



MAURITIUS

Economic and Social Indicators

An Occasional Paper

ISSUE NO. 299

25 June, 1999

**POPULATION AGEING AND THE ELDERLY
IN MAURITIUS**

Price: Rs 20.-

<http://ncb.intnet.mu/medrc.htm>

MINISTRY OF ECONOMIC DEVELOPMENT, PRODUCTIVITY
AND REGIONAL DEVELOPMENT

PORT LOUIS
MAURITIUS

POPULATION AGEING AND THE ELDERLY IN MAURITIUS

Explanatory notes

- The elderly : The population aged 60 years and above
- Median age : The age that divides the population into numerically equal parts of younger and older persons
- Index of ageing : The number of elderly persons per 100 children aged below 15
- The oldest old : The population aged 75 years and above
- Sex ratio : Number of women per 100 men
- Income : The income of the elderly refers to his/her individual income. This comprises regular cash income from all private sources such as employment, self-employment, investments, rent and other direct cash payments like pensions and social benefits
- Consumption expenditure : Consumption expenditure refers to the acquisition of goods and services by purchase, own production, or obtained free of charge. It excludes income tax, social security contributions, insurance and the services provided free by government e.g healthcare and education.
- Total dependency ratio : The combined number of children below 15 years and elderly persons per 100 persons of working age 15-59 years
- Parent support ratio : The number of persons aged 75 years and above per 100 persons aged 45 to 59 years
- Basic Retirement Pension : The pension paid by government to every Mauritian citizen aged 60 years or over. The amount paid in 1996/97 was :-
Rs1,055 to those aged 60-89 years
Rs4,120 to those aged 90-99 years
Rs4,220 to those aged 100 years and above
An additional pension of Rs745 was given to those elderly who were suffering from a severe disability.

Population ageing and the elderly in Mauritius

1. Introduction

Year 1999 has been declared as the International Year of Older Persons. This paper which presents information on population ageing and the profile of the elderly in the Republic of Mauritius has been prepared in this context. The analysis is based on: _

- population data from past censuses
- latest population projections computed by the Central Statistical Office; the projections used are the medium variant projections with 1997 as base year
- data collected from the latest household budget survey, the 1996/97 HBS.

2. Population ageing

Population ageing is a change in the age-structure of the population from a young one to an older one, resulting in an increasing proportion of elderly people in the population. During the 20th century, ageing of the Mauritian population started in the sixties mainly due to fertility decreases. This resulted in a decline in the proportion of children and thus in an increase in the proportion of the elderly. It is projected that over the next four decades, population ageing will proceed at a faster rate than in the past.

3. The elderly

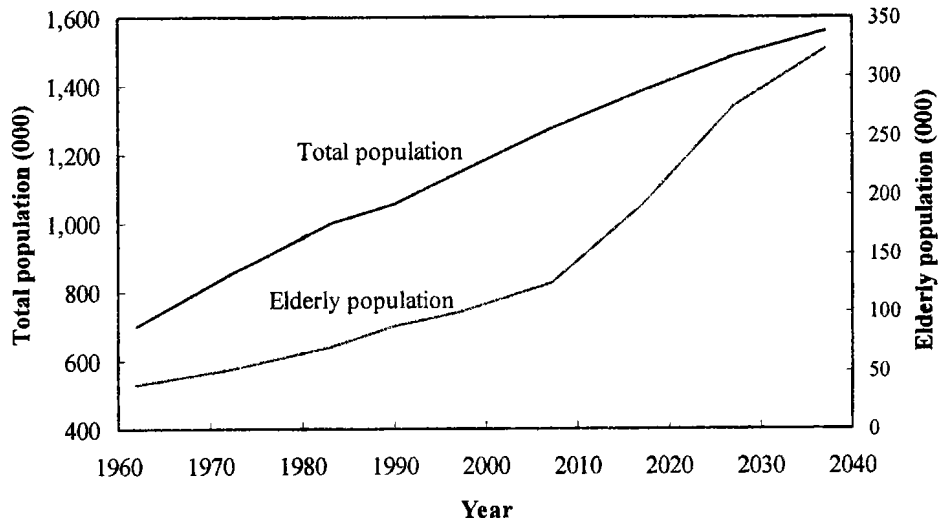
The elderly population (defined as the population aged 60 years and above) numbered 99,300 or 9% of a total population of 1,147,700 in the Republic as at mid-1997. Elderly women were more numerous; they were around 56,100 in number as compared to 43,200 elderly men.

4. Growth of the elderly population

The elderly population has more than doubled between 1962 and 1997, increasing from 37,600 to 99,300 by a factor of 2.6. At the same time, the total number of persons in the Republic of Mauritius has increased by a factor of only 1.6. Consequently, the elderly who comprised 5% of the population in 1962, made up 9% of the population in 1997. Declining fertility rates have led to a rise in the median age of the Mauritian population from 18 years in 1962 to 28 years in 1997.

According to population projections, the elderly population will more than triple between 1997 and 2037, to around 325,000. Most of this growth will occur in the period around 2007 to 2027 when the annual growth rate will average 4.0% as compared to 2.3% during 1997-2007 and 1.7% during 2027-2037 (Table 1).

Evolution of total and elderly population, 1962-2037



The projections also indicate that by 2037, around 1 in every 5 persons would be 60 years or over as compared to around 1 in every 11 persons in 1997. Also, there could be 1 elderly person for every child under 15 years by 2037 against 1 elderly person for every 3 children in 1997. The median age of the population is expected to rise to 37 by 2037 (Table 2).

5. The oldest old

The oldest old, here defined as those aged 75 years and above, are the most rapidly growing elderly age group. Between 1962 and 1997, that group increased from 6,000 to 22,000 - a 270% increase as compared to an increase of 164% among the elderly population as a whole. It is projected that the oldest old will number 96,000 by 2037 (Table 3). In terms of proportion, this group constituted 16% of the elderly in 1962, 22% in 1997 and could reach 30% by 2037 - an indication that the elderly population is itself growing older.

6. Sex composition

In 1997, elderly women outnumbered elderly men by a ratio of 130 to 100. This predominance of women increased with age. The number of women per 100 men was around 120 in the age group 60-74 years and reached 174 among those aged 75 years and above, i.e. the oldest old.

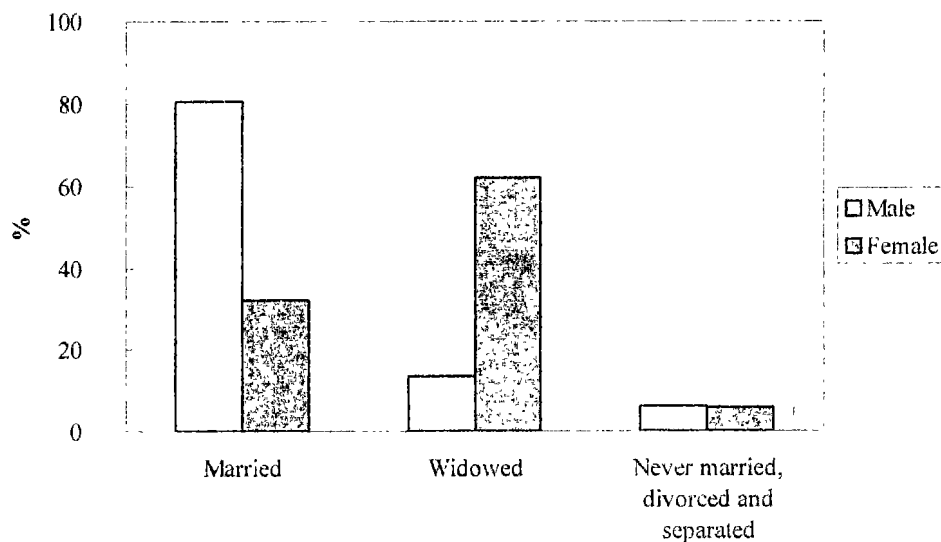
However, as more men live to older ages, the proportion of women among the elderly could be declining over time. According to population projections, in 2037 the sex ratio will be around 119 women per 100 men down from 130 in 1997.

7. Marital status

Based on the results of the 1996/97 HBS, most elderly men (81%) were married and living with their spouse while around 13% were widowed. In contrast, only 32% of elderly women were married; they were more likely to be widowed (62%). Thus, while most elderly men have a spouse for assistance and companionship, most elderly women do not.

The remaining elderly men and women were either never married or divorced or separated - this proportion was around 6% for both men and women (Table 4).

**Distribution of the elderly by marital status and sex,
1996/97 HBS**



7. Living arrangements

In 1996/97, more than 1 out of 2 elderly persons were living in extended or composite households. Around 37% were living with their spouse and/or unmarried children and the remaining 8% were living alone (Table 5). Elderly women were more likely than their male counterparts to be living alone. Around 11% of elderly women were living on their own as compared to only 4% among elderly men. In fact, nearly 8 out of every 10 elderly persons who lived alone were women.

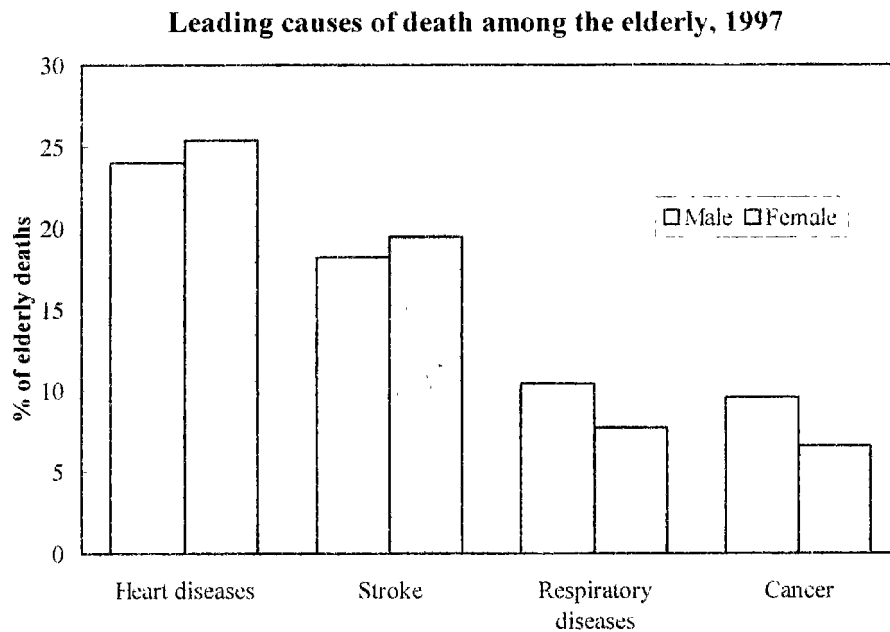
8. Educational characteristics

From the 1996/97 HBS data, 72% of elderly men had attended school in the past as compared to 47% of their female counterparts. Regarding educational attainment, only 6% of the elderly had post-primary education – the proportion was 8% for men and 4% for women.

Data on literacy was not collected at the HBS; most recent data on this characteristic is available at the 1990 Census. This shows that only 1 out of 2 elderly persons was literate in 1990 i.e. could, with understanding read and write a simple statement. The literacy rate was 67% for elderly men and 41% for women.

9. Deaths

Of a total of 8,000 deaths in the country during 1997, nearly 5,000 were among the elderly. The overall death rate among the elderly was 50 per 1,000; it was higher for men (60 per 1,000) than for women (43 per 1,000) as shown in Table 6. Diseases of the circulatory system (of which heart diseases and stroke are the major components) constituted the leading cause of death accounting for more than half of all elderly deaths. Next ranked diseases of the respiratory system and cancer respectively claiming 9% and 8% of elderly lives (Table 7).



10. Activity status and employment

At the 1996/97 HBS, the majority of elderly (84%) reported themselves either as retired or as homemakers. Only around 11% of the elderly were reported as employed or self-employed - the proportion was 20% among elderly men and only 4% among elderly women (Table 8).

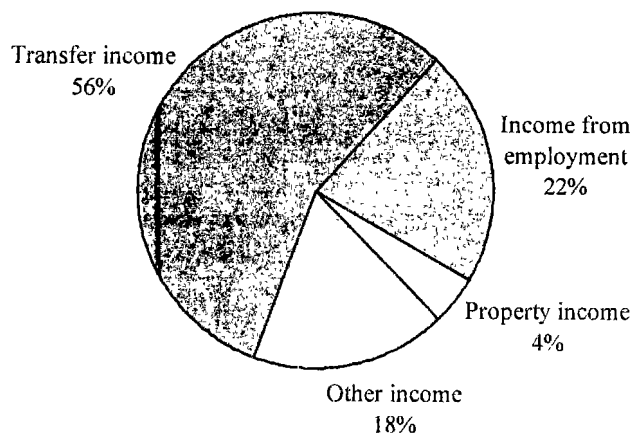
Among the employed elderly, around 27% had elementary occupations. Another 19% were engaged in agricultural jobs and 18% were performing at the administrative, professional or technical level.

11. Income

In 1996/97, the average income of an elderly person was around Rs3,300 monthly. The average income of an elderly man was more than double that of an elderly woman - Rs5,000 against Rs2,000, mainly because relatively fewer women receive employment income and employment-related pensions.

As shown in Table 9, transfer income consisting mainly of old age pensions and retirement benefits, was the major source of income, representing around 56% of total income. Income from employment/self-employment was the second largest income source (22% of total income) followed by 'other income' that consists mainly of withdrawals from savings and gifts in cash (18%).

**Distribution of elderly's income by source of income.
1996/97 HBS**



12. Expenditure

At the 1996/97 HBS, it was not possible to collect expenditure data for each individual member of the household. Thus consumption expenditure data collected related to the household as a whole. It is not therefore possible to obtain the average expenditure of an elderly person as such. However an idea of the average expenditure of the aged can be obtained by looking at the per capita consumption expenditure of the following types of households: -

- All-elderly households with elderly members only
- Non-elderly households without any elderly members
- Households of mixed type, i.e. containing both elderly and non-elderly members

All-elderly households were found to have the highest consumption expenditure per member. The average monthly consumption expenditure per capita was around Rs2,700 for the all-elderly

households as compared to Rs1,900 for the non-elderly households and Rs1,800 for those of mixed type.

The pattern of expenditure of the members in all-elderly households was significantly different from those living in other households. A higher proportion of their overall expenditure was allocated to food, medical care, household operations, fuel and light - 78% against 63% for those in mixed households and 61% for those in non-elderly households (Table 10). In fact, the expenditure incurred on these items for each person was nearly double in all-elderly households than in households of the mixed and non-elderly types.

13. Corollaries of ageing

The total dependency ratio, defined as the number of children (below 15 years) and elderly persons per 100 persons of working age (age15-59 years), is a gross indication of the overall support burden on the working-age adult community. This ratio is expected to remain stable at around 54 up to 2012. From 2012 to 2027, it could rise to 66. Population projections indicate that by 2037, the combined number of children and elderly per 100 working-age adults could be of the order of 71 (Table 11).

As more people live longer, there will be more relatives who will be facing the concern and expense of caring for them, specifically for the oldest old. One measure of the need for family support for the oldest old is the Parent Support Ratio (PSR). It is here defined as the number of persons aged 75 years and over, per 100 persons aged 45 to 59 years, which in a general sense relates the oldest old to their immediate offspring. Between 1997 and 2017 the PSR is expected to remain at around 15. In the following twenty years however, there could be as many as 33 'oldest old' per 100 persons in the age bracket 45-59 years (Table 11).

As regards social security disbursements, government expenditure on payments of old-age pensions (basic retirement pensions) will become increasingly heavier. Assuming that the pension rates of 1996/97 are maintained in the following forty years, it is projected that the cost of old-age pensions will nearly double between 1996/97 and 2016/2017 - from Rs1,542 million to Rs2,942 million. By 2036/2037, the total amount of old-age pensions payable could be over Rs5,000 million, more than three times the amount in 1996/97 (Table 12).

**Central Statistical Office
Ministry of Economic Development, Productivity and Regional Development
Port Louis**

June 1999

**Table 1 - Total and elderly population and growth rate,
Republic of Mauritius, 1962-2037**

Year	Number		Period	Annual growth rate (%)	
	Total population	Elderly population		Total population	Elderly population
1962	699,954	37,579	1962-1972	2.0	3.0
1972	850,968	50,492			
1983	999,945	70,277	1972-1983	1.5	3.1
1990	1,056,660	87,527			
1997	1,147,706	99,272	1983-1990	0.8	3.2
1997	1,147,706	99,272			
Projected estimates	2007	1,273,630	1990-1997	1.2	1.8
	2017	1,386,540	1997-2007	1.0	2.3
	2017	1,386,540	2007-2017	0.9	4.4
	2027	1,485,510	2017-2027	0.7	3.7
	2027	1,485,510	2027-2037	0.5	1.7
	2037	1,558,773	323,715		

Table 2 - Selected age-indicators, Republic of Mauritius, 1962-2037

Year	Median age	% aged 60 years & above	% aged below 15 years	Index of ageing ^{1/}	
1962	17.6	5.4	45.3	11.9	
1972	19.0	5.9	40.4	14.7	
1983	22.6	7.0	32.5	21.6	
1990	25.7	8.3	29.7	27.9	
1997	27.8	8.6	26.5	32.6	
Projected estimates	2007	30.6	9.7	24.7	39.5
	2017	33.7	13.7	22.6	60.7
	2027	35.5	18.5	21.4	86.4
	2037	36.9	20.8	20.7	100.6

^{1/} Number of persons aged 60+ per 100 children aged 0-14 years

Table 3 - Elderly population by age group and sex, 1962-2037
Republic of Mauritius

Age-group (years)	←----- Projected estimates -----→								
	1962	1972	1983	1990	1997	2007	2017	2027	2037
	Both Sexes								
60-74	31,619	41,667	56,965	69,853	77,216	92,055	150,856	211,401	227,268
75+	5,960	8,825	13,312	17,674	22,056	32,068	39,687	62,780	96,447
60+	37,579	50,492	70,277	87,527	99,272	124,123	190,543	274,181	323,715
	Male								
60-74	13,949	19,469	26,447	32,541	35,097	41,102	68,972	98,751	107,806
75+	1,748	2,822	4,453	6,164	8,054	11,705	14,845	24,657	39,856
60+	15,697	22,291	30,900	38,705	43,151	52,807	83,817	123,408	147,662
	Female								
60-74	17,670	22,198	30,518	37,312	42,119	50,953	81,884	112,650	119,462
75+	4,212	6,003	8,859	11,510	14,002	20,363	24,842	38,123	56,591
60+	21,882	28,201	39,377	48,822	56,121	71,316	106,726	150,773	176,053

**Table 4 - Distribution (%) of elderly persons by marital status and sex,
Republic of Mauritius, 1996/97 HBS**

Marital status	Both Sexes	Male	Female
Married	53.7	80.6	32.0
Widowed	40.4	13.4	62.1
Never married, divorced or separated	5.9	6.0	5.8
Total	100.0	100.0	100.0

**Table 5 - Distribution (%) of elderly persons by living arrangement and sex,
Republic of Mauritius, 1996/97 HBS**

Living arrangement	Both Sexes	Male	Female
Living alone ^{1/}	8.1	4.1	11.4
Living with spouse only	11.8	15.9	8.6
Living with spouse & unmarried children	19.2	31.3	9.5
Living with unmarried children only	6.3	2.6	9.2
Other living arrangements	54.5	46.1	61.3
Total	100.0	100.0	100.0

^{1/} For this type of living arrangement, the person lives on his/her own and makes his/her own provision for food and other essentials for living but may be sharing the housing unit with other persons

**Table 6 - Number of deaths and death rates of the elderly by age-group and sex,
Republic of Mauritius, 1997**

Age-group (years)	Number			Rate (per 1,000 population)		
	Both Sexes	Male	Female	Both Sexes	Male	Female
60-74	2,615	1,590	1,025	34	45	24
75+	2,380	1,019	1,361	108	127	97
Total	4,995	2,609	2,386	50	60	43

Table 7 - Deaths of the elderly by cause, Republic of Mauritius, 1997

Cause	Number			%		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Infectious and parasitic diseases	74	39	35	1.5	1.5	1.5
Neoplasms (Cancer)	406	249	157	8.1	9.5	6.6
Endocrine, nutritional and metabolic diseases and immunity disorders	208	93	115	4.2	3.6	4.8
<i>of which : diabetes</i>	(202)	(91)	(111)	(4.0)	(3.5)	(4.7)
Diseases of blood and blood-forming organs	10	5	5	0.2	0.2	0.2
Mental disorders	12	10	2	0.2	0.4	0.1
Diseases of nervous system and sense organs	12	6	6	0.2	0.2	0.3
Diseases of the circulatory system	2,836	1,417	1,419	56.8	54.3	59.5
<i>of which : heart diseases</i>	(1,232)	(627)	(605)	(24.7)	(24.0)	(25.4)
<i>: stroke (cerebrovascular diseases)</i>	(939)	(475)	(464)	(18.8)	(18.2)	(19.4)
Diseases of the respiratory system	455	271	184	9.1	10.4	7.7
Diseases of the digestive system	125	86	39	2.5	3.3	1.6
<i>of which : cirrhosis</i>	(50)	(43)	(7)	(1.0)	(1.6)	(0.3)
Diseases of the genitourinary system	241	132	109	4.8	5.1	4.6
Diseases of the musculoskeletal system and connective tissue	1	-	1	0.0	-	0.0
Injury and poisoning	56	44	12	1.1	1.7	0.5
Systems, signs and ill-defined conditions	559	257	302	11.2	9.9	12.7
Total	4,995	2,609	2,386	100.0	100.0	100.0

**Table 8 - Distribution (%) of elderly persons by activity status and sex,
Republic of Mauritius, 1996/97 HBS**

Activity status	Both Sexes	Male	Female
Employed	11.2	20.0	4.1
Homemaker	41.2	8.2	67.7
Retired/too old	43.4	68.8	22.9
Other	4.3	3.0	5.2
Total	100.0	100.0	100.0

**Table 9 - Average monthly (total) income of the elderly by source of income,
Republic of Mauritius, 1996/97 HBS**

Source of income	Rs			%		
	B. Sexes	Male	Female	B. Sexes	Male	Female
Income from employment	721	1,434	142	21.8	28.8	7.3
<i>of which : Wages & salaries</i>	(234)	(423)	(81)	(7.1)	(8.5)	(4.2)
<i>from self-employment</i>	(487)	(1,011)	(61)	(14.7)	(20.3)	(3.1)
Transfer income	1,852	2,299	1,489	56.1	46.2	76.7
Property income	145	282	33	4.4	5.7	1.7
Other income	586	966	277	17.7	19.4	14.3
Total	3,304	4,981	1,941	100.0	100.0	100.0

Table 10 - Distribution (%) of household consumption expenditure by commodity and household type, Republic of Mauritius, 1996/97 HBS

Commodity	All-elderly households	Non-elderly households	Mixed households	Total
Food, beverages & tobacco	46.9	39.9	41.2	40.4
Clothing and footwear	3.7	8.5	7.3	8.1
Fuel and light	6.4	4.5	4.9	4.6
Housing and household operations	17.2	14.1	12.1	13.7
Medical care and health expenses	7.0	2.9	4.9	3.5
Transport and communication	10.0	14.4	16.6	14.8
Recreation, entertainment, education, etc	2.4	6.8	4.9	6.2
Miscellaneous goods and services	6.3	8.9	8.1	8.7
Total	100.0	100.0	100.0	100.0

Table 11 - Dependency ratios and parent support ratios, Republic of Mauritius, 1997-2037

Year	1997	2007	2017	2027	2037
		← Projected ratios →			
Dependency ratio	54.3	52.5	57.2	66.1	70.7
Parent support ratio	14.5	13.8	14.7	22.1	33.3

Table 12 - Cost of old age pensions, Republic of Mauritius, 1996/97 - 2036/37

Financial year	1996/97	2006/07	2016/17	2026/27	2036/37
	Actual amount	Estimated future costs at 1996/97 pension rates			
Amount (Rs million)	1,542	1,915	2,941	4,201	5,020