GDP
Barbados	92	N/A
Belize	10	1.1
British Virgin Islands*	3.6	N/A
Dominica	26	N/A
Dominican Republic	11	N/A
Grenada	<5	1.5
Guyana	37	1.4
Jamaica	27	0.7
Trinidad & Tobago	82	3.4

Source: World Bank (1996), p. 124 (for the Dominican Republic: Pereyra (2000), p.7)

* 3.6% of the contributors to social security (PAHO, 2001)

In only two countries, Jamaica and Trinidad and Tobago, more than two thirds of all elderly are enjoying pension benefits. All other countries provide such support only to a third or even less of their elderly population as is the case of Grenada, where less than 5% of the elderly receive such benefits. Findings from recent research point to an overall decline in coverage. For example data from a survey on the elderly conducted in 1999 in Trinidad and Tobago (ECLAC, 2002b) indicate that only 75% of the elderly population were in receipt of an old age pension, while, according to findings from the World Bank, 82% enjoyed such benefits in the early 1990s. Census data for 2000 in Barbados suggest a similar trend with decline in coverage rates from 92% to 84%. The general low coverage in all other countries leaves the majority of the population dependent on other sources of income.

Full pensions are guaranteed quite often with relatively few years of contributions, the most extreme example being Jamaica, where only three years are required in contrast to the 20 years necessary in the case of Haiti. The following table provides an overview of the formal retirement age and the number of years required to qualify for full pension benefits for various countries in the Caribbean.

Table 3
Main publicly mandated pension scheme design features, 1991

Country	Normal retirement age		Covered years required for full pension
	Men	Women	
Anguilla	60*** ¹	60*** ¹	N/A
Antigua & Barbuda	60	60	9.6
Bahamas	65/ 60* ¹	65/ 60* ¹	14.4
Belize* ¹	65	60	N/A
Barbados	65	65	9.6
British Virgin Islands**	65	65	
Cuba* ¹	60	55	N/A
Dominica	60/ 55* ¹	60/55* ¹	5.7
Dominican Republic	60	60	15.4
Haiti	55	55	20
Grenada	60	60	9.6
Guyana	60/55* ¹	60/55* ¹	14.4
Jamaica	65	60	3
Montserrat	55* ¹	55* ¹	N/A
Puerto Rico	65*	65*	N/A
St. Vincent & the Grenadines	55* ¹	55* ¹	N/A
Saint Lucia	60* ¹	60* ¹	N/A
St. Kitts & Nevis	55* ¹	55* ¹	N/A
Trinidad & Tobago	60	60	14.4

Source: World Bank (1996), p. 124, for (*)PAHO (2002), for (**) PAHO (2001a), for (***) Statement made at the Regional Intergovernmental Conference on Ageing, Santiago, Chile, November 2003.

1: mandatory retirement age for civil servants

The normal age of retirement is lowest with 55 years in Haiti whereas in all other countries people retire at age 60 or 65. In most countries women retire at the same age as men with the exception of Jamaica, where women retire five years earlier than men, at age 60.

Recently various initiatives have been undertaken by the governments in the subregion to enhance pension schemes and to improve coverage of those previously excluded¹⁴.

- *Anguilla*: The Social Security Act of 2001 provides for non-contributory pensions for the elderly over age 68. Further, in 2003, the mandatory retirement age from the Public Service Sector was raised from 55 to 60 years.
- *Antigua and Barbuda*: A non-contributory pension scheme was introduced in 1994 to provide assistance to those in need. Additionally, a relief scheme is operated by the Board of Guardians, which supports those with no other coverage.
- *Aruba*: The Government of Aruba has adopted an officially regulated old-age pension programme designed to ensure a minimum income for the elderly.
- *Bahamas*: Since 1972 all insured persons over 65 years of age are entitled to retirement benefits also including the possibility of early retirement. More recently non-contributory pension schemes have been established to increase the coverage of those excluded from the contributory pension systems.

¹⁴ Source of information: see footnote 1. In addition, information has been drawn from PAHO (1998), Report on the Caribbean Forum on Health and Ageing, Nassau, the Bahamas and from PAHO (2001a) for the British Virgin Islands .

- *Barbados*: There is universal pension coverage for all elders through contributory and non-contributory pensions paid to persons aged 65 and over. In 2003 the Government of Barbados has embarked on an overhaul of the existing pension schemes. The foreseen introduction of flexible retirement ages between ages 60 and 70 with adjusted pension payments and the indexing (introduction of annual increases) to the N.I.S. insurance earnings are the pillars of this reform. The 2003 Occupational Pensions Benefits Act provides for the establishment, management and regulation of occupational pension plans.
- *British Virgin Islands*: A basic pension to the elderly is provided through Social Security.
- *Dominican Republic*: The Government only provides for contributory pension schemes, which cover about 11% of the entire population over age 60 (as of 2000).
- *Grenada*: Old age pension benefits have been increased by more than 50% between 1995 and 2002 and the number of persons receiving such benefits has more than doubled.
- *Guyana*: Old age pensions are provided to all citizens age 65 and over.
- *Haiti*: Everybody who has contributed for at least 250 months, or who became unable to work prior to reaching retirement age is entitled to receive a government pension.
- *Puerto Rico*: The Government of Puerto Rico has recently increased government pensions by 3%.
- *St. Kitts and Nevis*: The Government of St. Kitts and Nevis has recently established a non-contributory pension scheme in place to provide assistance to those in financial need. In 1997 a compulsory contributory scheme was introduced for the self-employed to ensure coverage for retirement.
- *Suriname*: Every retiree from the public and private sector is entitled to pension benefits. Recently, invalidity, widow/widower's and orphan pensions have been introduced.
- *Trinidad and Tobago*: A task force has been established to review pensions and formulate a suitable model to ensure equity between the contributory and non-contributory system. The government provides old age pensions in the amount of TT\$1000; ensuring that pensioners receive an amount above the poverty line defined here as an income of less than TT\$600 per month.

3. Economic activity

The right of older people to financial independence has been recognized in major international agreements. The International Labour Organisation (ILO) Older Workers Recommendation of 1986 calls upon States to adopt national policies to promote equality of opportunity and treatment of workers regardless of their age. The 1991 United Nations Principles for Older Persons names independence as one of its core principles and consequently calls for older persons to have the opportunity to work or to have access to other income generating opportunities. The Madrid Plan of Action on Ageing highlights the eradication of older people's poverty as a fundamental aim and commits governments to promote self employment initiatives and access to credit for older people. In the recently adopted Regional Strategy on Ageing for Latin America and the Caribbean governments expressed their commitment to strengthen the

economic independence of the elderly population as a crucial means of fighting of poverty within this age group.

As outlined earlier, the majority of the elderly population in the Caribbean is not covered by benefits paid through any formal government pension scheme or other social welfare programme. Even for those in receipt of such benefits, the amounts paid are hardly enough to survive. Other sources of income, such as continued own economic activity along with support from family and relatives have always been vital to secure sufficient income to survive. With the introduction of mandatory ages for retirement in the formal labor market as well as with globalization and the changes of life-styles, opportunities for the elderly to participate in the labour market are decreasing. Modern supermarkets and shopping malls increasingly deprive traditional street vendors of fruits and vegetables as well as other small-scale businesses of their clientele.

Since during the last decades unemployment rates remained high, it has become increasingly difficult to find reasonably paid work in the formal labor market. On the sectoral level, the effects of globalization have shifted employment opportunities away from the agricultural and manufacturing sectors towards the services industry. Particularly affected by unemployment are women and unskilled labor in all age-groups. Contrary to the situation in many other developing regions, unemployment is generally found to be higher in urban than in rural areas and underemployment is substantial in rural areas, which reflects the highly seasonal nature of the jobs available. Labour force participation in the informal sector in the Caribbean is generally higher than in Latin America. According to data published by the World Bank in 1996 (World Bank, 1996, p. 21, 172), the size of the informal sector varies from 8% of the labour force in Antigua to 36% in Jamaica (see table 4).

Table 4
Labor force participation in the informal sector and unemployment rates (1996)

Country	Proportion of labor force in the informal sector	Unemployment rates
Antigua & Barbuda	7.9	6.7
Bahamas	13.0	15.0
Barbados	n.a.	17.1
Belize	n.a.	11.1
Dominica	26.2	9.9
Dominican Republic	28.3	15.5
Grenada	15.9	26.0
Guyana	22.5	11.0
Jamaica	36.5	15.3
St. Kitts & Nevis	n.a.	12.0
St. Lucia	n.a.	16.2
St. Vincent & the Grenadines	17.9	19.8
Suriname	n.a.	16.0
Trinidad & Tobago	17.2	18.5

Source: World Bank (1996), p. 172

The informal sector mainly absorbs those with little or no skills to access the formal labour market. Generally wages are low, jobs are insecure and many people in this sector work irregularly and often on a daily or weekly, rather unstable, supply and demand basis. Agriculture, where still a large share of the informal labour force finds work, is still dominant in many countries in the Caribbean. This sector is also vulnerable to external shocks, such as unfavorable weather conditions or changing export opportunities for the goods produced. Small salaries with no additional benefits force the elderly to continue working as long as they are physically able to make their own living. No gender specific information on employment in the informal sector is available for the Caribbean, but it is assumed that more women than men are drawing their income from such jobs. Women quite often work as food producers and small-scale vendors of their goods. They sell agricultural products in the markets and offer other small services on a rather irregular basis.

Relatively little is known about labour market participation of the elderly in the Caribbean and the data available in many instances do not provide a reflection of the real situation since they only cover the formal segment of the labour force (see table 4). A survey conducted in Trinidad and Tobago in 1999 on the elderly found that 5% of those surveyed were employed at the time of the survey (ECLAC, 2002b) and almost all were self-employed. According to HelpAge International (HelpAge International, 2003a) many elderly, if asked, if they were working would respond with 'no', even though they spent a whole day selling fruits and vegetables in the market or sold home-prepared food in the street. Since such informal work is not given adequate recognition, it is not considered as 'work'.

4. Ageing and health

Over the past decades, Caribbean countries have generally experienced a comparably good health status and have managed to eliminate many of the basic health problems that are normally associated with the developing world. This is substantiated by achievements measured through various health indicators. Over the past years these admirable health standards appear to be faltering in several countries, with

growing complaints about the deterioration in the quality of the services provided, coupled with the growing inability of health administrations to respond effectively to the changing needs of users. Almost all countries in the subregion are in the process of designing and implementing appropriate health sector reforms at the national level. However, the adoption of a management culture which places emphasis on improving the quality of services, the establishment of more effective budgeting and planning mechanisms have only begun. Better integration of primary, secondary and tertiary levels of care as well as more effective enforcement mechanisms for health legislation and regulation need to be put in place. The emigration of health professionals, particularly nurses and midwives, poses additional challenges to public health officials. Overall, a major constraint to the full implementation of the health sector reform programmes are the decreasing financial resources available as a consequence of the implementation of structural adjustment programmes and the weak economic performance of many countries in the subregion.

Caribbean governments offer free primary health care to all their citizens, however, the quantity of services available as well as the quality of the services rendered varies to a great extent within the subregion. With the exception of Barbados, there are almost no specialized health care programmes for the elderly offered and most countries make such provisions within the general public health services system. For example, in most countries health care providers, mainly nurses, make periodic home visits to house-bound elderly for routine monitoring and medical care. Regardless of free access to healthcare, the high cost of drugs and the lack of adequate public transportation systems prevent many, particularly the elderly poor, from using it. Consequently, poor health, quite often related to poverty, prevents many older persons from active participation in their communities.

With populations ageing, prevailing disease patterns are changing. The demand for special health care services in old age has begun to increase, more public resources will need to be allocated and the present public health infrastructure needs to be revised in order to meet these new challenges. Over the last decade life-styles have been changing and many health risk factors are increasingly related to obesity, alcoholism and smoking. Lack of physical activity and nutritional deficiencies lead to excess weight which has become a significant health problem, especially among women in lower economic groups. As the proportion of older persons increases, there is a growth in the proportion of the population who suffer from chronic illness and disability and thus more public resources need to be allocated to provide for care arrangements of those affected, while acute and curative costs are expected to decrease over the years to come. Degenerative and non-communicable diseases, such as arthritis, diabetes, hypertension, cataracts, glaucoma and heart disease will become much more prevalent.

Gender differentials in health have to be recognized, since morbidity and mortality patterns differ to a great extent between men and women. In addition, women with quite often only episodic labor force participation throughout their lives have limited access to income and consequently in many instances can not afford the necessary health care services. With women outliving men by several years, the demand for health care services focusing on the special needs of elderly and old aged women is increasing.

No national health insurance scheme with global coverage has yet been established in any of the countries in the Caribbean. However, a number of countries are currently in the process of overhauling their public social security schemes and are beginning to introduce national health insurance programmes (for example, Grenada and Trinidad and Tobago). Exceptions to this are Aruba and the Netherlands Antilles where health insurance is provided by the national social security system, a State-sponsored mechanism financed with compulsory contributions from salaries. Further, institutional care arrangements need to be put in place along with enhanced support for family and community care givers.

4.1 National health policies and programmes

In light of the growing demand on the public health sector to cater to the health needs of the elderly population, most of the governments have begun to develop national policies and programmes. The Caribbean Charter on Health and Ageing, adopted in 1999 by CARICOM, has provided crucial guidance for many countries in the subregion (see section 4.2). The following section presents an overview of the main national health policy and programme initiatives adopted¹⁵ in various countries in the Caribbean:

- *Anguilla*: The Government provides for free medication and medical attention for those in need. Health care providers, mainly nurses, make periodic home visits to the housebound elderly for routine monitoring and medical care. A 10-bed geriatric care unit provides institutional care for the elderly. Promotional health programmes for the elderly and diabetic clinics are run weekly.
- *Antigua and Barbuda*: In 1994 the government introduced a programme of home care for the elderly and incapacitated. There are two long-stay facilities, the Mental Hospital with 150 beds (average occupancy in 1995 was 85 patients) and the Fiennes Institute, which serves 100 geriatric patients.
- *Aruba*: Everyone who legally resides on the island has access to medical care. Individuals may obtain insurance privately or through their employers. The elderly are eligible to receive a PPK card ("pro-paupere kaart"), which entitles them to receive care from government physicians. The government also furnishes any drugs that PPK cardholders require.
- *Bahamas*: Health care for all persons aged 60 and over is widely available through a network of community clinics and hospitals. Government hospitals provide medication free of charge to persons over age 65, while several private pharmacies offer a 10% discount to elders. Home health care is available through district nursing services. Partial salary replacement is provided during illness, as well as paid medical care for industrial injuries. Other types of benefits for the elderly include disability and death. In addition, provision is made for invalidity, retirement, and survivor's benefits. Several options for health and dental insurance are available through the private insurance system.
- *Barbados*: There is universal access to health care and medication services to all people aged 60 and over. Health service delivery falls into the following seven programme areas: primary health care; 24-hour acute, secondary, tertiary and emergency care; mental health care; care for the elderly including rehabilitation services; drug service; assessment services and health promotion. Primary health care services provide care for the disabled and the elderly; general medical care with clinics for hypertension, diabetes, and sexually transmitted diseases; nutrition; pharmaceutical services; and community mental health and environmental health care. These services are provided through a network of polyclinics and outpatient service stations. The Ministry of Health plans to further expand the provision of alternative care as well as to embark on a programme to facilitate accommodation needs for ill elderly.
- *British Virgin Islands*: The government's policy ensures that the public and private health sectors provide services that are as comprehensive as possible using available resources. The government, as the main provider of health services, focuses on providing care for the most disadvantaged, as are children, the elderly, the mentally ill, and the disabled. In accordance with the 1976 Public Health Act, which provides the statutory framework for protecting and promoting the population's health,

¹⁵ The information provided is based on PAHO Country Health Profiles accessed on June 16, 2003 on the following web-site: <http://165.158.1.110/english/sha> and from PAHO (1998), Report on the Caribbean Forum on Health and Ageing, Nassau, the Bahamas. For the British Virgin Islands also PAHO (2001a).

government health services are provided free at the point of use to certain groups, which include the elderly over age 65 amongst other groups with special needs. However, services are largely curative and of limited access. The Ministry of Health and Welfare is also running a residential facility for the elderly to provide medical care for those in need.

- *Cuba*: Health care for the elderly aged 60 and over is universally accessible as well as a programme for receiving medication.
- *Dominica*: The Ministry of Health has identified the elderly over age 60 as one of the priority groups in its five-year Strategic Health Plan 2002-2006. Basic health care, including medication and home care delivery, are free and are provided through an island-wide network of clinics. Specialist services in mental health and ophthalmology care are offered and routine hypertension and diabetic clinics are conducted in all communities. The curriculum of the Nursing School has included a module for care for the elderly since the early 1990s and the Dominica Council on Ageing has been providing training for informal community care givers since 1997.
- *Dominican Republic*: Since 1990 there has been pressure to completely overhaul social security policy, but to date no global reform has been accomplished. Existing health care programmes for the elderly are providing only limited services.
- *Grenada*: Primary health care services for the elderly 60 years and over are widely accessible, which includes free hospitalization and medication.
- *Guyana*: Limited access is available to primary health care services including free medication.
- *Jamaica*: Since 1977, the government has made drugs for chronic diseases available at lower cost for the elderly. In 1996 the 'Jamaica Drugs for the Elderly' Programme was launched to increase access to medication to treat certain chronic health conditions and asthma. Many pharmacies also discount drug prices for senior citizens. All citizens benefiting from old age pensions are entitled to receive free medication from any government or private pharmacy for a selected range of ailments, which require prescribed drugs, such as hypertension, diabetes and glaucoma.
- *Montserrat*: Access to medication and health care is free for those aged 60 and over and home health care is available through the Old Peoples' Welfare Association (OPWA).
- *Netherlands Antilles*: In the Netherlands Antilles several insurance modalities apply:
 - (a) The PPK ("pro-paupere kaart"), which is totally funded by the government and is intended for the indigent and those who are not otherwise insured because of advanced age or the existence of a chronic condition;
 - (b) The public insurance programme, which covers 100% of health care costs for blue-collar workers and 90% for personnel in higher categories of public-sector employment;
 - (c) The insurance fund for retired public-sector employees;
 - (d) Private insurance plans provided by large private companies for its own personnel; and
 - (e) The social security fund, which covers employees of small private companies and other forms of private insurance.

Given the substantial differences in coverage under the various modalities of insurance, one of the objectives of the insurance system restructuring process is to reduce differences in access and quality of medical care. The introduction of the General Insurance Plan for Special Medical Expenses is the first step toward a general insurance system in the Netherlands Antilles. The next step will be the introduction of a general health insurance programme.

- *Puerto Rico*: Universal access to medical services is available to elders in Puerto Rico.
- *St. Kitts and Nevis*: Universal access to health care for citizens over 55 years of age is available in St. Kitts and Nevis. These services are provided through a network of clinics and health care facilities at the primary and secondary level and include medication as well as dental and eye care. National health facilities in St. Kitts include three public hospitals and one facility for the chronically ill, the disabled and geriatric cases. Nevis has a 22-bed infirmary that caters to psychiatric patients and the aged-poor.
- *Saint Vincent and the Grenadines*: There are no specialized health care services for the elderly, although legal provisions have been made to exempt them from user fees. Everyone has access to health care through the general public health service delivery system. Current policy encourages non-institutional care of the elderly within the community. A task force has been set up to determine the scope of problems among the elderly, indicate appropriate responses and adopt holistic approaches to care. As part of its effort to attain universal access to health care, the government has identified vulnerable groups requiring special attention which include the elderly. As a result, various services are targeted toward these groups and concessions in accessing health care services are granted. The elderly are also the main beneficiaries of the routine diabetic clinics that are conducted at all health centers. In addition to that, the government operates a 120-bed home for the aged that mainly provides general care.
- *Suriname*: There are no specific national health policies targeting the aged, but several policies and programmes address the needs of the poor and the disabled. Since many elderly are poor and/or disabled, such programmes also provide for the poor among the senior population. To protect the health status of the population, the Government formulated a Policy Paper in 1996 to provide material and social support on a needs basis to individuals and groups in vulnerable socio-economic situations to ultimately enable target groups to become self-sufficient. The Ministry of Social Affairs and Housing provides the existing system of support, which includes cash transfers to the elderly and to poor families and free medical care for those in need. The Regional Health Service, a semi-private, government-subsidized institution, provides health care for the poor in the coastal areas.
- *Trinidad and Tobago*: The government has recently instituted a 'Chronic Diseases Assistant Plan', which provides medical assistance to the elderly suffering from chronic diseases.

4.2. Regional initiatives to improve access and availability of health care services

The main initiative in the Caribbean to promote research and to deepen the knowledge on ageing and health is the establishment of the first Collaborative Center on Ageing in Latin America and the Caribbean by the Pan American Health Organization/World Health Organization (PAHO/WHO) at the University of the West Indies (UWI) in Jamaica.

To advocate for ageing as an issue of priority in the areas of health and social planning within the national policy and planning machineries, CARICOM adopted in 1999 the Caribbean Charter on Health

and Ageing (CCH-II). The objective of the charter is to develop and initiate comprehensive programmes to promote and protect health and well-being of the elderly. In order to meet this objective, the charter suggests the following initiatives:

- A National Plan for Health Ageing developed by all countries by mid-2000;
- National Health Focal points, multisectoral monitoring/steering mechanisms and evidence of resource mobilization for implementation of the Health Ageing plan identified in all countries by end 2000;
- Caribbean Indicators on Health and Ageing developed by end 2000, and national information systems in all countries modified where necessary by 2002; and
- Develop a training programme for health care workers, individuals and community care givers on the ageing process and on the health needs of the elderly.

The Charters encourages the implementation of a number of strategies to promote health and well-being of the elderly in the entire region, such as:

- The development of a rights-based public health policy;
- Reorienting health services to include the special needs of the elderly;
- Sensitizing communities about the special needs of the elderly;
- Creating supportive environments to ensure that standards of care are being met;
- Develop personal health skills by preparing adults for healthy ageing;
- Enhance and support collaboration between governments, non-governmental organizations (NGOs) and media.

5. Abuse of and violence against the elderly

Since abuse can take many forms it is not always directly related to health, but quite often the implications of abuse are directly or indirectly affecting the health status of the abused. Apart from anecdotal evidence world-wide, not much is known about elderly abuse. It is generally agreed that abuse of older people is either an act of commission or neglect (WHO, 2002). Abuse has many dimensions, which range from physical or psychological, as well as financial and material abuse and the illegal or improper exploitation or use of resources of the elderly. Sexual abuse and the refusal or failure to fulfil a care-giving obligation define other dimensions of violence against the elderly. The demographic changes taking place along with increasing mobility and changing family structures, the erosion of traditional family and community relationships along with economic hardships are conducive to violence and abuse of the elderly. Over-crowding, lack of regular income and rising demands for care taking pose enormous stress on younger family members. Without assistance and coping strategies, these pressures often turn into abuse of and violence against the weaker family members. The consequences of elder abuse can be detrimental. Older people are generally more vulnerable to physical violence due to the fact that they are physically weaker and less able to cope with harm and injuries. Being deprived of their quite often limited resources will make it difficult to even meet the basic needs in food and shelter. In the Caribbean

awareness of the problem is gradually emerging but not much is known about the magnitude of the problem.

6. NGOs supporting the elderly in the Caribbean

HelpAge International is the main internationally operating NGO in the Caribbean with programmes to support the elderly. Its main aim is to promote ageing policies and programmes and to build capacity of age care organizations in the subregion. HelpAge International in the Caribbean collaborates closely with the governments and local NGOs of the countries it services (Grenada, Saint Vincent and the Grenadines, Saint Lucia and Dominica, Antigua, Barbados, Belize, Jamaica, Montserrat and Haiti). It supports the design of national policies and the development of formal government support structures for older people to provide the necessary services. Its work addresses the following areas:

- Protection of older people from discrimination;
- Poverty reduction;
- Policy and advocacy work;
- Health care;
- Intergenerational projects and community development;
- Housing; and
- Capacity-building.

One example for close collaboration between the government and HelpAge is the case of Belize, where in the year 2000 the government adopted a national policy for older persons, which was a result of close consultations with and support from the subregional HelpAge support center.

There are numerous small NGOs operating in the individual countries whose programmes are beneficial to the elderly, many under the umbrella and supported by the various churches and religious communities present. Most of them are community based and orient their programmes towards providing basic services, such as food and shelter to lonely and quite often impoverished and neglected elderly.

One such example is 'Reaching Elderly Abandoned Citizens Housebound' (REACH) in Dominica, which is also one of the regional NGOs supported by HelpAge International. This community-based organization addresses the needs of the elderly poor in Dominica by providing food, clothes and transportation.

In Jamaica, the St. Catherine Community Development Agency (SACDA) started in 1997 an intergenerational crafts project with male and female participants aged 18 – 75 years. Items such as bedspreads, clothes and brooms are made and sold on local markets. Apart from production of goods, the participants receive training in business management, marketing, accounting and self-development. The participants earn a maximum of J\$250 (US\$5) per week, not much, but substantial when compared to the monthly state benefit of J\$300 (US\$6). Apart from the financial benefits, the project promotes collaboration between the old and the young (HelpAge International, 2003b).

In Trinidad and Tobago, the St. Vincent De Paul Society runs homes for the elderly and provides food for the elderly in need.

Through support from Help Age International the St. Vincent De Paul Society in Grenada could provide older persons with in subsistence farming, small business and cottage industries.

7. Data availability and research

The Population Estimates and Projection bi-annually released by the Population Division are the only demographic data with extensive country coverage for the subregion (see part I of this document). Recent national level data from the 2000 census round are only available for seven countries in the Caribbean, which are Aruba, Barbados, Belize, the Bahamas, the British Virgin Islands, the Netherlands Antilles and Saint Lucia. No other country level data with subregional coverage are presently available on other aspects of population ageing such as living conditions, health and labour force participation.

Two major initiatives are currently underway to collect data on various aspects on population ageing. These are the Survey on Health, Well-being, and Ageing (SABE) and the development of a Caribbean Health and Ageing Data Set (CHAMDS). Both efforts focus on health, but are also covering other aspects of life.

7.1. Survey on Health, Well-being and Ageing (SABE)

The SABE Project is a multi-center study to evaluate the health conditions and well-being of adults aged 60 years and over, with special attention paid to those over 80, in selected cities of Latin America and the Caribbean. The following countries in the region have been surveyed: Argentina, Barbados, Brazil, Cuba, Chile, Mexico and Uruguay. The study represents a collaborative effort between research centers and institutions in the region and PAHO. The assessment covers only the population in the cities of the selected countries and thus no information is provided on the situation of the rural population.

The overall objective of the project is to provide comparative data for a number of countries in the region. The data collected focus mainly on the following aspects (PAHO, 2001b):

- Assessment of the health situation of the elderly;
- Evaluate the access and use of health assistance services available to the elderly;
- Assess the degree of access to health insurance offered by the private and public sector;
- Study the trends in health services delivery;
- Evaluate the relative contribution of various sources of support: family, public assistance and private resources;
- Analyze intra-familial transfer patterns;
- Analyze the relations that exist among the strategic factors: health related behavior, occupational background, socio-economic conditions, gender and cohort;

- Evaluate inequity levels and patterns in health status and in health service access and utilization.

One preliminary report (PAHO, 2001) and one study using the findings of the first phase of the survey (Palloni et al, 2002) have been published recently.

7.2. Caribbean Health and Ageing Minimum Data Set (CHAMDS)

Rising concerns about the increase in the proportion of older persons in the Caribbean and the lack of data on issues related to ageing, such as changing disease patterns, implications of gender differences, labour force participation and well-being of the elderly have been the basis for this effort. The development of CHAMDS has been initiated by PAHO as a response to various government requests for technical cooperation in this area. At present PAHO is in discussion with the countries in the subregion to design the minimum data set for which all governments can agree to provide data. The main aim of the project is to provide easy access to data for governments and non-governmental organizations involved in the policy-making and planning process for the older sector of the population.

The specific goal of CHAMDS is to improve the quality of data on ageing as well as access to such information by (PAHO, 2002, p. 1):

- Promoting communication among data producers and policy makers;
- Coordinating the development and use of statistical databases appropriate for the needs of older persons;
- Identifying information gaps and data inconsistencies; and
- Addressing concerns regarding collection, access and dissemination of data on ageing.

CHAMDS covers the following areas:

- Supportive environments for older persons at home, in the communities and in various health care facilities;
- Primary health care and health promotion;
- Economic security; and
- Health status and infrastructure.

Data for this minimum data set should be already available in the country and no special surveys should be necessary to collect the information. For the project to be successful it is important that each country recognizes the importance of the need for such data and is willing to provide the data needed to set up the databases.

III. SUMMARY AND CONCLUSIONS

The present analysis has shown that demographic ageing is well on its way and is affecting all countries in the Caribbean subregion. While some countries are already considerably advanced, others are just beginning to embark on this process. Governments in the Caribbean have engaged in discussing necessary strategies to address the consequences of the changing population age structure and some have already adopted various policies and programmes to address the emerging problems.. National policies on ageing are being adopted and implemented and different welfare programmes specifically designed to meet the needs of the elderly population are being put in place. It is understood that most of the elderly cannot draw on any formal pension or welfare system and are thus dependent on other sources of income, such as own work and family support. The changing health needs of the elderly and the growing demand on the public health system have been recognized by almost all national machineries and increasingly provisions are made to cope with these new challenges.

What will the future bring? Forecasts for global economic development are rather austere for the years to come with considerable negative impacts on the development of the Small Island Developing States (SIDS) in the Caribbean. A significant factor determining global economic development is the huge United States deficit which is likely to continue. The growth prospects for many of the countries in the Caribbean are foreseen to be adversely affected by the likely slow-down in growth of the region's main trading partners. Caribbean economies are not well prepared for these challenges as they need to improve their competitiveness and economic restructuring, which will demand increased investment targeted at the productive sectors of the economy. The pace of economic development will be significantly influenced by the various integration efforts presently underway to enhance economic performance on the subregional, regional as well as global level. On the subregional level, by 2006 the CARICOM Single Market and Economy (CSME) is expected to be completed and the Free Trade Area of the Americas (FTAA) agreement should be in place and being implemented. An economic partnership agreement (EPA) will be negotiated in the coming years and the DOHA Round of the World Trade Organization (WTO) should have been well advanced. This means that trade would have been significantly liberalized at regional, hemispheric and multilateral levels.

With limited global growth perspectives, few jobs will be created and many more will be lost. Many jobs are expected to be lost in the informal sector and thus particularly those with little or no qualification will find it increasingly more difficult to find employment. The restructuring of the economy with a steady decline of the agricultural sector which has absorbed the unskilled to a great extent will further contribute to the rise of unemployment. The services sector has been expanding and is expected to grow further. However, it is questionable if it will be able to absorb those unskilled workers easily.

Against the background of these pessimistic overall economic perspectives and the already experienced decrease of public revenues, absolute public expenditures on social services have begun and are expected to further decline. Therefore it is questionable if the governments in the Caribbean will be able to maintain their commitment to provide free basic social and health services to the entire population. With not only the quantity, but also the quality of the services rendered suffering considerably, the wealthier population is increasingly shifting to private service providers, particularly in the field of education and health. The fact that this option is only available to middle and high income families enhances social inequalities, simply due to the fact that the low income population does not dispose of the necessary financial means to be able to purchase quality services outside the public system.

Efforts are currently underway to better target social spending to reduce overall social inequalities. One example is the public subsidies to primary health care providers, such as hospitals and public health centres which seem to be evenly distributed across the population. However, the ability to

purchase subsidized medication seems to be more biased towards those population segments with higher incomes (World Bank, 1996). Another example for a more equal distribution of social spending has been the establishment of non-contributory pension schemes in several countries in the region which provide benefits for those elderly who are not covered by traditional contributory systems. The growing demands of an increasingly ageing population are not the only strain on the public welfare system. Most of the countries in the Caribbean at present are struggling to cope with the greatest challenges at the beginning of this new millennium: responding to the growing HIV/AIDS crisis and to provide resources to meet the needs of their still rather young populations.

As presented in this report, the challenges emerging from this 'silent revolution' are immense and will grow in the years to come. With the pace of the demographic transition expected to be much faster than the changes already experienced, less time will be available to adjust to the consequences of this transition. Moreover, as outlined above, population ageing in most of the Caribbean countries is taking place under tight socio-economic conditions with only limited resources available to devote to the development of the necessary strategies and policies. However this transition offers a 'window of opportunity'- the so called 'demographic bonus'. The 'demographic bonus' describes a situation where the working population is having proportionally fewer old and young dependants to support. Under such favourable circumstances, more public and private resources could become available for investment into social safety systems to provide for the aged and retired at present and, even more so, in the future. Policy makers at all levels of government are called upon to seize this opportunity to invest now in health, education and job creation for the younger generations to ensure that the resulting economic gains will improve the overall quality of life and provide the necessary resources to meet the challenges of an ageing society.

Without doubt investments in social spending are more successful in reducing overall social inequalities, if well targeted. This has been proven by the fact that several strategies described in this study seem to have improved the quality of life of their beneficiaries. Particularly in times of scarce resources, more needs to be done to identify the needs of the elderly population concerned and to design policies and programmes to use the available resources efficiently in providing the assistance and services required.

Based on the lessons learnt from this review of policies and programmes within the global context of socio-economic development, the following guidelines to address population ageing efficiently can be provided to policy makers:

1. To better understand the needs of the elderly in the individual countries, more data collection and research is needed. Studies need to be conducted to assess the living conditions of the elderly in urban and rural areas, including an in-depth analysis of their housing situation, provision of transport, availability and accessibility of basic social and health care services, care arrangements and more information about gender-based differences in their individual needs.
2. Poverty has different dimensions and can affect people at different times over their entire life cycle. More needs to be understood on the causes of poverty at old age, the way various aspects of poverty affect the lives of elderly men and women and what can be done to alleviate poverty. Finally special measures need to be designed to ultimately prevent the elderly at risk from falling into poverty.
3. Global reforms of the existing safety nets are required and new social welfare programmes need to be put in place to improve coverage for those already retired and, more important, to include those who will retire in the years to come. To enhance services delivered to the elderly today, more efficient administrative systems are indispensable to ensure the timely and adequate delivery of social assistance benefits.

4. In recognition of the rather limited public funds available, citizens will need to be encouraged to take responsibility to make their individual arrangements for future retirement. This could be facilitated by tax breaks and other incentives to make the acceptance of such plans more attractive for the general public. Mandatory enrolment to national insurance plans would allow for extended coverage and adequate benefit levels. Increasing awareness of social insurance and subscription to old-age pension schemes for those in the informal sector would prevent many from falling into poverty later in life. The establishment of non-contributory pensions to provide for those elderly with no other coverage would greatly enhance their quality of life. Considering the payment of widow/er benefits after the death of a beneficiary spouse would greatly reduce the risk of the surviving spouse (in most cases the wife) from being deprived of the main source of income.
5. To improve the economic conditions of the elderly today, employment opportunities need to be offered, particularly for those with little or no skills and opportunities for continued education and learning should be provided. New ways for the younger working poor to generate income and to build up savings must be developed.
6. The changing demands on the health care system need urgent attention. The generally increased need for long-term care of chronic diseases and other old-age specific diseases need to become part of the basic training of medical service providers. Various forms of mental and physical disability need to be dealt with. Rehabilitation and independence should be the guiding principle in the management of chronic diseases. Since almost all elderly wish to live in their communities, community health service providers need to be strengthened and out-patient care facilities need to be put in place.
7. The immediate care-giver network, family and community, needs to be strengthened and support infrastructure, such as meals on the wheels and day-care centres for the elderly, provided. Training for care-givers needs to be offered to provide the necessary medical, psychological and technical skills to deal with the old aged on a daily basis.
8. The protection of elderly from various forms of violence is of utmost importance. Counseling services and shelters for those affected need to be established.
9. The fact that ageing is a lifelong process needs to become part of the Caribbean culture. Since the quality of life in older ages is very much determined by living conditions in earlier ages, access to life-long education as well as the extent of labour force participation throughout younger years will decisively determine access to resources to allow for ageing in health and dignity. To develop policies to prepare the presently young and economically active population to invest in their future well-being needs to be of utmost priority on the agendas of national policy makers.
10. The general image of the elderly as old and frail and thus a burden on society, which quite often leads to discrimination in various forms, needs to be addressed. Public information campaigns need to be launched to provide adequate information and education to the wider public and to thus revise the approach to deal with the elderly in all societies.
11. Due to changing family patterns, increasingly more elderly are living alone. Consequently, loneliness and exclusion are one of the key issues to be addressed by communities and social workers.
12. South-south cooperation within the Caribbean subregion should be enhanced to exchange experiences and to learn from each other's best practices in dealing with the increasingly greying population.

13. Last but not least, ageing in grace and dignity is the wish of everybody. Thus, all stakeholders, the governments, policy makers, community workers, health professionals, family members and the aged themselves are called upon to contribute to the successful establishment of a society for all, which provides a quality life for all its citizens regardless of age and sex.

Annex

1. DEFINITIONS

The technical annex provides definitions for the demographic indicators presented in Chapter 3¹⁶.

Life expectancy

Life expectancy at a specific age is the average number of additional years a person of that age could expect to live if current mortality levels observed for ages above that age were to continue for the rest of that person's life. In particular, *life expectancy at birth (e0)* is the average number of years a newborn would live if current age-specific mortality rates were to continue. Apart from life expectancy at birth, *life expectancy at age 60 (e60)* and *life expectancy at age 80 (e80)* will be discussed.

Median age

The median age of a population is that age that divides a population into two groups of the same size, such as half the total population is younger than this age, and the other half older.

Ageing index

The ageing index is calculated as the number of persons 60 years old or over per hundred persons under age 15. This index compares the size of the two age-groups. A value of 100 indicates that both age-groups are of equal size. A value of 200 would mean there are two people over age 60 for every person under age 15, and vice versa a value of 50 would indicate the opposite: two young people per one elderly person. Consequently the higher the value of this index, the older the population will be.

Sex-ratio

The sex ratio is calculated as the number of males per one hundred females in a population. The sex ratio may be calculated for a total population or for a specific age group. Values over 100 indicate there are more men than women in a specific age-group. Values under 100 indicate a higher percentage of women in a given age-group.

Total Fertility Rate

The Total Fertility Rate (TFR) is defined as the average number of children a woman would bear over the course of her lifetime if current age-specific fertility rates remained constant throughout her childbearing years (normally between the ages 15 – 49). The current total fertility rate is usually taken as an indicator of the number of children women are having at present.

Support and dependency ratios

Dependency and support ratios measure the relative size of two age groups. They are generally used to assess the relation of one age group to another.

Total dependency ratio

The total dependency ratio is the number of persons under age 15 plus persons aged 65 and over per one hundred persons between the ages 15 to 64. It is the sum of the youth and the old-age dependency ratio.

¹⁶ The definitions provided are based on definitions provided by the United Nations Population Division in its publication 'World Population Ageing' (see footnote 3).

The lower the value of any of these ratios, the less favorable is the relationship between dependants and support provider.

Youth dependency ratio

The youth dependency ratio is the number of persons under age 15 per one hundred persons between the ages 15-64.

Old age dependency ratio

The old age dependency ratio is the number of persons under age 65 and over per one hundred persons between the ages 15 to 64.

Parent support ratio

The parent support ratio is the number of persons 85 years old and over per one hundred persons 50-64 years.

Potential support ratio

The potential support ratio is the number of persons aged 15 to 64 per one hundred persons aged 65 or older.

Illiteracy

Adult literacy refers to the proportion of the adult population who can, with understanding, both read and write a short simple statement on everyday life. Here, the literacy rate is expressed as a percentage of the population aged 70 years and above. It has been observed that some countries apply definitions and criteria for literacy which are different from the international standards, or equate persons with no schooling to illiterates, or change definitions between censuses and surveys. Practices for identifying literates may also vary, and errors in literacy self-declaration can affect the reliability of the data (United Nations, 2002c).

Labor force participation

The labor force participation rate consists of the economically active population in a particular age group as a percentage of the total population in that same age group. The active population (or labor force) is defined as the sum of persons in employment and unemployed persons seeking employment¹⁷. National definitions may differ in some cases and actual rates might be higher than those observed, since labor force participation in the informal sector has been relatively high in the Caribbean.

¹⁷ This definition of employment is the one adopted by the Thirteenth International Conference of Labor Statisticians (Geneva, 1982).

2. TABLES

Table 1: Life Expectancy at birth (e0)

Female	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	53.5	66.4	70.9	74.8	78.1
Bahamas	61.2	71.2	73.9	79.5	81.1
Barbados	59.5	73.9	79.5	82.2	83.9
Belize	58.3	70.6	75.9	79.5	81.8
Cuba	61.3	74.8	78.7	81.7	83.5
Dominican Republic	47.3	63.8	70.1	72.1	76.8
Guyana	53.9	63.2	66.9	68.7	74.9
Haiti	38.9	52.2	56.5	66.9	73.2
Jamaica	60.2	71.8	77.8	81.2	83.1
Netherlands Antilles	61.6	74.8	79.2	82.0	83.7
Puerto Rico	66.0	77.0	80.1	81.8	83.6
St. Lucia	55.3	71.0	76.4	79.8	82.1
Suriname	57.7	67.7	73.7	78.1	81.0
Trinidad and Tobago	59.9	70.9	77.2	81.1	83.0
Male	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	50.8	62.7	65.4	68.8	72.2
Bahamas	58.3	63.5	65.2	71.8	73.6
Barbados	55.0	68.7	74.5	77.2	78.9
Belize	57.1	68.9	73.0	75.7	77.7
Cuba	57.8	71.5	74.8	77.2	78.5
Dominican Republic	44.7	60.2	64.4	64.4	69.4
Guyana	50.8	58.3	58.0	59.6	67.3
Haiti	36.3	49.1	50.2	61.1	67.3
Jamaica	56.9	68.4	73.7	76.8	78.6
Netherlands Antilles	59.1	69.5	73.3	76.4	78.2
Puerto Rico	62.7	70.2	71.2	74.6	76.9
St. Lucia	52.7	64.9	71.1	74.5	76.8
Suriname	54.4	62.8	68.5	73.3	76.2
Trinidad and Tobago	58.2	65.9	72.5	76.1	78.0
Total	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	52.1	64.5	68.1	71.8	75.1
Bahamas	59.8	67.3	69.4	75.7	77.3
Barbados	57.2	71.3	77.2	79.8	81.4
Belize	57.7	69.7	74.4	77.5	79.7
Cuba	59.3	72.6	76.4	78.8	80.2
Dominican Republic	45.9	61.8	66.9	67.7	72.5
Guyana	52.3	60.7	62.4	64.1	71.2
Haiti	37.6	50.6	53.3	63.8	69.9
Jamaica	58.5	70.1	75.7	79.0	80.8
Netherlands Antilles	60.5	72.1	76.3	79.4	81.0
Puerto Rico	64.3	73.4	75.6	78.3	80.3
St. Lucia	54.1	68.0	73.8	77.2	79.5
Suriname	56.0	65.1	71.1	75.8	78.6
Trinidad and Tobago	59.1	68.3	74.8	78.6	80.5

Table 2: Life Expectancy at age 60 (e60)

Female	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	21.3	23.3	24.5
Bahamas	22.1	25.0	26.2
Barbados	22.5	24.5	25.9
Belize	22.0	23.7	25.0
Caribbean	21.3	23.3	24.5
Cuba	22.5	24.1	25.1
Dominican Republic	19.4	21.6	23.4
Guyana	19.0	21.6	23.5
Haiti	16.5	20.2	22.6
Jamaica	22.4	24.4	25.6
Netherlands Antilles	22.3	24.4	25.7
Puerto Rico	23.8	24.9	26.1
St. Lucia	21.3	23.3	24.9
Suriname	19.2	21.7	23.7
Trinidad and Tobago	21.2	23.9	25.3
Male	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	18.8	20.2	21.0
Bahamas	18.3	19.8	21.1
Barbados	18.5	20.3	21.6
Belize	20.1	21.1	21.8
Cuba	20.3	21.3	21.8
Dominican Republic	17.4	18.6	19.9
Guyana	15.7	17.9	19.6
Haiti	15.0	18.2	20.0
Jamaica	20.0	21.3	22.2
Netherlands Antilles	18.0	19.7	21.0
Puerto Rico	19.4	20.0	20.9
St. Lucia	17.8	18.9	20.3
Suriname	16.9	18.3	19.7
Trinidad and Tobago	18.1	19.7	21.1
Total	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	20.1	21.8	22.8
Bahamas	20.4	22.6	23.8
Barbados	20.7	22.5	23.8
Belize	21.0	22.3	23.4
Cuba	21.4	22.7	23.4
Dominican Republic	18.4	20.2	21.7
Guyana	17.4	20.1	21.9
Haiti	15.8	19.3	21.4
Jamaica	21.3	22.9	24.0
Netherlands Antilles	20.3	22.3	23.5
Puerto Rico	21.7	22.7	23.7
St. Lucia	19.7	21.3	22.7
Suriname	18.2	20.1	21.8
Trinidad and Tobago	19.7	21.9	23.3

Table 3: Life Expectancy at age 80 (e80)

Female	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	8.1	8.9	9.5
Bahamas	8.7	10.2	10.9
Barbados	8.2	9.5	10.5
Belize	8.5	9.4	10.2
Cuba	8.0	8.8	9.3
Dominican Republic	6.4	7.5	8.5
Guyana	7.1	8.3	9.3
Haiti	6.3	7.5	8.3
Jamaica	8.7	9.9	10.6
Netherlands Antilles	8.1	9.4	10.4
Puerto Rico	9.5	10.1	10.8
St. Lucia	8.6	9.4	10.2
Suriname	7.2	8.3	9.4
Trinidad and Tobago	8.2	9.6	10.4
Male	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	7.2	7.5	7.8
Bahamas	8.1	7.8	8.4
Barbados	6.1	7.1	7.8
Belize	7.5	7.9	8.3
Cuba	7.4	7.8	8.0
Dominican Republic	6.0	6.6	7.2
Guyana	6.1	6.9	7.5
Haiti	5.9	6.8	7.2
Jamaica	7.7	8.2	8.6
Netherlands Antilles	6.0	6.7	7.5
Puerto Rico	7.7	7.6	7.9
St. Lucia	7.0	7.1	7.6
Suriname	7.0	7.0	7.5
Trinidad and Tobago	6.7	7.2	7.9
Total	1950-55	1975-80	2000-05	2025-30	2045-50
<i>Caribbean</i>	7.7	8.3	8.8
Bahamas	8.4	9.3	10.0
Barbados	7.4	8.6	9.3
Belize	8.0	8.7	9.3
Cuba	7.7	8.4	8.8
Dominican Republic	6.2	7.1	7.9
Guyana	6.7	7.8	8.7
Haiti	6.1	7.2	7.9
Jamaica	8.3	9.1	9.7
Netherlands Antilles	7.2	8.4	9.2
Puerto Rico	8.8	9.2	9.8
St. Lucia	7.9	8.5	9.2
Suriname	7.1	7.8	8.6
Trinidad and Tobago	7.5	8.6	9.4

Table 4: Median Age

Median age (years)	1950	1975	2000	2025	2050
<i>Caribbean</i>	21.3	20.0	26.5	33.2	38.3
Bahamas	20.7	19.3	26.2	33.2	38.2
Barbados	24.6	23.7	32.6	43.5	47.7
Belize	20.8	16.1	20.1	30.4	38.1
Cuba	23.3	22.7	32.9	43.5	46.7
Dominican Republic	17.7	17.1	23.1	30.1	36.3
Guyana	19.8	17.4	24.1	33.0	44.2
Haiti	22.4	19.3	18.9	24.6	32.7
Jamaica	22.2	17.0	24.2	32.7	39.0
Netherlands Antilles	23.3	22.3	32.0	37.8	41.5
Puerto Rico	18.4	22.6	30.6	38.0	42.4
St. Lucia	20.7	16.5	23.5	31.4	38.2
Suriname	20.1	16.0	24.0	35.3	44.0
Trinidad and Tobago	20.7	20.0	27.7	39.5	44.8

Table 5: Ageing Index

Ageing Index	1950	1975	2000	2025	2050
<i>Caribbean</i>	17.8	20.3	33.5	69.6	122.3
Bahamas	16.9	14.2	27.0	69.6	118.3
Barbados	25.7	43.3	64.7	162.2	235.2
Belize	15.5	14.5	15.7	41.9	109.8
Cuba	20.4	26.4	64.3	156.8	220.5
Dominican Republic	11.6	10.4	19.7	50.2	98.7
Guyana	16.2	12.5	22.6	67.7	179.8
Guyana	16.2	12.5	22.6	67.7	179.8
Haiti	22.3	17.0	13.9	23.9	68.0
Jamaica	16.1	18.8	30.6	62.9	123.8
Netherlands Antilles	24.9	26.0	47.1	117.1	154.5
Puerto Rico	14.2	27.5	59.9	108.2	164.4
St. Lucia	14.8	16.0	24.3	51.6	111.4
Suriname	20.9	12.2	26.6	70.3	178.2
Trinidad and Tobago	15.2	20.0	38.3	107.3	203.0

Table 6: Sex Ratio

Sex Ratio (60+)	1950	1975	2000	2025	2050
<i>Caribbean</i>	99.6	98.8	86.6	79.5	80.5
Bahamas	73.3	72.6	76.6	70.8	74.0
Barbados	38.5	78.7	62.2	82.3	81.9
Belize	92.3	90.7	102.5	95.2	90.5
Cuba	134.1	113.5	92.1	86.8	86.0
Dominican Republic	99.7	102.6	94.4	81.9	79.2
Guyana	78.5	89.4	77.5	60.8	62.8
Haiti	81.9	85.0	81.4	68.3	75.5
Jamaica	72.3	85.8	84.1	80.3	85.4
Netherlands Antilles	48.6	84.6	75.4	71.4	78.7
Puerto Rico	98.5	92.3	76.3	66.6	74.1
St. Lucia	54.9	72.1	71.8	75.1	78.9
Suriname	100.0	97.1	79.4	76.3	82.6
Trinidad and Tobago	85.7	85.7	85.6	82.1	80.9
Sex Ratio (80+)	1950	1975	2000	2025	2050
<i>Caribbean</i>	78.6	84.9	77.4	64.6	62.0
Bahamas	58.9	53.2	65.4	48.0	50.6
Barbados	30.0	57.6	45.3	42.6	59.4
Belize	88.1	82.6	83.8	81.7	70.8
Cuba	91.1	113.5	85.5	73.0	71.0
Dominican Republic	88.7	82.9	90.6	69.3	63.2
Guyana	100.0	59.4	65.5	49.0	42.7
Haiti	70.0	80.6	77.0	63.6	55.3
Jamaica	52.1	56.1	70.7	67.9	60.9
Netherlands Antilles	35.6	41.6	51.0	44.5	47.9
Puerto Rico	109.6	73.3	67.8	48.5	45.4
St. Lucia	44.5	50.1	61.3	50.7	51.8
Suriname	100.0	75.4	75.7	52.1	56.4
Trinidad and Tobago	50.0	57.9	70.4	55.5	55.5

Table 7: Total Fertility Rates

TFR	1950-55	1975-80	2000-05	2025-30
<i>Caribbean</i>	5.2	3.6	2.4	2.1
Bahamas	4.1	3.2	2.3	2.1
Barbados	4.7	2.2	1.5	1.8
Belize	6.7	6.2	2.9	2.1
Cuba	4.1	2.1	1.6	1.9
Dominican Republic	7.4	4.7	2.7	2.1
Guyana	6.7	3.9	2.3	2.1
Haiti	6.3	6.0	4.0	2.5
Jamaica	4.2	4.0	2.4	2.1
Netherlands Antilles	5.7	2.5	2.1	2.0
Puerto Rico	5.0	2.8	1.9	1.9
St. Lucia	6.0	5.2	2.5	2.1
Suriname	6.6	4.2	2.1	1.8
Trinidad and Tobago	5.3	3.4	1.5	1.9

Table 8: Support Ratios

Parent Support Ratio	1950	1975	2000	2025	2050
<i>Caribbean</i>	1.9	2.7	5.3	6.0	13.7
Bahamas	2.3	3.2	4.4	5.9	16.2
Barbados	3.1	3.6	11.2	5.7	26.5
Belize	1.6	3.2	5.5	4.2	8.1
Cuba	2.0	2.4	6.1	7.1	23.4
Dominican Republic	1.2	1.5	2.0	3.0	9.2
Guyana	2.4	2.0	4.1	3.7	18.4
Haiti	1.6	1.9	2.5	3.4	4.9
Jamaica	1.2	3.1	9.5	6.5	13.3
Netherlands Antilles	3.4	2.0	4.0	7.3	19.0
Puerto Rico	2.8	5.1	8.3	10.2	18.0
St. Lucia	4.3	2.4	7.1	4.0	10.2
Suriname	4.3	1.9	4.4	3.8	12.0
Trinidad and Tobago	2.3	3.2	4.8	5.7	19.3
Potential Support ratio	1950	1975	2000	2025	2050
<i>Caribbean</i>	12.8	10.1	9.2	5.9	3.5
Bahamas	12.7	14.5	12.2	6.4	3.4
Barbados	10.8	6.0	6.7	3.8	2.0
Belize	15.9	10.7	13.5	10.2	4.1
Cuba	12.2	8.3	7.2	3.9	2.1
Dominican Republic	16.2	17.3	14.5	7.8	4.2
Guyana	12.0	14.1	13.0	6.7	2.2
Haiti	11.1	11.9	15.0	12.8	6.4
Jamaica	15.6	8.4	8.5	6.8	3.4
Netherlands Antilles	9.2	10.8	8.5	3.7	3.0
Puerto Rico	13.6	9.6	6.3	4.2	2.8
St. Lucia	14.8	9.9	10.9	8.8	3.7
Suriname	8.9	12.5	11.5	8.8	2.7
Trinidad and Tobago	14.2	11.6	10.3	4.9	2.3

Table 9: Dependency Ratios

Total	1950	1975	2000	2025	2050
<i>Caribbean</i>	75.3	82.7	57.2	52.1	60.0
Bahamas	77.6	81.8	53.7	49.5	61.4
Barbados	63.6	70.4	45.0	49.2	77.6
Belize	73.0	106.7	74.2	45.3	55.1
Cuba	68.5	78.8	44.5	49.5	73.9
Dominican Republic	91.4	93.6	60.8	51.1	56.9
Guyana	83.9	91.7	55.1	47.9	74.8
Haiti	72.5	84.0	79.5	56.9	50.1
Jamaica	66.4	104.2	63.1	49.0	59.9
Netherlands Antilles	71.1	62.8	48.3	58.0	61.5
Puerto Rico	89.0	66.4	52.2	52.8	64.1
St. Lucia	75.3	106.2	60.7	45.5	57.8
Suriname	85.3	106.3	56.3	39.1	63.6
Trinidad and Tobago	79.7	75.4	46.3	48.2	72.7
Old age dependency ratio	1950	1975	2000	2025	2050
<i>Caribbean</i>	7.8	9.9	10.8	16.9	28.9
Bahamas	7.9	6.9	8.2	15.7	29.4
Barbados	9.3	16.8	15.0	26.0	50.9
Belize	6.3	9.4	7.4	9.8	24.5
Cuba	8.2	12.0	13.8	25.6	47.1
Dominican Republic	6.2	5.8	6.9	12.8	24.0
Guyana	8.3	7.1	7.7	14.9	44.7
Haiti	9.0	8.4	6.7	7.8	15.7
Jamaica	6.4	11.8	11.8	14.8	29.0
Netherlands Antilles	10.9	9.3	11.8	26.9	33.4
Puerto Rico	7.3	10.5	15.9	23.6	36.2
St. Lucia	6.7	10.1	9.2	11.4	26.7
Suriname	11.2	8.0	8.7	11.3	36.6
Trinidad and Tobago	7.1	8.6	9.7	20.5	44.4
Youth dependency ratio	1950	1975	2000	2025	2050
<i>Caribbean</i>	67.4	72.8	46.4	35.2	31.2
Bahamas	69.7	74.9	45.5	33.8	32.0
Barbados	54.3	53.6	30.0	23.2	26.7
Belize	66.7	97.3	66.8	35.5	30.7
Cuba	60.3	66.8	30.7	23.9	26.8
Dominican Republic	85.2	87.8	53.9	38.3	32.9
Guyana	75.5	84.6	47.4	33.0	30.1
Haiti	63.6	75.7	72.9	49.0	34.4
Jamaica	59.9	92.4	51.3	34.2	30.9
Netherlands Antilles	60.2	53.5	36.5	31.1	28.1
Puerto Rico	81.7	55.9	36.3	29.2	27.9
St. Lucia	68.6	96.1	51.5	34.1	31.1
Suriname	74.1	98.3	47.6	27.8	27.0
Trinidad and Tobago	72.6	66.7	36.6	27.7	28.3

Table 10: Percentage of the population aged 60 and over

Female	1950	1975	2000	2025	2050
<i>Caribbean</i>	6.9	8.1	10.5	17.7	25.9
Bahamas	7.2	6.7	8.9	18.0	26.2
Barbados	11.4	14.6	16.0	27.2	37.9
Belize	6.1	7.2	6.0	10.5	22.7
Cuba	6.5	9.4	14.2	26.7	36.1
Dominican Republic	5.3	4.7	6.9	14.0	22.8
Guyana	7.3	5.8	7.5	17.8	35.5
Haiti	8.8	7.4	6.1	8.7	17.3
Jamaica	6.6	9.0	10.3	15.9	25.7
Netherlands Antilles	11.4	9.2	12.8	26.1	29.5
Puerto Rico	6.2	9.4	15.6	23.9	31.2
St. Lucia	7.3	8.3	8.9	13.7	24.5
Suriname	8.3	5.9	8.9	15.8	31.9
Trinidad and Tobago	6.6	8.2	10.3	21.6	35.7
Male	1950	1975	2000	2025	2050
<i>Caribbean</i>	6.8	8.0	9.2	14.5	21.6
Bahamas	6.1	5.0	7.0	13.4	20.6
Barbados	5.2	12.5	10.6	23.1	32.7
Belize	5.9	6.5	6.0	9.9	20.7
Cuba	8.0	10.4	13.1	23.4	31.8
Dominican Republic	5.1	4.7	6.3	11.5	18.5
Guyana	6.0	5.2	6.2	12.1	25.8
Haiti	7.6	6.6	5.2	6.2	13.8
Jamaica	5.0	8.0	8.9	13.0	22.2
Netherlands Antilles	5.9	7.9	10.3	19.8	24.1
Puerto Rico	6.0	9.1	12.8	17.2	24.5
St. Lucia	4.2	6.5	6.6	10.4	19.4
Suriname	8.4	5.7	7.2	12.2	26.9
Trinidad and Tobago	5.7	7.1	8.9	18.4	30.7
Total	1950	1975	2000	2025	2050
<i>Caribbean</i>	6.9	8.1	9.9	16.1	23.8
Bahamas	6.6	5.9	8.0	15.7	23.5
Barbados	8.5	13.6	13.4	25.2	35.4
Belize	6.0	6.8	6.0	10.2	21.7
Cuba	7.3	9.9	13.7	25.1	34.0
Dominican Republic	5.2	4.7	6.6	12.7	20.7
Guyana	6.7	5.5	6.9	15.1	31.0
Haiti	8.2	7.0	5.6	7.5	15.6
Jamaica	5.8	8.5	9.6	14.5	24.0
Netherlands Antilles	8.8	8.6	11.6	23.1	26.8
Puerto Rico	6.1	9.2	14.3	20.7	27.9
St. Lucia	5.8	7.4	7.8	12.1	22.0
Suriname	8.4	5.8	8.1	14.0	29.4
Trinidad and Tobago	6.1	7.6	9.6	20.1	33.3

Table 11: Percentage of the population aged 80 and over

Female	1950	1975	2000	2025	2050
<i>Caribbean</i>	0.6	0.8	1.6	2.8	6.1
Bahamas	0.7	0.8	1.3	2.9	7.1
Barbados	1.3	1.4	3.9	4.0	11.7
Belize	0.4	0.7	0.9	1.3	4.0
Cuba	0.6	0.8	2.4	4.7	11.2
Dominican Republic	0.3	0.4	0.6	1.5	4.3
Guyana	0.5	0.6	1.0	2.0	9.0
Haiti	0.6	0.6	0.6	1.0	2.3
Jamaica	0.3	1.0	2.1	2.5	6.0
Netherlands Antilles	1.3	0.9	1.9	4.3	8.4
Puerto Rico	0.5	1.2	2.9	5.0	8.5
St. Lucia	1.1	0.8	1.6	1.9	5.1
Suriname	0.9	0.4	0.9	2.1	7.0
Trinidad and Tobago	0.6	0.8	1.6	3.2	8.6
Male	1950	1975	2000	2025	2050
<i>Caribbean</i>	0.4	0.6	1.2	1.9	3.9
Bahamas	0.5	0.4	0.9	1.5	3.8
Barbados	0.5	0.9	1.9	1.8	7.3
Belize	0.3	0.6	0.8	1.1	2.8
Cuba	0.5	0.8	2.0	3.5	8.1
Dominican Republic	0.3	0.3	0.5	1.0	2.8
Guyana	0.5	0.4	0.7	1.1	4.4
Haiti	0.5	0.5	0.5	0.6	1.3
Jamaica	0.2	0.6	1.5	1.7	3.7
Netherlands Antilles	0.5	0.4	1.0	2.0	4.2
Puerto Rico	0.5	0.9	2.1	2.6	4.1
St. Lucia	0.5	0.4	1.0	1.0	2.7
Suriname	0.9	0.3	0.7	1.1	4.0
Trinidad and Tobago	0.3	0.5	1.1	1.8	5.1
Total	1950	1975	2000	2025	2050
<i>Caribbean</i>	0.5	0.7	1.4	2.3	5.1
Bahamas	0.6	0.6	1.1	2.2	5.5
Barbados	0.9	1.2	2.9	2.9	9.6
Belize	0.4	0.7	0.8	1.2	3.4
Cuba	0.6	0.8	2.2	4.1	9.7
Dominican Republic	0.3	0.3	0.5	1.2	3.6
Guyana	0.5	0.5	0.9	1.6	6.9
Haiti	0.5	0.5	0.5	0.8	1.8
Jamaica	0.2	0.8	1.8	2.1	4.8
Netherlands Antilles	0.9	0.7	1.5	3.2	6.4
Puerto Rico	0.5	1.1	2.5	3.9	6.4
St. Lucia	0.8	0.6	1.3	1.4	3.9
Suriname	0.9	0.4	0.8	1.6	5.6
Trinidad and Tobago	0.5	0.7	1.3	2.5	6.9

Table 12: Illiteracy Rates for population aged 70 and over

Female	1980	1990	2000	2005	2010
Bahamas	17.1	11.9	8.4	7.9	7.3
Cuba	20.9	15.9	12.4	11.5	8.4
Dominican Republic	62.0	53.3	42.9	38.0	31.2
Guyana	30.4	27.2	17.4	12.6	7.0
Haiti	94.0	90.8	87.0	83.4	82.5
Jamaica	52.0	40.1	28.9	26.8	23.7
Netherlands Antilles	13.9	10.3	7.5	6.3	5.4
Puerto Rico	33.2	22.8	15.8	13.2	10.7
Trinidad and Tobago	25.1	19.1	14.1	10.4	7.0
Male	1980	1990	2000	2005	2010
Bahamas	13.7	10.9	8.8	8.5	8.1
Cuba	18.6	15.3	12.4	11.2	7.6
Dominican Republic	52.4	44.7	35.9	31.7	26.4
Guyana	16.3	12.3	7.8	5.7	4.4
Haiti	88.4	84.2	79.8	75.5	75.3
Jamaica	55.0	46.7	38.5	35.1	31.6
Netherlands Antilles	12.6	9.9	7.0	5.9	5.1
Puerto Rico	23.7	17.5	13.0	11.3	10.0
Trinidad and Tobago	17.0	10.2	5.3	3.6	2.6
Total	1980	1990	2000	2005	2010
Bahamas	15.7	11.4	8.6	8.1	7.6
Cuba	19.7	15.6	12.4	11.4	8.0
Dominican Republic	57.4	49.1	39.5	35.0	28.9
Guyana	24.2	19.7	13.2	9.4	5.9
Haiti	91.5	87.8	83.8	80.0	79.4
Jamaica	53.4	43.0	33.2	30.4	27.2
Netherlands Antilles	13.3	10.1	7.3	6.2	5.3
Puerto Rico	28.7	20.4	14.6	12.4	10.4
Trinidad and Tobago	21.6	15.0	10.1	7.4	5.1

Table 13: Labor Force Participation Rates for population aged 65 and over

Female	1980	1990	2000	2005	2010
<i>Caribbean</i>	21.4	15.0	9.5	8.3	7.3
Bahamas	18.0	28.3	15.2	14.7	14.2
Barbados	19.0	10.9	4.1	3.4	2.9
Belize	11.9	7.5	5.2	4.6	4.1
Cuba	8.5	4.9	1.8	1.4	1.2
Dominican Republic	4.5	10.5	10.2	10.2	10.1
Guyana	7.8	6.0	5.1	4.7	4.4
Haiti	59.0	45.4	36.7	33.5	30.8
Jamaica	11.4	23.6	23.7	22.3	21.0
Netherlands Antilles	5.4	4.8	3.6	3.1	2.6
Puerto Rico	4.8	2.9	2.7	2.3	2.0
St. Lucia	..	..	..	..	..
Suriname	8.9	7.1	2.2	1.9	1.6
Trinidad and Tobago	12.4	10.5	5.2	4.5	4.0
Male	1980	1990	2000	2005	2010
<i>Caribbean</i>	66.4	47.2	30.4	28.4	25.8
Bahamas	60.9	57.9	36.4	32.7	29.7
Barbados	42.0	34.0	15.0	12.8	11.2
Belize	88.1	59.4	55.0	50.1	46.0
Cuba	57.0	34.7	11.0	9.0	7.6
Dominican Republic	84.6	79.1	73.5	70.6	67.7
Guyana	60.4	41.4	31.4	27.8	25.0
Haiti	87.2	81.0	71.2	67.1	62.9
Jamaica	67.0	59.5	53.8	49.3	44.8
Netherlands Antilles	18.4	16.8	14.4	13.5	12.6
Puerto Rico	58.4	28.7	17.1	10.0	2.8
St. Lucia	..	..	..	..	..
Suriname	65.6	40.6	21.7	18.4	15.9
Trinidad and Tobago	53.4	38.9	18.9	16.2	14.1
Total	1980	1990	2000	2005	2010
<i>Caribbean</i>	43.5	31.2	19.4	17.6	15.7
Bahamas	35.9	40.2	24.3	22.4	20.8
Barbados	24.8	19.0	8.4	7.0	6.0
Belize	48.2	32.4	29.3	26.7	24.2
Cuba	36.0	21.7	6.3	5.0	4.2
Dominican Republic	44.2	43.8	41.7	39.7	37.9
Guadeloupe	34.1	13.1	5.0	4.0	2.9
Guyana	29.4	21.7	17.2	14.9	13.1
Haiti	71.5	61.6	52.4	48.8	45.2
Jamaica	34.1	39.5	37.4	34.3	31.6
Martinique	31.2	16.4	3.8	3.0	2.5
Netherlands Antilles	9.5	9.6	8.2	7.5	6.7
Puerto Rico	30.5	15.4	9.3	5.6	2.4
St. Lucia
Suriname	35.0	22.9	11.3	9.2	7.6
Trinidad and Tobago	30.4	22.9	12.0	10.2	8.9

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