

Ministry of Economic Development, Financial Services and Corporate Affairs

Central Statistics Office



Republic of Mauritius

HOUSING AND POPULATION CENSUS 2000

**Analysis Report
VOLUME II - Housing & Household Characteristics**



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Foreword

The Central Statistics Office conducted a Housing and Population Census in the year 2000. Census 2000 was the seventeenth for the Island of Mauritius and the seventh for the Island of Rodrigues.

A series of tables reports covering housing and living conditions, demographic and fertility characteristics, economic characteristics, educational characteristics, household characteristics, geographical and migration characteristics and disability was published during the following year. Analysis and evaluation of the census data are currently being carried out and the results published in a series of analytical reports.

This report is the second of the series and covers the housing and living conditions of households as reported at Census 2000. Projections of households and housing needs up to 2020 based on certain specified assumptions are also included.

I would like here to thank all staff who contributed in one way or another to the production of this report.

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Chapter 1 - Introduction

The Republic of Mauritius consists of the island of Mauritius, the island of Rodrigues and several other outer islands, the main ones being Agalega and Saint Brandon. The islands of Mauritius and Rodrigues have a total area of 1,969 square kilometres and a population of 1.2 million residents. Agriculture covers about 46% of the area, 20% is occupied by built-up areas and 2% by public roads; the remaining consists of forests, scrub land, grasslands and grazing lands, rain water catching areas, rivers, swamps and rocks.

The 2000 Housing Census data show that the housing situation has improved both in quantity and quality since 1990. Between 1990 and 2000, the housing stock increased by some 74,000 units. The standards of housing also improved in respect of construction materials and key amenities such as water supply, bathroom, kitchen, etc. The ownership rate of housing units improved significantly from 76% in 1990 to 87% in 2000.

These figures indicate that the policy adopted by the Government in the early 1990's and having as objective "Un toit pour chaque famille" has produced positive results.

Nevertheless, the housing sector remains an area of challenge and continues to face major constraints – land scarcity and high costs of housing being the two most crucial elements.

The housing problem is one of the major priorities of the Government and various other bodies. It is hoped that this report will be helpful to all public and private agencies which, in one way or the other, are concerned with this issue.

The report, which is organised in five chapters, analyses data on housing and households at the 2000 Census and estimates future number of households and housing requirements. Chapter 1 presents background information on the taking of the 2000 Housing Census, which was the basic source of the housing and household data. Chapters 2, 3 and 4 deal with buildings, housing units and households respectively, while the last chapter examines future housing needs and concludes with highlights and some thoughts about future housing policies.

1.1 Historical background

Census taking in Mauritius dates back to the 18th century. The first complete census of the island of Mauritius was taken in 1735 under the governorship of Mahé de Labourdonnais. Since then, numerous complete censuses or partial counts of the population have been taken. Manuscript results of two complete censuses taken in 1776 and 1786 are still preserved in the archives in Paris. The first census report to be printed was probably that of 1846, but no copy has been traced in Mauritius. Printed copies of all subsequent census reports are kept in the Archives of Mauritius.

The 1846 census was followed by that of 1851. Since then, up to 1931, censuses have been taken every ten years. With the outbreak of the Second World War, the one which was due in 1941 had to be postponed to 1944. The first census to be taken after the war was in 1952, and the ten-yearly programme was subsequently resumed with a census in 1962 and another in 1972. The census which was scheduled for 1982 had to be postponed to 1983 because of the 1982 parliamentary elections.

If the decennial plan were to be followed, the next census would have been taken in 1993. However, it was found necessary to bring the census year to 1990 to satisfy a pressing need for detailed up-to-date data on the characteristics of the labour force in a situation characterized by important industrial and occupational changes. The 2000 Census was the seventeenth complete census for the island of Mauritius and the seventh for the island of Rodrigues.

1.2 The 2000 Housing Census

A housing census is the total process of collecting, compiling, evaluating, analysing and publishing or

disseminating statistical data pertaining, at a specific time, to all buildings, housing units and households in a country.

The 2000 Housing Census which covered the islands of Mauritius, Rodrigues and Agalega, was conducted from February to April 2000. It enumerated all residential and non-residential buildings, housing units, households, commercial and industrial establishments, hotels and boarding houses, collective quarters for foreign workers and institutions. Information was also collected on the number and type of fruit trees of bearing age on residential premises.

1.2.1 Objectives and uses

The main objective of a housing census is to provide up-to-date information on the stock of buildings as well as on housing and living conditions. Data on housing such as materials of construction, year of construction, number of rooms, availability of essential facilities like water supply, electricity, bathroom, refuse disposal, etc. are useful for evaluating housing conditions. These data, when supplemented by current building and construction statistics provide a continuous up-to-date picture of the housing situation in a country, which is needed in the formulation of housing programmes.

The formulation of housing policies and programmes by Government is one of the principal uses of housing census data. Housing data are analysed in both quantitative and qualitative terms, and data from previous censuses are used to indicate the changes in the housing situation that have occurred during the intercensal periods; the housing deficit and future requirements are thus estimated.

Commercial and other agencies engaged in the construction industry, as well as financing institutions also use housing census data to assess the possible demand for housing.

1.2.2 Housing Census fieldwork

The Census Commissioner was the head of the whole census operation, both in the office and on the field. As regards field operations, there were five grades of field staff distributed as follows: 1 Chief Supervisor, 2 Assistant Chief Supervisors, 17 Senior Supervisors, 143 Supervisors and 1,029 Chief Enumerators. Each Senior Supervisor was in charge of about 8 Supervisors and 60 Chief Enumerators. Thus some 1,192 field staff were involved in the 2000 Housing Census. Some 5,033 more persons were recruited as Enumerators for the Population Census held in July of the same year, bringing the total number of field workers for the whole census to 6,225.

Instructions describing the duties of field staff were incorporated in a manual. The instructions manual also contained an explanation of the manner in which the questions had to be asked and the public approached, as well as the principles regarding the daily management of data collected. This document constituted the basic material for training sessions.

Since the number of staff was large and spread out over the country, the training sessions had to be conducted at many locations simultaneously and repeatedly. Separate sessions for the supervisory staff were first conducted at the office headquarters to instruct them on their specific functions and to equip them with training skills for subsequent training of the staff working under their responsibility.

1.2.3 Census mapping

The preparation of maps is a basic element in a census. Proper enumeration, and in particular, the prevention of omissions and duplications depend to a large extent on the availability of up-to-date and accurate maps showing detailed subdivisions of regions into easily recognizable census Enumeration Areas (EAs).

A total of 3,565 EAs was demarcated at the 2000 Census – 3,472 for the island of Mauritius and 93 for

Rodrigues. The average number of households in an enumeration area was about 90 in urban and 75 in rural areas. Each Chief Enumerator (CE) had to canvass 3 or 4 EAs; these EAs formed what was known as the CE area, while all the CE areas under the responsibility of a supervisor constituted the supervisor area.

A series of EA maps, and location maps for the CE areas and supervisor areas were produced. Location maps were distributed to Chief Enumerators, Supervisors and Senior Supervisors. Chief Enumerators were also provided with individual EA maps. The latter, being more detailed and important, were used for enumeration purposes, and were updated and returned to the office for future use.

1.2.4 The Housing Census questionnaire

The housing census data were recorded in enumeration books each containing 25 questionnaires. The Housing Census questionnaire, a copy of which is shown in Annex, was designed to record information on one building, one housing unit within the building, up to three households within the housing unit and one establishment. Fruit trees of bearing age found on residential premises were also enumerated. The questionnaire was divided into seven sections as follows:

I.	Location of building
II.	Type of building
III.	Characteristics of building
IV.	Characteristics of housing unit
V.	Households
VI.	Commercial and industrial establishments, hotels and boarding houses
VII.	Fruit trees on premises

The definitions used at the census were as follows:

Geographical district_

The island of Mauritius is divided into nine geographical districts. For the purposes of census analysis and tabulations, Rodrigues has been considered as the tenth district.

Municipal Council Area (MCA)

The boundaries of the Municipal Council Areas are proclaimed by law. There are five such administrative areas, divided into 20 Municipal Wards in the island of Mauritius.

Village Council Area (VCA)

VCAs are smaller administrative areas, defined by law, within the District Council Areas which are rural counterparts of the Municipal Council Areas. There are 124 Village Council Areas in the island of Mauritius. Rodrigues has no MCA or VCA.

Localities_

Localities are smaller regions within Municipal Wards and Village Council Areas, but since their boundaries are often not well defined, no tabulations have been produced at this level.

Census District_

The island of Mauritius is divided into 20 Census Districts or Electoral Constituencies for the purposes of the parliamentary elections. Rodrigues is the 21st constituency.

Enumeration Area

For census purposes, the island of Mauritius was divided into 3,472 Enumeration Areas and Rodrigues into 93 such areas.

Block

For ease of enumeration, every Enumeration Area was subdivided into a number of blocks which are areas surrounded by well defined boundaries.

Building

A building was defined as any independent free-standing structure, comprising one or more rooms and other spaces, covered by a roof and usually enclosed within external walls or dividing walls which extend from the foundation to the roof. Dividing walls, rather than external walls, are quite common in densely built commercial areas, particularly in urban regions. The building may be used or intended for residential, commercial, industrial or agricultural purposes or for the provision of services. For the purposes of the census, detached structures such as toilets, bathrooms, kitchens and garages were not counted as separate buildings; they were accounted for as facilities available to the housing unit to which they belong. However, detached rooms used for living purposes, were counted as separate buildings. Similarly a garage, a store-room, or any other temporary or improvised structure that was being used for living purposes at the time of the census, was considered as a distinct building.

Housing Unit

A housing unit was defined as a separate and independent place of abode intended for habitation by one household, or one not intended for habitation, but occupied for living purposes by a household at the time of the census. Although intended for one household, a housing unit could be occupied by more than one household or by part of a household. It could be an occupied or vacant place of abode, an improvised structure which was occupied for living purposes at the time of census or any other place, not intended for habitation, but occupied for living purposes.

Household_

A household may be either

- (i) a one-person household, that is, a person who makes provision for his own food or other essentials for living without combining with any other person to form part of a multi-person household; or
- (ii) a multi-person household, that is, a group of two or more persons living together who make common provision for food or other essentials for living. The persons in the group may pool their incomes and have a common budget to a greater or lesser extent; they may be related or unrelated persons or a combination of both. Cases of persons having varying degrees of common housekeeping were considered as one household if there was a regular arrangement to share at least one meal a day.

Households living in housing units were referred to as *private households* to distinguish them from *communal households* in hotels, infirmaries, hospitals and other institutions. The census covered all households and persons except members of the Diplomatic Corps.

Head of household

The head of a household was any adult member who was acknowledged as head by other members of the household. For communal households, the person in charge was considered as the head for the purpose of supplying the information.

1.2.5 Data Processing

The Integrated Microcomputer Processing System (IMPS), was used for processing the census data. IMPS is a

software which performs the major tasks in census and survey processing. It is an integrated system made up of several components for data entry, editing, tabulation, etc. IMPS is developed, distributed and supported by the US Bureau of Census.

Data entry and editing were effected at the Central Information System Division (CISD). The data were captured by Enumeration Area, i.e. for each EA a file was created. The individual files were then consolidated into one single master file at the country level. This master file was then used at the office for further processing.

IMPS offers the facility to produce tables at different geographic levels. All tables were produced at the levels of MCA/VCA, district, island and the Republic. Subtotals were provided for urban and rural areas within each district, island and for the Republic.

1.3 The Housing situation

1.3.1 *Housing stock*

As mentioned at the beginning of this chapter, the housing stock has been improving both in quantity and quality over the course of the past decade. The number of housing units enumerated in 2000 was 297,700 compared to 223,800 in 1990, giving an annual growth of 2.9% which was higher than the household formation rate of 2.3%. This is the opposite of what was observed during the previous intercensal period of 1983-1990, when households grew at an annual rate of 2.0% while the growth rate of housing units was only 1.7%. Private ownership of housing units, although very high, increased further from 98.5% in 1990 to 99.1% in 2000. As concerns tenure, 87% of households were owners of the housing units they occupied compared to 76% in 1990.

1.3.2 *Quality of housing*

Parallel with the increase in the stock of residential buildings, there has been an improvement in the quality of housing in terms of type of materials used for construction, amenities available and living space. Some 86.4% of residential and partly residential buildings enumerated in 2000 were wholly in concrete compared to 70.6% in 1990. The percentage of households having access to electricity, piped water, bathroom with running water, and hygienic toilet facilities has increased markedly over the ten-year intercensal period. Thus, 99.0% of households had electricity in 2000 compared to the already high figure of 96.8% in 1990; the percentage of households who obtained their water supply from fountains, wells or rivers dropped from 10.5% in 1990 to 1.8% in 2000, and only 1.0% did not have bathroom facilities compared to 5.5% in 1990. As regards toilets, the percentage of households having the flush type increased from 62.8% to 88.8% while those having pit latrines dropped from 36.5% to 11.0%. There has also been an improvement in the density of occupation as shown by the average number of persons per room used for living purposes. This ratio has improved from 1.2 to 0.9 between 1990 and 2000.

However, in spite of these improvements, there is still quite a significant number of houses which lack the basic amenities. For example, at the 2000 Census 3,000 households had no electricity, 5,000 households obtained their water supply from fountains and rivers, while 3,000 households did not have bathroom facilities. As regards living space, 10,000 households had a density of occupation of more than 3 persons per room.

1.3.3 *Housing shortage*

Some 296,300 households and 297,700 housing units were enumerated at the 2000 Census. Assuming that a household needs to occupy one housing unit, a surplus of 1,400 units was thus noted. But, in order to have a true picture of the housing stock situation, we need to consider only housing units which are used as principal residence (i.e. 278,200), and subtract this figure from the total number of households. This gives a backlog of about 18,000 units, and represents the number of households doubled-up with other households.

1.3.4 Government involvement in housing construction

(i) The Mauritius Housing Company Ltd

The Mauritius Housing Corporation was created in 1963 and emanates from the former Mauritius Agricultural Bank – a parastatal body whose main activity was the financing of the agriculture, the industrial and the housing sectors. This banking institution was split into two organisations: the Development Bank of Mauritius and the Mauritius Housing Corporation (MHC) which took over the housing finance business.

In its early stages of operation, MHC catered mostly for people in the middle and upper income groups. In the 1980's it became urgent to help people in the low income bracket to own a home. Within the Urban Rehabilitation and Development Program financed by the World Bank, MHC became more actively involved in the financing of housing for low-income families.

In 1989 the Mauritius Housing Corporation became a public company, now known as the Mauritius Housing Company Ltd (MHC Ltd), under the aegis of the Ministry of Finance. Its main activity is now to offer housing loans.

The company grants loans mainly for the following purposes:

- construction of residential buildings on private land (or land on long term lease from the Government of Mauritius)
- purchase of residential properties
- repairs, improvements or enlargement to existing residential buildings
- construction or purchase of a second residential property
- repay an existing housing loan
- purchase of land for residential purposes

The different types of loans granted by the MHC Ltd are:

a) Government Sponsored Loans (with grant)

This scheme was launched in 1986 with a view to assisting low income earners (i.e. those earning up to a maximum of Rs 7 500 monthly) at a special subsidized interest rate of 6.5%, with a grant of Rs 30 000.

b) Government Sponsored Loans (without grant)

This scheme was incepted in July 1992 and concerns those earning up to a maximum of Rs 10 000 per month. The rate of interest is at 10%.

c) Sugar Camps Housing Loan Scheme

This scheme was set up to enable the Sugar Industry workers of the very low income groups and occupying degrading sugar camps to become owners of decent homes.

d) Normal (non-subsidized) loans

Conscious of the ever increasing competition from other financial institutions such as banks and insurance companies, MHC Ltd has reduced the interest rate on its normal loans from 13% - 14% to 12.5%. As from July 2001 the company has introduced the Land Purchase Scheme at the same interest rate of 12.5%. This scheme targets people who are not able to build their house simply because they do not have the necessary financial resources to buy a plot of land. It is open to all

categories of income earners who would not have reached their 60th birthday by the last repayment date of the loan. The maximum repayment period is 15 years.

It is important to note that for all the loans mentioned above, applicants must be holders of a Plan Epargne Logement (PEL) account. The Plan Epargne Logement was launched in 1988 for people who want to create capital savings through monthly instalments. The main aim is to encourage regular savings so as to accumulate capital to enable home ownership. For the Land Purchase Scheme, priority is given to applicants who have a PEL credit balance representing at least 30% of the purchase price.

(ii) Housing Development schemes

Two such schemes exist: the Housing Development Certificate (HDC) scheme and the New Incentives for Residential Development (NIRD) scheme.

The HDC was launched to encourage private sector investment in the housing sector, while ensuring that the sale price of at least 30% of the units is between the range Rs 300 000 – Rs 500 000. It targets families earning a monthly salary of Rs 6 000 – Rs 10 000.

The NIRD scheme allows residential development outside limits of permitted development subject to certain conditions, but 25% of the acreage approved for development should be disposed of, with infrastructure, to households of the lower income group who are not owners of any residential plot of land or other immovable property.

The two schemes have not proven to be much of a success. The setting up of a multi-sectoral committee is being planned to revisit the schemes in order to make them more client friendly towards prospective developers and results oriented with respect to the provision of housing for the lower middle income groups earning up to Rs 10 000.

(iii) National Housing Development Company Ltd

The National Housing Development Company Ltd (NHDC) was created in March 1991 to implement the national housing programme of the government, with particular consideration for the lower income groups. Up to now, the NHDC has constructed more than 8,000 housing units, which represent an investment of about Rs 2.7 billions for the buildings only. The company is looking forward to construct 1,000 units yearly to help the government attain its objective of providing a decent dwelling to every household.

The criteria that makes a buyer eligible for an NHDC apartment are:

- the applicant or the spouse does not own a house or a plot of residential land,
- either of them is a holder of a PEL account at the MHC Ltd.,
- the applicant is able to make the deposit and effect the payback instalment to MHC Ltd, and
- the applicant resides in the catchment area of the NHDC complex.

Chapter 2 – Building

2.1 Introduction

The 2000 Housing Census covered all structures and buildings, both residential and non-residential. For the purpose of the 2000 Housing Census, a building was defined as any independent free-standing structure, comprising one or more rooms and other spaces, covered by a roof and usually enclosed within external or dividing walls which extend from the foundation to the roof. The following types of buildings were enumerated:

- (i) all buildings used at the time of the census for residential, commercial or industrial purposes or for the provision of services, including hotels, institutions and public buildings;
- (ii) all buildings intended for such use but which were vacant at the time of the census;
- (iii) any improvised shelter which, although not in conformity with the definition of a building, was used for habitation at the time of the census;_
- (iv) buildings under construction.

The following buildings were not covered:

- (i) all buildings used for agricultural purposes including livestock keeping;
- (ii) temporary shelters and improvised housing units that were not occupied at the time of the census;
- (iii) buildings being demolished or awaiting demolition;
- (iv) dilapidated buildings which were uninhabited at the time of the census;
- (v) buildings wholly occupied by embassies.

2.2 Building stock and type

The 268,302 buildings enumerated at the 2000 Housing Census represent an increase of about 58,400 over the 1990 Census figure of 209,909. This translates into an average growth rate of 2.5% per annum during the period 1990-2000 compared with 1.7% per annum for the previous intercensal period.

Buildings can be classified into four broad categories according to their use:

- (i) wholly residential;
- (ii) partly-residential, i.e. buildings having housing units as well as commercial, industrial or other non-residential quarters;
- (iii) hotels and institutions;
- (iv) non-residential, i.e. buildings which contain public, commercial or industrial enterprises, or warehouses.

Table 2.1 below compares the number of buildings by type for the 1990 and 2000 Housing Censuses. The figures also include buildings which were under construction at the time of enumeration.

Residential and partly-residential buildings have been growing at a higher rate (2.5%) than non-residential buildings (2.0%).

Table 2.1: Distribution of buildings by type, Republic of Mauritius, 1990 and 2000 Housing Censuses

Building type	Housing Census				Increase 1990-2000	
	1990		2000			
	No.	%	No.	%	No.	%
Under construction	9,491	4.5	12,110	4.5	2,619	27.6
Wholly residential	180,688	86.1	228,977	85.3	48,289	26.7
Partly-residential	6,939	3.3	11,418	4.3	4,479	64.5
Hotels and institutions	303	0.1	515	0.2	212	70.0
Non-residential	12,488	6.0	15,282	5.7	2,794	22.4
All buildings	209,909	100.0	268,302	100.0	58,393	27.8

2.2.1 Residential and partly-residential buildings

The number of wholly residential and partly-residential buildings have increased by about 52,800 or 28.1%, representing an annual growth rate of 2.5 %. This is greater than the annual growth rate of households (2.3%). The number of partly-residential buildings with a growth rate of 5.1% per annum, has been increasing faster than that of wholly residential buildings (2.4%).

2.2.2 Wholly residential buildings

In 2000, the number of wholly residential buildings was 229,000 compared to 180,700 in 1990. This represents an increase of 26.7% between the two census years.

The distribution of wholly residential buildings by type is shown in Table 2.2 below.

Table 2.2: Distribution of wholly residential buildings by type, Republic of Mauritius, 1990 and 2000 Housing Censuses

Building type	1990		2000		Change 1990-2000	
	No.	%	No.	%	No.	%
Building used as one housing unit	154,023	85.3	193,391	84.5	39,368	25.6
Block of flats and semi detached houses	14,059	7.8	27,507	12.0	13,448	95.7
Crudely subdivided buildings	10,154	5.6	6,354	2.8	-3,800	-37.4
Detached rooms	2,202	1.2	1,467	0.6	-735	-33.4
Improvised buildings	250	0.1	258	0.1	8	3.2
All wholly residential buildings	180,688	100.0	228,977	100.0	48,289	26.7

Though there has been an increase of 25.6% in the number of buildings used as one housing unit, the relative share of the latter has registered a slight decrease from 85.3% in 1990 to 84.5% in 2000. It is interesting to note the substantial increase both in number (95.7%) and relative share (from 7.8% to 12.0%) for blocks of flats and semi detached houses during the inter-censal period. The ratio of housing units to residential building has also increased significantly from 1.21 in 1990 to 1.24 in 2000. This confirms the tendency to construct buildings with more than one housing unit.

Crudely subdivided buildings are buildings which were designed to be used as one housing unit but have been crudely subdivided (e.g. by simply locking of doors between adjacent rooms) into smaller housing units for occupation by more than one household. This type of residential building decreased both in number (37.4%) and relative share (from 5.6% in 1990 to 2.8% in 2000).

An improvised housing unit is an independent makeshift shelter built without any predetermined plan for the purpose of human habitation, or a structure that has not been built for human habitation, but is used for that purpose. The number (around 250), and relative share (0.1%) of this category of residential buildings remained constant since the 1990 Census.

A decrease was noted in the number (-33.4%) and share (from 1.2% to 0.6%) of detached rooms. Detached rooms are separate buildings consisting of one or more rooms, but without kitchen facilities, intended for use by part of a household living in another building.

Table 2.3: Percentage distribution of wholly residential buildings by type and regional strata, Republic of Mauritius, 1990 and 2000 Housing Censuses

Building Type	1990			2000		
	Total	Urban	Rural	Total	Urban	Rural
Building used as one housing unit	85.3	78.3	89.2	84.5	78.7	88.2
Block of flats and semi-detached houses	7.8	12.0	5.4	12.0	17.1	8.7
Crudely subdivided buildings	5.6	9.0	3.6	2.8	3.8	2.1
Detached rooms	1.2	0.6	1.6	0.6	0.3	0.9
Improved buildings	0.1	0.1	0.2	0.1	0.1	0.1
All wholly residential buildings: Percentage	100.0	100.0	100.0	100.0	100.0	100.0
Number	180,688	65,856	114,832	228,977	90,481	138,496

Table 2.3 shows the distribution of wholly residential buildings by type and regional strata, namely urban and rural. In both the urban and rural regions the share of block of flats and semi-detached houses registered an increase. The share of buildings used as one housing unit increased marginally in urban regions, whereas a decrease was noted in rural regions. The latter had however, a higher proportion of one housing-unit buildings than the urban regions. Furthermore, blocks of flats and semi-detached houses were less predominant in these regions than in urban regions. The proportion of crudely subdivided buildings was higher in towns than in villages.

2.2.3 Non-residential buildings

Table 2.4: Non-residential buildings, Republic of Mauritius, 1990 and 2000 Housing Censuses

Building type	1990		2000		Change 1990-2000	
	No.	%	No.	%	No.	%
Public building	3,919	31.4	4,125	27.0	206	5.3
Commercial building	4,039	32.3	5,782	37.8	1,743	43.2
Industrial building	1,741	13.9	1,528	10.0	-213	-12.2
Commercial/industrial building	431	3.5	527	3.4	96	22.3
Warehouse	278	2.2	527	3.4	249	89.6
Other	2,080	16.7	2,793	18.3	713	34.3
Total	12,488	100.0	15,282	100.0	2,794	22.4

Table 2.4 shows that there were some 15,300 non-residential buildings in 2000 as compared to 12,500 in 1990. This represents an increase of 22.4%.

About a quarter of these buildings were public, that is, those which are used entirely by Central Government, Local Government or public corporations for general administrative purposes and for the provision of social services with the exception of institutions. They may be owned by the public or private sector. Public buildings have increased by 5.3% during the intercensal period.

It is interesting to note that while there has been a substantial increase (43.2%) in the number of commercial buildings, the number of industrial buildings has dropped by 12.2%. Buildings used equally for commercial and industrial purposes increased by 22.3%. These three types of buildings constituted more than half of the stock of non-residential buildings.

Warehouses and other buildings, particularly those used by the services sectors like cinemas, banks, beauty parlours, etc. constituted 3.4% and 18.3% of the non-residential buildings respectively. The increase in the number of warehouses was very high (89.6%) and that for the other non-residential buildings substantial (34.3%).

2.3 Geographical location of buildings

The geographical distribution of residential and partly-residential buildings at the 1990 and 2000 Censuses is shown in Figure 2.1 and Table 2.5. In 2000, Plaines Wilhems alone had more than a quarter (29.1%) of the nation's total residential buildings. The districts of Port Louis, Pamplemousses, Rivière du Rempart, Flacq and Grand Port had together half of the stock, each district with a share of approximately one tenth of the total inventory. The rest was divided among the remaining three districts and Rodrigues, the latter's share being the smallest (3.8%).

Figure 2.1: Percentage distribution of residential and partly residential buildings by district, Republic of Mauritius, 1990 and 2000 Censuses

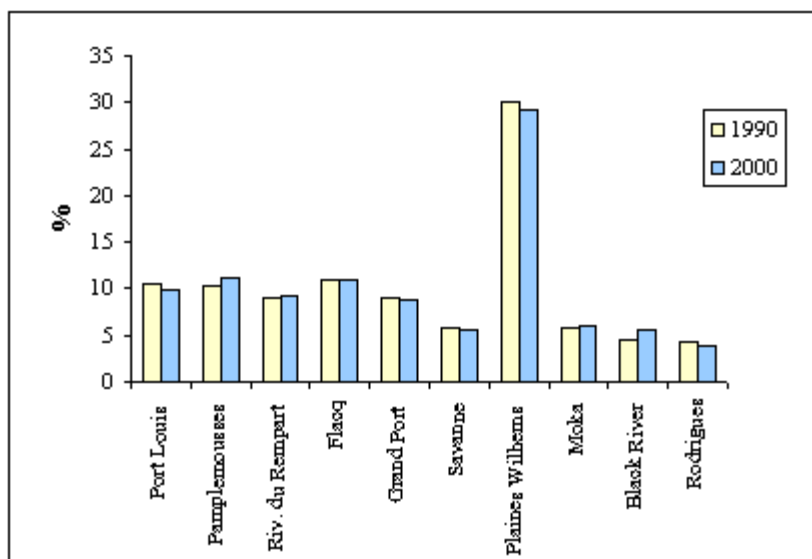


Table 2.5 shows that important increases, well above the national increase of 28.8%, were registered in Pamplemousses (40.3%) and Black River (57.6%). These two districts improved their share of residential buildings by 0.9% and 1.0% respectively. The increase in share was smaller for Rivière du Rempart, Flacq and Moka.

The other districts lost in their share, the most important being the two urban districts: Port Louis

(-0.7%) and Plaines Wilhems (-0.9%). It should however be noted that the number of residential buildings increased by about 4,000 or 20.3% in Port Louis and 14,000 or 25.1% in Plaines Wilhems.

The island of Rodrigues saw its stock of residential buildings increased by about 1,400 or 17.7% during the period 1990-2000.

Table 2.5: Geographical distribution of residential and partly-residential buildings, Republic of Mauritius, 1990 and 2000 Housing Censuses

District	Building ¹				Increase 1990-2000	
	1990		2000 ²		No.	%
	No.	%	No.	%		
Port Louis	19,547	10.5	23,515	9.8	3,968	20.3
Pamplemousses	18,835	10.2	26,427	11.1	7,592	40.3
Rivière du Rempart	16,820	9.1	22,168	9.3	5,348	31.8
Flacq	20,199	10.9	26,238	11.0	6,039	29.9
Grand Port	16,899	9.1	20,943	8.8	4,044	23.9
Savanne	10,715	5.8	13,244	5.5	2,529	23.6
Plaines Wilhems	55,543	30.0	69,494	29.1	13,951	25.1
Moka	10,823	5.8	14,620	6.1	3,797	35.1
Black River	8,330	4.5	13,130	5.5	4,800	57.6
Rodrigues	7,714	4.2	9,080	3.8	1,366	17.7
Republic of Mauritius	185,425	100.0	238,859	100.0	53,434	28.8

¹ : excluding detached rooms used by part of household (2,202 for 1990, and 1,467 for 2000)

² : excluding 69 buildings in Agalega

Households will be analyzed in detail in Chapter 4. It is worth mentioning that analysis of availability of residential buildings should be made in conjunction with the household situation. From Table 2.6, it is found that the distribution of households by district follows more or less the same pattern as that of residential buildings. The percentage increase in the number of households was lowest for the district of Port Louis (6.4%) and highest for Black River (58.1%).

Table 2.6: Geographical distribution of private households, Republic of Mauritius, 1990 and 2000 Housing Censuses

District	Household				Increase 1990-2000	
	1990		2000 ¹		No.	%
	No.	%	No.	%		
Port Louis	30,780	13.0	32,753	11.0	1,973	6.4
Pamplemousses	21,709	9.2	29,886	10.0	8,177	37.7
Rivière du Rempart	18,716	7.9	24,442	8.2	5,726	30.6
Flacq	23,787	10.1	30,713	10.3	6,926	29.1
Grand Port	21,183	9.0	26,676	9.0	5,493	25.9
Savanne	13,582	5.7	16,818	5.6	3,236	23.8
Plaines Wilhems	75,492	31.9	93,762	31.5	18,270	24.2
Moka	14,267	6.0	18,541	6.2	4,274	30.0
Black River	9,851	4.2	15,579	5.2	5,728	58.1
Rodrigues	7,268	3.1	8,651	2.9	1,383	19.0
Republic of Mauritius	236,635	100.0	297,821	100.0	61,186	25.9

¹ : excluding 60 private households in Agalega for year 2000

2.4 Building characteristics

2.4.1 Number of storeys

There has been a major shift towards the tendency to construct storeyed buildings. Table 2.7 shows that the share of buildings constructed on ground floor had decreased in 2000; while that of buildings with storeys had increased. Thus, out of the 239,000 residential and partly-residential buildings enumerated at the 2000 Census, 69.5% were constructed on ground floor, 30.2% had one or two storeys, and about 0.3% had three or more storeys. The corresponding figures at the 1990 Census were 88.1% and 11.8%, while only 0.1% residential and partly-residential buildings were constructed with three or more storeys.

Table 2.7: Residential and partly-residential buildings¹ by number of storeys, Republic of Mauritius, 1990 and 2000 Censuses.

Number of storeys	1990		2000		Increase 1990-2000	
	No.	%	No.	%	No.	%
0	163,339	88.1	166,047	69.5	2,708	1.7
1	21,363	11.5	69,259	29.0	47,896	224.2
2	581	0.3	2,919	1.2	2,338	402.4
3	68	0.1	588	0.3	520	764.7
4+	49	0.0	115	0.0	66	134.7
Not stated	25	0.0	-	-	-	-
All buildings	185,425	100.0	238,928	100.0	53,528	28.9

¹: excluding detached rooms used by part of a household (2,202 for 1990, and 1,467 for 2000)

Table 2.8 gives the geographical distribution of residential buildings with one or more storeys. Plaines Wilhems had the highest proportion (38.8%) of multi-storeyed residential buildings followed by Port Louis (11.4%). But there has been a decrease in the shares of such buildings for these two urban districts compared to an increase for all the rural districts. The 30.5% of residential buildings which are multi-storeyed is almost equally shared between the urban (15.3%) and rural (15.2%) areas. There were about 400 storeyed residential or partly-residential buildings in Rodrigues, representing about 4% of its stock of buildings.

Table 2.8: Geographical distribution of storeyed residential buildings, Republic of Mauritius, 1990 and 2000 Censuses

District	Storeyed buildings				Increase 1990-2000	
	1990		2000			
	No.	%	No.	%	No.	%
Port Louis	3,715	16.8	8,297	11.4	4,582	123.3
Pamplemousses	1,820	8.3	7,447	10.2	5,627	309.2
Rivière du Rempart	1,550	7.0	6,209	8.5	4,659	300.6
Flacq	1,168	5.3	5,664	7.8	4,496	384.9
Grand Port	1,377	6.2	5,845	8.0	4,468	324.5
Savanne	638	2.9	2,963	4.1	2,325	364.4
Plaines Wilhems	10,074	45.7	28,246	38.8	18,172	180.4
Moka	968	4.4	3,968	5.4	3,000	309.9
Black River	655	3.0	3,849	5.3	3,194	487.6
Rodrigues	96	0.4	393	0.5	297	309.4
Republic of Mauritius	22,061	100.0	72,881	100.0	50,820	230.4

2.4.2 Age of building

Table 2.9 presents the geographical distribution of residential buildings by year of completion. Nearly 42% of the stock were constructed during the last ten years. This high percentage is the result of the efforts made by the government in the early 90's in its policy "Un toit pour chaque famille".

The share of the stock constructed before 1970 and during the period 1970-1984 were 17.4% and 21.4% respectively. Some 2.0% of residential buildings were not completed but inhabited, while for 2.5% of cases, the occupants did not know the year of completion of the buildings they were occupying.

Table 2.9: Geographical distribution of residential and partly-residential buildings¹ by year of completion, Republic of Mauritius, 2000 Census.

District	Year of completion									Median age (years)
	Before 1970	1970-1984	1985-1989	1990-1994	1995-1999	2000	Year not known	Not completed but inhabited	All buildings	
Port Louis	31.0	19.4	12.8	14.4	17.8	0.9	2.8	0.9	100.0	17
Pamplemousses	11.1	22.6	15.0	19.1	24.9	0.8	2.7	3.8	100.0	11
Rivière du Rempart	15.0	24.0	18.1	18.1	20.5	0.7	1.5	2.1	100.0	13
Flacq	12.8	21.9	17.0	19.3	23.9	0.8	0.8	3.5	100.0	11
Grand Port	13.9	19.7	15.8	19.3	26.9	0.9	1.8	1.7	100.0	11
Savanne	18.1	20.6	14.7	16.6	26.9	0.7	1.7	0.7	100.0	12
Plaines Wilhems	20.8	22.5	13.4	16.1	20.9	1.1	3.9	1.3	100.0	14
Moka	18.1	22.9	14.0	17.4	22.6	1.0	1.8	2.2	100.0	13
Black River	11.7	15.7	13.8	20.9	33.7	1.5	1.4	1.3	100.0	9
Rodrigues	8.5	19.6	16.1	17.7	31.5	1.1	2.7	2.8	100.0	9
Republic of Mauritius	17.4	21.4	14.8	17.5	23.4	1.0	2.5	2.0	100.0	12
	41,618	51,306	35,311	41,760	55,854	2,313	5,976	4,721	238,859	

¹: excluding Agalega

The median age of all residential buildings enumerated at the 2000 Census was about 12 years. This means one half of the buildings were built from 1988 to 2000. All the rural districts had less than 20% of their stock built before 1970, those with the smallest shares being Pamplemousses (11.1%), Black River (11.7%) and Rodrigues (8.5%). Black River and Rodrigues had more than 50% of their residential buildings built during the period 1990-2000; this explains the low median age (9 years) for residential buildings found in these two districts. Among all districts, Port Louis had the lowest share (33.1%) of its buildings constructed in the last ten years and the highest percentage (50.4%) built before 1985, hence a high median age (17 years) for buildings found in Port Louis.

Table 2.10: Residential and partly-residential buildings¹ by year of completion, Republic of Mauritius, 1990 and 2000 Censuses

Year of completion	1990		2000		Buildings surviving from 1990 to 2000
	No.	%	No.	%	
Before 1985	130,825	70.6	92,938	38.9	71.0
1985-1989	37,330	20.1	35,325	14.8	94.6
1990-1994 ²	2,033	1.1	41,762	17.5	-
1995-1999	-	-	55,887	23.4	-
2000	-	-	2,313	1.0	-
Year not known	6,175	3.3	5,982	2.5	-
Not completed	9,062	4.9	4,721	2.0	-
All buildings	185,425	100.0	238,928	100.0	76.3

¹: excluding detached rooms used by part of a household (2,202 for 1990 and 1,467 for 2000)

²: Data for 1990 relate to buildings constructed up to the 1990 Housing Census

Table 2.10 is a Building Life Table which gives the percentage of residential and partly-residential buildings in 2000 which survived from the 1990 Census stock. Some 71.0% of the 1990 stock of buildings constructed before 1985 and 94.6% of the 1990 stock constructed in the period 1985-1989 survived to year 2000. This gives a total of 76.3% of the 1990 stock which survived to year 2000.

2.4.3 Construction Materials

Construction materials of walls and roof may be considered as an indicator of the durability of a building. But the latter does not depend solely on the materials used in construction, but also on the construction standards. A census is not the proper mechanism to gather information on complex characteristics like construction standards; the data collected therefore relate only to the materials used for construction.

Table 2.11: Residential and partly-residential buildings¹ by type of construction materials, Republic of Mauritius, 1990 and 2000 Censuses

Type of walls and roof materials	1990		2000		Change 1990-2000	
	No.	%	No.	%	No.	%
Concrete walls and roof	130,919	70.6	206,210	86.4	75,291	57.5
Concrete walls & iron/tin roof	13,560	7.3	9,416	3.9	-4,144	-30.6
Iron/tin walls and roof	33,690	18.2	19,345	8.1	-14,345	-42.6
Wood walls and iron/tin/shingle roof	4,248	2.3	2,198	0.9	-2,050	-48.3
Other	3,008	1.6	1,759	0.7	-1,249	-41.5
Republic of Mauritius	185,425	100.0	238,928	100.0	53,503	28.9

¹: excluding detached rooms used by part of a household (2,202 for 1990, and 1,467 for 2000)

Table 2.11 shows that out of the 239,000 residential and partly-residential buildings enumerated in 2000, 86% were made of concrete walls and roof compared to 71% in 1990. Buildings made of other types of construction materials significantly dropped both in number and shares.

The geographical distribution of residential and partly-residential buildings by type of construction materials for the 2000 census is presented in Table 2.12.

Table 2.12: Geographical distribution of residential and partly-residential buildings¹ by type of construction materials, Republic of Mauritius, 2000 Census

District	Type of walls and roof materials											
	concrete walls & roof		concrete walls & iron/tin roof		iron/tin walls and roof		wood walls & iron/ tin/ shingle roof		other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Port Louis	16,782	71.4	2,350	10.0	3,204	13.6	1,047	4.5	132	0.6	23,515	100.0
Pamplemousses	23,492	88.9	866	3.3	1,934	7.3	23	0.1	112	0.4	26,427	100.0
Rivière du Rempart	19,854	89.6	1,055	4.8	987	4.5	13	0.1	259	1.2	22,168	100.0
Flacq	22,949	87.5	528	2.0	2,557	9.7	67	0.3	137	0.5	26,238	100.0
Grand Port	18,030	86.1	617	2.9	1,761	8.4	127	0.6	408	1.9	20,943	100.0
Savanne	11,397	86.1	331	2.5	1,188	9.0	32	0.2	296	2.2	13,244	100.0
Plaines Wilhems	63,526	91.4	2,356	3.4	2,748	4.0	735	1.1	129	0.2	69,494	100.0
Moka	13,474	92.2	207	1.4	767	5.2	47	0.3	125	0.9	14,620	100.0
Black River	10,394	79.2	896	6.8	1,669	12.7	49	0.4	122	0.9	13,130	100.0
Rodrigues	6,310	69.5	154	1.7	2,521	27.8	56	0.6	39	0.4	9,080	100.0
Republic of Mauritius	206,208	86.3	9,360	3.9	19,336	8.1	2,196	0.9	1,759	0.7	238,859	100.0

¹: excluding 1,467 detached rooms used by part of a household and 69 buildings in Agalega

The data show that in 2000, a large majority of residential and partly-residential buildings in all districts was of concrete walls and roof, the proportion ranging from 70% for Rodrigues to 92% for Moka. The use of other materials was still important in the district of Port Louis and in Rodrigues, where about 30% of the residential buildings found therein were of iron, tin or wood.

It is also interesting to look at the evolution of building materials over time. The next table presents the distribution of residential buildings by year of completion and type of construction materials.

Table 2.13: Residential and partly-residential buildings¹ by year of completion and type of construction materials, Republic of Mauritius, 2000 census.

Year of completion	Type of walls and roof materials											
	concrete walls & roof		concrete walls & iron/tin roof		iron/tin walls and roof		wood walls & iron/ tin/ shingle roof		other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Before 1970	26,636	64.0	5,218	12.5	6,736	16.2	1,752	4.2	1,283	3.1	41,625	100.0
1970 - 1984	47,342	92.3	1,305	2.5	2,408	4.7	119	0.2	139	0.3	51,313	100.0
1985 - 1989	32,596	92.3	685	1.9	1,907	5.4	59	0.2	78	0.2	35,325	100.0
1990 - 1994	38,009	91.0	709	1.7	2,892	6.9	66	0.2	86	0.2	41,762	100.0
1995 - 1999	50,247	89.9	1,001	1.8	4,410	7.9	105	0.2	124	0.2	55,887	100.0
2000	2,024	87.5	34	1.5	243	10.5	5	0.2	7	0.3	2,313	100.0
Not known	4,824	80.6	346	5.8	682	11.4	91	1.5	39	0.7	5,982	100.0
Not completed but inhabited	4,532	96.0	118	2.5	67	1.4	1	0.0	3	0.1	4,721	100.0
All buildings	206,210	86.3	9,416	3.9	19,345	8.1	2,198	0.9	1,759	0.7	238,928	100.0

¹: excluding 1,467 detached rooms used by part of a household

Table 2.13 shows that a high proportion of recently built residential and partly-residential buildings were made of concrete. The proportion increased from 64% for buildings built before 1970 to reach a maximum of 92.3% for those built during 1985-1989; it then decreased gradually to reach 87.5% in 2000.

A reverse situation is noticed in the share of buildings made of iron/tin walls and roof. In fact, the proportion which stood at 16.2% for the period before 1970, decreased to 4.7% for 1970-1984. It then gradually increased to reach 10.5% in 2000. Some 7,500 residential buildings with iron/tin walls and roof were constructed during the intercensal period 1990 to 2000. The majority of these buildings were found in Port Louis (12%), Flacq (16%), Black River (12%) and Rodrigues (18%).

Out of the existing stock of wholly concrete buildings, only about one tenth were built before 1970, while almost 60% were constructed during the last 15 years. Nearly 80% of buildings made of wood walls and iron, tin or shingle roof were constructed before 1970. While more than one third of the stock of iron and tin buildings were constructed before 1970, about 38% was constructed during the past decade.

Table 2.14: Residential and partly-residential buildings by year of completion and type of construction materials, Republic of Mauritius, 1990 and 2000 Censuses

Census year	Year of completion	Type of walls and roof materials					Total
		concrete walls & roof	concrete walls & iron/tin roof	iron/tin walls and roof	wood walls & iron/ tin/ shingle roof	other	
1990	Before 1985	87,160	11,300	25,941	3,882	2,542	130,825
	1985 - 1989	29,757	1,172	5,893	171	337	37,330
	All buildings constructed before 1990	116,917	12,472	31,834	4,053	2,879	168,155
2000	Before 1985	73,978	6,523	9,144	1,871	1,422	92,938
	1985-1989	32,596	685	1,907	59	78	35,325
	All buildings constructed before 1990	106,574	7,208	11,051	1,930	1,500	128,263
	Buildings surviving from 1990 to 2000 (%)	91	58	35	48	52	76

Table 2.14 shows the number of buildings by construction materials built before 1990 and which had survived to 2000. The figures refer to buildings constructed up to year 1989 only. The proportion of wholly concrete buildings which survived up to year 2000 was 91%. The lowest percentage was for buildings made of iron or tin (35%). The data reveal some inconsistencies: the number of wholly concrete residential buildings constructed during the period 1985-1989 reported in 2000 was greater than that reported at the 1990 census for the same period of construction. The number should have been less due to the depletion of the existing stock. This discrepancy may have been caused by the shifting in the reported year of completion. Buildings actually built in a given period may have been reported as of a previous or a later period, thus creating such inconsistency in the data. The shifting of year of completion may be caused by memory lapse of the owner, or by the fact that the buildings were occupied by tenants who, not knowing the answer, only gave estimates of the year of completion. The latter may also have been shifted forward because of major addition, renovation and repairs made to the building; also, some people build their houses over more than one year due to economic reasons and may give either the later or earlier year of completion.

2.5 Construction activity

Construction activity may be gauged by observing trends in the rate of issue of building permits, in investment and employment in the construction sector.

2.5.1 Building permits

Table 2.15 gives the number of building permits for residential and non-residential buildings issued between 1990 and 2000 for the island of Mauritius. The same data are presented graphically in Figure 2.2.

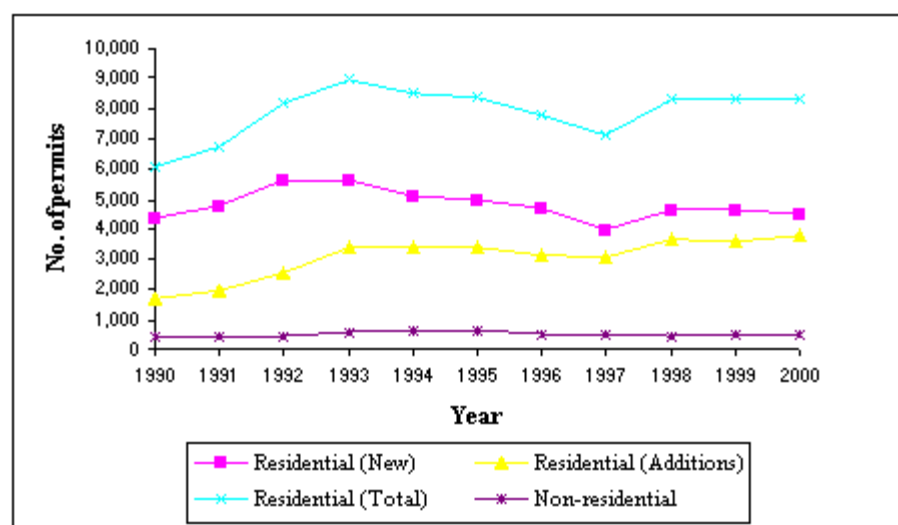
Table 2.15: Building permits issued, 1990-2000, Island of Mauritius

Year	Residential			Non-residential
	New	Additions	Total	
1990	4,388	1,720	6,108	485
1991	4,763	1,991	6,754	444
1992	5,637	2,550	8,187	484
1993	5,606	3,369	8,975	581
1994	5,094	3,402	8,496	682
1995	4,956	3,394	8,350	621
1996	4,689	3,113	7,802	535
1997	4,011	3,086	7,097	511
1998	4,667	3,635	8,302	469
1999	4,657	3,623	8,280	537
2000	4,538	3,793	8,331	536
Total	53,006	33,676	86,682	5,885

Data for the island of Mauritius on building permits issued for new residential buildings indicate a peak of 5,600 in 1992 from 4,400 in 1990. This was then followed by a steady decrease with a tendency to stabilize around 4,500. Permits for additions, however increased significantly. The 1990 figure of 1,700 more than doubled to reach 3,800 in 2000. It should however be noted that permits for additions also include additions of rooms or garage to existing housing units.

For non-residential buildings, the issue of permits has been more or less constant over the ten-year period.

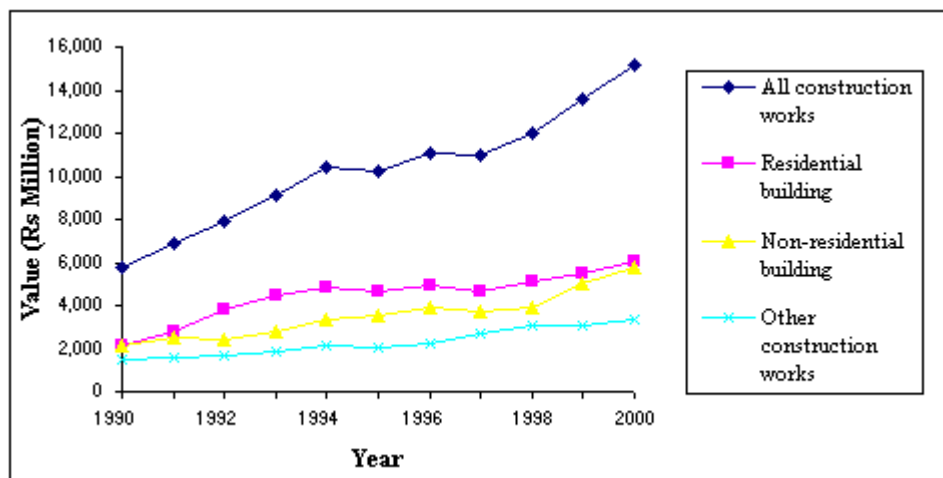
Figure 2.2: Building permits issued, 1990-2000, Island of Mauritius



2.5.2 Investment in the construction sector

Figure 2.3 provides information on investment in construction over the period 1990-2000.

Figure 2.3: Investment in construction at current prices by type, Republic of Mauritius, 1990-2000



Investment in construction increased steadily from Rs5.7 billion in 1990 to Rs10.4 billion in 1994. A slowing down was then noted till 1997, when the GDFCF for the construction industry was around Rs11.0 billion. This was followed by a regain in construction activity with investments of Rs12.0, 13.6, and 15.2 billion in 1998, 1999 and 2000 respectively.

2.5.3 Employment in the construction sector

Total employment in the construction sector stood at 43,000 in 2000, representing 9% of total employment. The corresponding figure for 1990 was 39,000 or 10% of total employment.

Out of the 43,000 construction employees in 2000, some 14,000 were employed in large firms (i.e. firms with 10 or more employees), while the rest, i.e. some 29,000, were either employed in small construction firms or were self-employed. The corresponding figures for 1990 were 11,000 for large firms and 28,000 for other than large firms.

Chapter 3 – Housing Units and amenities

3.1 Introduction

Housing units are contained within residential and partly-residential buildings. A building may contain one or more housing units. In the previous chapter, the data on the characteristics of the residential buildings were analysed and it was found that there has been an improvement both in quantity and quality from 1990 to 2000. But for a sound analysis of housing conditions, it is important as well to assess the quality of shelter in terms of the availability of basic amenities to households.

A housing unit can be defined as a *separate* and *independent* place of abode intended for habitation by one household, or one not intended for habitation, but occupied for living purposes by a household at the time of the census. Although intended for one household, a housing unit may be occupied by more than one household or by part of a household.

The attribute of separateness implies that the household can isolate itself from other persons in the community for the purposes of shelter and living. The attribute of independence implies that the occupants of the household can come in or go out of their abode without passing through the premises of somebody else.

3.2 Housing stock and growth

In 2000, a total of 297,671 housing units was enumerated compared to 223,821 in 1990. This represents an increase of about 73,800 or an average growth of 2.9% per annum. The ratio of housing units per building works out to 1.24 in 2000 compared to 1.21 for 1990.

3.3 Geographical distribution and flow

Table 3.1 gives the relative share of housing units and households in the different districts at the last two censuses, while Table 3.2 presents the growth rate and percentage change of housing units and households for the intercensal period 1990-2000.

Port Louis registered the most important drop in its share of housing units (-1.8%) as well as households (-2.0%). It also registered the lowest growth rate and lowest increase in the number of housing units and households. The percentage increase in the number of housing units and households were only 11.1% and 6.5% respectively, well below the national averages of 33.0% and 26.0%. This can be explained by the out-migration of people from Port Louis to other parts of the island; in fact, the district of Port Louis registered a net loss of 4,200 residents between 1990 and 2000.

Black River on the other hand, witnessed high growth rates in the number of housing units (6.1%) and households (4.7%) in year 2000, representing percentage increases of 80.3% and 58.2% respectively. The number of housing units (17,752) available in Black River surpassed largely the number of households therein (15,627), indicating that a high proportion of these housing units may be used as secondary residences.

Other districts with relatively high increases in housing units are Pamplemousses, Rivière du Rempart and Moka. These districts also registered high growth rates in the number of households.

Table 3.1: Geographical distribution of housing units and households¹, Republic of Mauritius, 1990 and 2000 Censuses

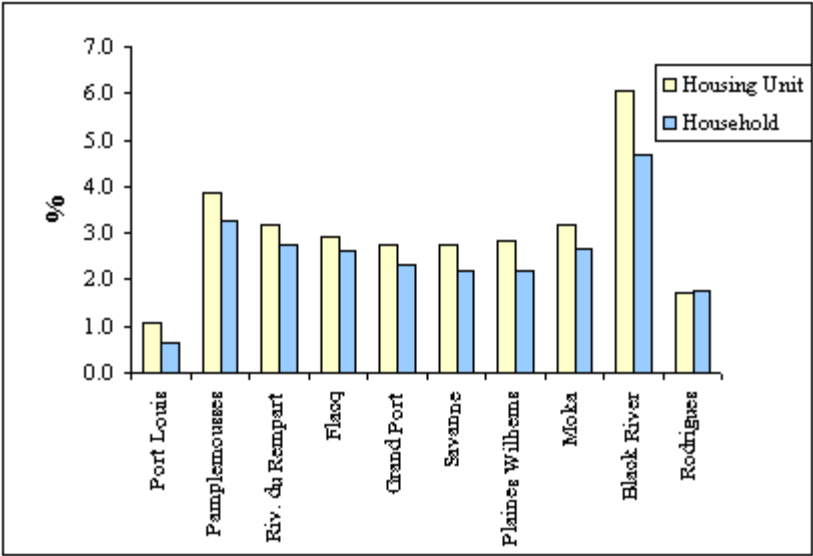
District	Housing unit				Household			
	1990		2000		1990		2000	
	No.	%	No.	%	No.	%	No.	%
Port Louis	29,456	13.2	32,716	11.0	30,826	13.0	32,834	11.0
Pamplemousses	20,756	9.3	30,328	10.2	21,745	9.2	30,003	10.0
Rivière du Rempart	18,098	8.1	24,751	8.3	18,787	7.9	24,647	8.3
Flacq	21,850	9.8	29,084	9.8	23,798	10.0	30,760	10.3
Grand Port	19,376	8.7	25,359	8.5	21,212	8.9	26,715	8.9
Savanne	12,242	5.5	16,044	5.4	13,590	5.7	16,846	5.6
Plaines Wilhems	71,333	31.9	94,494	31.8	75,610	31.9	94,050	31.5
Moka	13,056	5.8	17,816	6.0	14,286	6.0	18,573	6.2
Black River	9,844	4.4	17,752	6.0	9,876	4.2	15,627	5.2
Rodrigues	7,810	3.5	9,254	3.1	7,289	3.1	8,669	2.9
Republic of Mauritius	223,821	100.0	297,598	100.0	237,019	100.0	298,724	100.0

¹: excluding 73 housing units and 70 households in Agalega for year 2000.

Table 3.2: Growth rate and percentage change in housing units and households between 1990 and 2000 Censuses, Republic of Mauritius

District	Growth rate (% per annum)		Percentage change	
	Housing Unit	Household	Housing Unit	Household
Port Louis	1.1	0.6	11.1	6.5
Pamplemousses	3.9	3.3	46.1	38.0
Rivière du Rempart	3.2	2.8	36.8	31.2
Flacq	2.9	2.6	33.1	29.3
Grand Port	2.7	2.3	30.9	25.9
Savanne	2.7	2.2	31.1	24.0
Plaines Wilhems	2.9	2.2	32.5	24.4
Moka	3.2	2.7	36.5	30.0
Black River	6.1	4.7	80.3	58.2
Rodrigues	1.7	1.7	18.5	18.9
Republic of Mauritius	2.9	2.3	33.0	26.0

Figure 3.1: Growth rates of housing units and households between 1990 and 2000, Republic of Mauritius



It is worthy to note from Table 3.2 and Figure 3.1 that the number of housing units grew faster than the number of households for every district, except for Rodrigues where both rates were the same (1.7%). This is just the opposite of what was observed during the intercensal period of 1983-1990 where the household formation rate for each district was higher than the housing construction rate. This implies that there has been an improvement in the housing situation in terms of housing needs during the last 10 years. The growth rate for the Republic of Mauritius works out to 2.9 for housing units compared to 2.3 for households. The corresponding rates for 1990 were 1.7 and 2.0 respectively.

3.4 Ownership, mortgage status, type of building and tenure

Table 3.3: Percentage distribution of housing units by ownership and mortgage status, Republic of Mauritius, 1990 and 2000 Censuses

Ownership	Housing units			
	1990 ¹		2000	
	No.	%	No.	%
Private	220,550	98.5	294,849	99.1
<i>Mortgaged</i>	-	-	47,040	15.8
<i>Nonmortgaged</i>	-	-	237,666	79.9
<i>Not stated</i>	-	-	10,143	3.4
Public	3,003	1.3	1,265	0.4
Not stated	268	0.1	1,557	0.5
Republic of Mauritius	223,821	100.0	297,671	100.0

¹: Data on mortgage status not available for 1990 Census

Housing units may be privately owned, i.e. by households or private corporations, or publicly owned, i.e. by the Central or Local Government or public corporations. Table 3.3 shows that private ownership of housing units, although very high, increased further from 98.5% in 1990 to 99.1% in 2000. About 16% of the private housing units enumerated in 2000 were mortgaged while 81% were not. It was not possible to obtain the mortgage status for the remaining 3% since they were either vacant at the time of enumeration, or were occupied by tenants who were unable to supply the information.

Table 3.4: Geographical distribution of mortgaged housing units, Republic of Mauritius, 2000 Census.

District	Total housing units ¹	Mortgaged housing units	
		No.	% of district total
Port Louis	32,716	3,914	12.0
Pamplemousses	30,328	4,603	15.2
Rivière du Rempart	24,751	1,754	7.1
Flacq	29,084	2,700	9.3
Grand Port	25,359	2,811	11.1
Savanne	16,044	1,724	10.7
Plaines Wilhems	94,494	21,126	22.4
Moka	17,816	2,937	16.5
Black River	17,752	3,987	22.5
Rodrigues	9,254	1,484	16.0
Republic of Mauritius	297,598	47,040	15.8

¹: excluding 73 housing units in Agalega.

Table 3.4 gives the distribution of mortgaged housing units by district. The data reveal that nearly one quarter of the housing units in each of the districts of Plaines Wilhems and Black River are mortgaged. The district with the lowest proportion of mortgaged housing units is Rivière du Rempart (7%).

Table 3.5: Private housing units by type of building in which located, Republic of Mauritius, 1990 and 2000 Censuses

Type of building	Housing units			
	1990		2000	
	No.	%	No.	%
Detached housing units	153,784	69.7	191,592	65.0
Blocks of flats and semi detached houses	33,788	15.3	72,297	24.5
Crudely subdivided buildings	23,294	10.6	14,573	4.9
Housing units in partly-residential buildings	9,424	4.3	16,136	5.5
Improvised housing units	259	0.1	200	0.1
Other	1	0.0	51	0.0
All housing units	220,550	100.0	294,849	100.0

The location of private housing units in the different types of buildings is an important information for the formulation of housing programmes and provides an indication of housing conditions.

Table 3.5 shows that the share of housing units located in detached buildings has decreased from 70% in 1990 to 65% in 2000. Conversely, one quarter of the housing units in year 2000 were located in blocks of flats and semi-detached houses compared to 15% in 1990. This confirms the tendency to construct buildings with more than one housing unit, as seen earlier in Chapter 2. Housing units located in buildings crudely subdivided into smaller units dropped from 10.6% to 4.9%, while the proportion of improvised housing units remained the same (0.1%). The share of housing units found in partly-residential buildings witnessed a slight increase from 4.3% to 5.5% during the intercensal period.

The term ownership as spelled out at the beginning of this section refers to the *housing unit* as to whether it is owned privately or by the public sector. Tenure is a concept that is related to the *household*, and refers to the arrangements under which the household occupies a housing unit. The extent to which households own or rent the housing unit they occupy is of significance for housing policies and programmes.

Table 3.6: Distribution of households by tenure, Republic of Mauritius, 1990 and 2000 Censuses

Tenure	Households			
	1990		2000	
	No.	%	No.	%
Owner	179,692	75.9	257,685	86.5
Tenant	35,102	14.8	27,791	9.3
Subtenant	928	0.4	39	0.0
Free	20,723	8.8	12,325	4.2
Other	280	0.1	41	0.0
All households	236,725	100.0	297,881	100.0

Table 3.6 shows the pattern of tenure under which households occupied their residence at the last two censuses. In 2000, 87% of households owned the dwellings they were occupying as compared to 76% in 1990. Conversely, the proportion of households renting their accommodation dropped from 15% in 1990 to 9% in 2000. This indicates a positive evolution of tenure towards owner-occupied dwellings.

The percentage of households living in free housing fell from 8.8% in 1990 to 4.2% in 2000. Free housing is usually provided by employers to their employees and also by some persons to their relatives.

Table 3.7: Percentage distribution of households by district and tenure, Republic of Mauritius, 1990 and 2000 Censuses

District	Tenure					
	1990			2000		
	Owner	Tenant / Sub tenant	Free/Other	Owner	Tenant / Sub tenant	Free/Other
Port Louis	59.6	31.0	9.4	77.6	18.8	3.6
Pamplemousses	81.0	8.8	10.2	89.3	6.3	4.4
Rivière du Rempart	88.5	4.4	7.2	92.8	3.3	3.9
Flacq	85.7	5.9	8.3	91.7	3.4	5.0
Grand Port	80.8	9.5	9.7	90.0	5.0	5.0
Savanne	79.2	8.1	12.7	89.9	5.0	5.1
Plaines Wilhems	70.3	22.3	7.4	82.2	14.3	3.5
Moka	83.4	7.5	9.0	91.3	5.4	3.3
Black River	73.8	10.8	15.4	86.4	7.6	6.1
Rodrigues	90.7	3.7	5.7	94.0	2.1	3.9
Republic of Mauritius	75.9	15.2	8.8	86.5	9.3	4.2

Table 3.7 gives the distribution of households by district and tenure at the last two censuses. Though the two urban districts, Port Louis and Plaines Wilhems had the highest proportions of households living in rented dwellings, there had been a marked improvement towards owner-occupied housing in these two districts during the past ten years. Thus, the percentage of households owning their dwellings increased from 60% to 78% for Port Louis and from 70% to 82% for Plaines Wilhems during the intercensal period.

Rodrigues had the highest proportion of owner occupied households; in fact, 94% of households owned their dwelling.

3.5 Occupancy and vacancy

Tables 3.8 and 3.9 give the distribution of housing units by occupancy status and type of vacancy.

Table 3.8: Distribution of housing units by occupancy status and type of vacancy, Republic of Mauritius, 1990 and 2000 Censuses

Type of occupancy or vacancy		Housing Units			
		1990		2000	
		No.	%	No.	%
Housing units occupied as:	Principal residence	216,246	96.6	278,226	93.5
	Secondary residence	1,857	0.8	3,932	1.3
<i>Total occupied</i>		<i>218,103</i>	<i>97.4</i>	<i>282,158</i>	<i>94.8</i>
Vacant housing units:	For rent	2,193	1.0	6,103	2.1
	For sale	259	0.1	2,560	0.9
	Provided by employer	887	0.4	637	0.2
	Under repairs	688	0.3	1,124	0.4
	Other	1,691	0.8	5,089	1.7
<i>Total vacant</i>		<i>5,718</i>	<i>2.6</i>	<i>15,513</i>	<i>5.2</i>
All housing units		223,821	100.0	297,671	100.0

A housing unit may be either occupied or vacant. Furthermore, it can be occupied as a principal residence or as a secondary residence. An occupied housing unit is considered as a principal residence when it is the main place of abode of its occupants. It is considered as a secondary residence if the occupants have a principal residence elsewhere, and the unit is kept for seasonal occupation for the owner's household, friends or relatives.

At Census 2000, 94% of the 297,671 housing units enumerated were occupied as principal residence compared to 97% in 1990 while the percentage of housing units used as secondary residence increased from 0.8% in 1990 to 1.3% in 2000.

The vacancy rate, defined as the number of vacant housing units to the total number of housing units, increased from 2.6% in 1990 to 5.2% in 2000. In absolute terms this represents an increase from 5,700 to 15,500. The high rate at the 2000 Census may be due to the fact that many secondary residences have been recorded as vacant units since the occupants were staying at their principal residences at the time of enumeration. A housing unit may be vacant for rent, sale, repair or provided by the employer. Table 3.9 gives the distribution of housing units by type of vacancy.

Table 3.9: Distribution of housing units by type of vacancy, Republic of Mauritius, 1990 and 2000 Censuses

Type of vacancy	Housing Units			
	1990		2000	
	No.	%	No.	%
For rent	2,193	38.4	6,103	39.3
For sale	259	4.5	2,560	16.5
Provided by employer	887	15.5	637	4.1
Under repairs	688	12.0	1,124	7.2
Other	1,691	29.6	5,089	32.8
All housing units	5,718	100.0	15,513	100.0

The share of vacant housing units available for rent remained almost the same from 1990 (38.4%) to 2000 (39.3%). On the other hand, a substantial increase from 4.5% in 1990 to 16.5% in 2000 is noted in the

share of vacant housing units available for sale. A majority (75%) of this latter category has been recently constructed (1995 – 2000). A significant drop was registered for vacant housing units provided by employer and those under repairs.

The rather high percentage (32.8%) of vacancy for the “Other” category is most probably due to secondary residences being recorded as vacant units as mentioned above. Another reason might be the acquisition of additional housing units for occupation by future generations. It was difficult to obtain precise information on the occupancy status of these housing units since they were unoccupied at the time of enumeration.

3.6 Amenities available to households

Table 3.10: Percentage distribution of private households by amenities available, Republic of Mauritius, 1990 and 2000 Censuses

Amenity available	Households	
	1990 (%)	2000 (%)
Water supply		
(i) Piped water inside house	56.0	83.7
(ii) Piped water outside on premises	33.5	14.5
(iii) Public fountain, well, river, etc.	10.5	1.8
Availability of water tank/reservoir ¹	-	36.4
Electricity	96.8	99.0
Toilet		
(i) Flush toilet	62.8	88.8
(ii) Pit latrine	36.5	11.0
(iii) Other	0.7	0.2
Bathroom		
(i) With running water	63.6	89.0
(ii) Without running water	30.9	10.0
(iii) None	5.5	1.0
Kitchen		
(i) Inside housing unit	64.9	87.8
(ii) Outside housing unit	32.7	11.4
(iii) None	2.4	0.8
Fuel for cooking		
(i) Gas	50.3	91.5
(ii) Wood and charcoal	26.3	4.5
(iii) Kerosene	21.7	3.4
(iv) Electricity	1.5	0.5
(v) Other and not stated	0.2	0.1

¹: data not available for 1990

An increase in the number of housing units available in a country does not necessarily mean an improvement in the living conditions of its population. For decent and comfortable living, a household needs, in addition to a dwelling, amenities which are of good quality. Examples are piped water supply, electricity, hygienic toilet facilities, bathroom, kitchen, safe refuse disposal, etc.

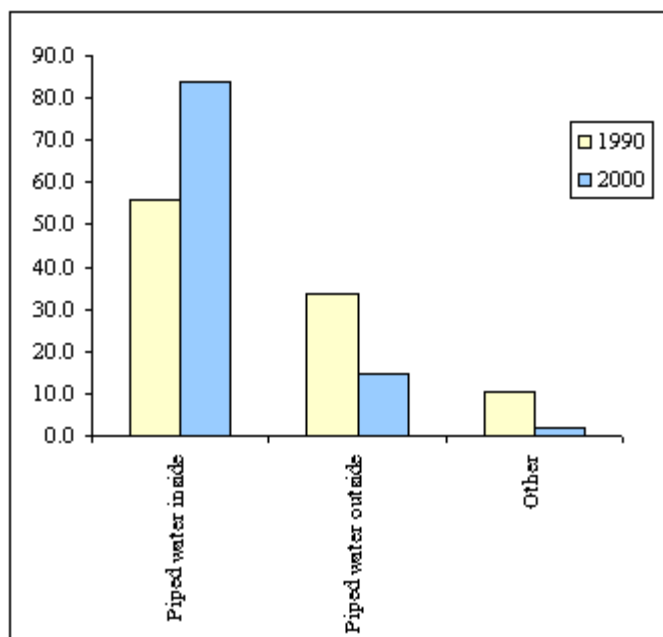
The 2000 census data indicate a significant improvement in the living conditions of the population with regard to amenities available.

It can be seen from Table 3.10 that the percentage of households having access to the basic amenities has increased markedly over the ten-year intercensal period. However, there are still a few households which lacked these basic amenities.

3.6.1 Water supply

A reliable and potable water supply is a major indicator of the level of community health since many epidemic diseases are waterborne. The most significant information from a health point of view is whether the household has a piped water supply. The supply of water through pipes is recognised as the most effective means of protecting it from pollution and of ensuring its purity.

Figure 3.2: Percentage distribution of private households by type of water supply, 1990 and 2000 Censuses, Republic of Mauritius



Nearly 84% of households in 2000 enjoyed a piped water supply inside their housing units in contrast with 56% in 1990, while the proportion of households having piped water outside their dwellings dropped from 34% in 1990 to 14% in 2000. The number of households deriving their water supply from public fountains, well, rivers, tank-wagons and other means, dropped significantly from 10% (or 25,000) to 2% (or 5000).

The type of water supply was slightly better in the urban areas as shown by the fact that 99.4% of urban households were served by a piped water supply. The corresponding percentage for rural households was 97.3%. Rodrigues had 85.9% of households connected to the piped water network.

3.6.2 Domestic water reservoir

Information on whether the housing unit has a domestic tank or reservoir was collected for the first time during the 2000 Housing Census. For the purpose of the census, a domestic tank or reservoir was defined as a container made of fibre glass, concrete or concrete blocks to store water to be used for domestic purposes only. The water stored should be conducted through pipes and taps to the occupants of the housing unit.

Some 36% of households reported having a domestic water tank or reservoir. The proportion of households having this facility was higher in the urban regions (45%) than the rural areas (30%).

3.6.3 Electricity

The percentage of households which were provided with electricity increased from 96.8% in 1990 to 99.0% in 2000. Some 98.7% of rural households had electricity in 2000 compared to 95.4% in 1990. For urban regions, the increase was from 99.0% in 1990 to 99.4% in 2000.

A marked improvement was noted for Rodrigues, where the percentage of households with electricity increased from 70.0% in 1990 to 94.6% in 2000.

3.6.4 Toilet facility

Table 3.11: Distribution of private households by type of toilet facility, Republic of Mauritius, 1990 and 2000 Censuses

Toilet facility	Households			
	1990 ¹		2000	
	No.	%	No.	%
Flush toilet connected to	148,588	62.8	264,583	88.8
Sewerage system	44,734	18.9	58,478	19.6
<i>Not shared</i>	34,450	14.6	51,697	17.4
<i>Shared</i>	10,284	4.3	6,781	2.3
Absorption pit/septic tank	103,854	43.9	206,105	69.2
<i>Not shared</i>	93,472	39.5	191,093	64.2
<i>Shared</i>	10,382	4.4	15,012	5.0
Pit latrine	86,287	36.5	32,672	11.0
Water seal	15,070	6.4	10,798	3.6
<i>Not shared</i>	11,328	4.8	7,982	2.7
<i>Shared</i>	3,742	1.6	2,816	0.9
Other	71,217	30.1	21,874	7.3
<i>Not shared</i>	53,407	22.6	17,474	5.9
<i>Shared</i>	17,810	7.5	4,400	1.5
Other including none	1,760	0.7	626	0.2
All households	236,635	100.0	297,881	100.0

¹ : excluding 90 households with number of persons not stated.

Table 3.11 shows the types of toilet facilities that were available in the country at the last two censuses while Table 3.12 gives the percentage distribution of these facilities by district.

Between 1990 and 2000, there has been qualitative improvement in type of toilet facility with nearly 90% of households having flush toilet in 2000, in contrast with 63% in 1990. Flush toilet connected to absorption pit or septic tank was the most common toilet system (69%), followed by connection to the sewerage system (20%); 11% of households were using pit latrine while some 0.2% (or 600) households still had no toilet as compared to 0.7% (or 1,800) households in 1990.

An improvement was also noted in the proportion of households which were provided with their own toilet facility. Only 9.7% of the households shared toilets at the 2000 Census compared to 17.8% in 1990.

Table 3.12: Percentage distribution of private households¹ by district and toilet facility, Republic of Mauritius, 2000 Census

District	Flush toilet connected to						Pit latrine		Other/None		Total	
	Sewerage		Absorption pit		Septic tank		No	%	No	%	No	%
	No	%	No	%	No	%						
Port Louis	25,042	76.5	5,033	15.4	718	2.2	1,885	5.8	75	0.2	32,753	100.0
Pamplemousses	636	2.1	22,695	75.9	3,020	10.1	3,491	11.7	44	0.1	29,886	100.0
Rivière du Rempart	57	0.2	20,456	83.7	1,383	5.7	2,514	10.3	32	0.1	24,442	100.0
Flacq	111	0.4	25,133	81.8	222	0.7	5,189	16.9	58	0.2	30,713	100.0
Grand Port	49	0.2	22,019	82.5	740	2.8	3,840	14.4	28	0.1	26,676	100.0
Savanne	28	0.2	13,639	81.1	192	1.1	2,931	17.4	28	0.2	16,818	100.0
Plaines Wilhems	28,535	30.4	59,608	63.6	2,789	3.0	2,781	3.0	49	0.1	93,762	100.0
Moka	1,402	7.6	14,814	79.9	569	3.1	1,735	9.4	21	0.1	18,541	100.0
Black River	2,592	16.6	9,274	59.5	1,156	7.4	2,524	16.2	33	0.2	15,579	100.0
Rodrigues	26	0.3	2,358	27.3	236	2.7	5,780	66.8	251	2.9	8,651	100.0
Republic of Mauritius	58,478	19.6	195,029	65.5	11,025	3.7	32,670	11.0	619	0.2	297,821	100.0

¹ : Excluding 60 households in Agalega

The majority (95%) of households served by sewer were found in urban areas. The two urban districts, Port Louis and Plaines Wilhems, had respectively 76% and 30% of their households connected to the sewerage system. Only 2% of the rural households reported to have flush toilet connected to the sewerage network; rural households were provided mainly with flush toilet connected to absorption pit or septic tank. A fairly large number of rural households (28,000 or 17%) had pit latrines. Rodrigues had 67% of its households served by pit latrine toilets, and 3 % with other types of toilet or no toilet at all.

3.6.5 Bathing facility

The availability of appropriate bathing facilities (Table 3.13) is also an important factor to consider

when assessing housing conditions from a health and hygiene point of view.

Table 3.13: Distribution of private households by bathing facility, Republic of Mauritius, 1990 and 2000 Censuses.

Bathing facility	Households			
	1990 ¹		2000	
	No.	%	No.	%
Bathroom inside housing unit	114,175	48.2	222,769	74.8
With running water	104,557	44.2	216,337	72.6
<i>Not shared</i>	99,582	42.1	209,602	70.4
<i>Shared</i>	4,975	2.1	6,735	2.3
Without running water	9,618	4.1	6,432	2.2
<i>Not shared</i>	8,549	3.6	5,716	1.9
<i>Shared</i>	1,069	0.5	716	0.2
Bathroom outside housing unit	109,538	46.3	72,220	24.2
With running water	46,069	19.5	48,711	16.4
<i>Not shared</i>	30,996	13.1	35,801	12.0
<i>Shared</i>	15,073	6.4	12,910	4.3
Without running water	63,469	26.8	23,509	7.9
<i>Not shared</i>	50,233	21.2	18,999	6.4
<i>Shared</i>	13,236	5.6	4,510	1.5
None	12,922	5.5	2,892	1.0
All households	236,635	100.0	297,881	100.0

¹: Excluding 90 households with number of persons not stated

There has been a substantial improvement in the type and availability of bathing facilities from 1990 to 2000. In 2000, 75% of households had bathrooms inside their housing units compared to 48% in 1990. The percentage of households having bathrooms outside their housing units was 24% in year 2000 compared to 46% in 1990. Only 1% of households in 2000 still had no bathing facilities against 6% in 1990.

Some 97% of bathrooms found inside the building had running water while the corresponding percentage for those which are found outside is 67%.

The percentage of households sharing bathrooms decreased from 15% in 1990 to 8% in 2000.

Bathroom facilities differed largely between urban and rural regions. About 84% of urban households had bathrooms inside their housing units while the corresponding figure for the rural areas was 68%. Also, 96% of urban households had running water in their bathroom compared to 84% in the rural areas. Out of the 2,892 households with no bathing facilities, 2,640 or 91% were found in the rural region. The problem was more acute in Rodrigues where 1,300 households or 15% had no bathroom facilities.

3.6.6 Kitchen facility

Table 3.14: Distribution of private households by availability of kitchen, Republic of Mauritius, 1990 and 2000 Censuses

Availability of kitchen	Households			
	1990 ¹		2000	
	No.	%	No.	%
Kitchen inside housing unit	153,499	64.9	261,542	87.8
<i>Not shared</i>	152,171	64.3	260,149	87.3
<i>Shared</i>	1,328	0.6	1,393	0.5
Kitchen outside housing unit	77,331	32.7	33,952	11.4
<i>Not shared</i>	75,531	31.9	33,106	11.1
<i>Shared</i>	1,800	0.8	846	0.3
None	5,805	2.5	2,387	0.8
All households	236,635	100.0	297,881	100.0

¹: Excluding 90 households with number of persons not stated

Table 3.14 shows that the proportion of households having their kitchen inside the housing unit they are occupying, has increased from 65% in 1990 to 88% in 2000. Conversely, the percentage of households having their kitchen outside has dropped from 33% to 11% during the same period. There were some 2,400 or 0.8% households who did not have a kitchen in 2000, though this showed an improvement over the 1990 Census where the number of households without this facility stood at about 5,800 or 2.5%.

A significant difference was observed between the urban and rural regions. About 94% of urban households had kitchen inside while the corresponding figure for the rural areas was 83%. About two-thirds (69%) of households in Rodrigues had their kitchen inside.

The percentage of shared kitchen dropped from 1.4% in 1990 to 0.8% in 2000. The extent of kitchen sharing was more or less the same for urban (0.7%) and rural (0.9%) areas.

3.6.7 Fuel used for cooking

Table 3.15: Distribution of private households by type of fuel used for cooking purposes, Republic of Mauritius, 1990 and 2000 Censuses

Type of fuel	Households			
	1990		2000	
	No.	%	No.	%
Wood and charcoal	62,257	26.3	13,461	4.5
Kerosene	51,262	21.7	10,029	3.4
Electricity	3,627	1.5	1,586	0.5
Gas	119,008	50.3	272,419	91.5
Other and Not Stated	571	0.2	386	0.1
All households	236,725	100.0	297,881	100.0

Table 3.15 reveals that there had been a major shift towards the use of gas as principal fuel used for cooking purposes during the period 1990-2000. The percentage of households using gas increased markedly from 50.3% in 1990 to 91.5% in 2000, while the proportion of those using wood and charcoal dropped drastically from 26.3% to 4.5% during the same period. Furthermore, only 3.4% of households used kerosene in 2000 as compared to 21.7% in 1990. The proportion of households using electricity, which was already very low in 1990 (1.5%), further decreased to 0.5% in 2000.

The majority or 80% of households using kerosene, wood or charcoal was found in rural areas. Nearly a quarter (23%) of households in Rodrigues reported using kerosene, wood or charcoal as principal fuel for cooking.

3.6.8 Method of refuse disposal

Inadequate collection and unmanaged disposal of solid waste present a number of problems for human health. Uncollected refuse dumped in public areas contributes to the spread of diseases. It is therefore important, from a health and environment point of view, to know the means of refuse disposal available to housing units.

A direct comparison cannot be made between the 1990 and 2000 data on method of refuse disposal. However, Table 3.16 shows that there has been a marked improvement in the way people dispose of their refuse. Thus, the percentage of households who had their refuse collected by authorized collectors increased from 47.1% in 1990 to 91.5% in 2000. Some 5% of these households, most of which are found in rural areas, had their refuse collected on an irregular basis.

Table 3.16: Distribution of private households by method of refuse disposal, Republic of Mauritius, 1990 and 2000 Censuses

Method of refuse disposal	Households			
	1990 ¹		2000	
	No.	%	No.	%
Receptacle with cover	71,272	30.1	-	-
Receptacle without cover	24,111	10.2	-	-
Enclosure made of bricks/stones	16,145	6.8	-	-
Regular collection	-	-	258,134	86.7
Irregular collection	-	-	14,372	4.8
Dumped on premises	40,377	17.1	4,990	1.7
Dumped on roadside	31,970	13.5	2,791	0.9
Ash pit	50,247	21.2	16,386	5.5
Other	2,513	1.1	1,208	0.4
All households	236,635	100.0	297,881	100.0

¹: Excluding 90 households with number of persons not stated

There were some 7,800 households, representing 2.6% of all households, who dumped their refuse on the roadside or in their backyard, though there has been a considerable improvement from the proportion (30.6%) observed in 1990. Some 5.5% of households reported using an ash pit to dispose of their refuse against 21.2% in 1990.

Nearly all urban households (98%) had their refuse collected by authorized collectors compared to 86% in rural areas. Ash pit was used by 9% of rural households and was the most common type of method of refuse disposal used in Rodrigues (63% of households).

3.7 Living space

The density of occupation of a household can be measured by different indicators. One of them is the number of households per housing unit. This indicator shows the extent to which households share housing units. It is important to note that this indicator refers to housing units occupied by private households. In 1990, there were some 236,600 private households for 215,400 occupied housing units, giving a national average of 1.10 households per housing unit. In 2000, 297,900 households and 277,500 occupied housing units were enumerated, yielding an average of 1.07 household per dwelling. It can be therefore concluded that the extent to which households share housing units has improved by about 3% during the intercensal period. The improvement is even more pronounced if the extent to which individuals shared units is considered. With a reduction in the household size from 4.4 in 1990 to 3.9 in 2000, the average number of persons per housing unit works out to 4.2 in 2000 compared to 4.8 in 1990. The ratio thus improved by 12% during the period 1990-2000.

A lower ratio of households or persons to housing unit does not necessarily mean an improvement in the density of occupation. Another indicator is the average number of rooms for living purposes per housing unit. This ratio increased from 3.98 in 1990 to 4.62 in 2000 showing a substantial improvement in living space.

Table 3.17: Distribution of housing units¹ by number of rooms per housing unit, Republic of Mauritius, 1990 and 2000 Censuses

No. of rooms per housing unit	1990		2000		Change 1990-2000	
	No.	%	No.	%	No.	%
1	13,238	6.1	7,402	2.7	-5,836	-44.1
2	38,759	18.0	29,391	10.6	-9,368	-24.2
3	37,825	17.6	41,906	15.1	4,081	10.8
4	54,040	25.1	68,571	24.7	14,531	26.9
5	29,442	13.7	52,519	18.9	23,077	78.4
6+	42,080	19.5	77,718	28.0	35,638	84.7
All housing units	215,384	100.0	277,507	100.0	62,123	28.8

¹ housing units occupied by private households

Table 3.17 gives the distribution of housing units by the number of rooms they contained at the 1990 and 2000 censuses. At the 2000 census, nearly half of the housing units (47%) contained 5 or more rooms while the corresponding figure for 1990 was 33%. Housing units with one or two rooms witnessed large decreases (-44% and -24% respectively). On the other hand, large increases were noted in housing units with four rooms (27%), five rooms (78%) and six or more rooms (85%).

A better measure of the density of occupation is the average number of persons per room used for living purposes. This ratio has decreased from 1.2 to 0.9 between 1990 and 2000, confirming the improvement in the living space available to occupants of housing units.

Table 3.18 gives the distribution of households by density per room, i.e. by the average number of persons per room. It is noticed that the percentage of households with less than one person per room has increased substantially from 26.5% in 1990 to 46.2% in 2000, while households with two or more persons per room have decreased considerably from 27.5% to 12.1% during the same period.

Table 3.18: Percentage distribution of private households by density per room, Republic of Mauritius, 1990 and 2000 Censuses

Average number of persons per room	Total		Urban		Rural	
	1990 ¹	2000 ²	1990	2000	1990	2000
Less than 1	26.5	46.2	32.7	50.2	22.1	43.0
1 or more but less than 2	46.0	41.7	44.4	39.9	47.1	43.2
2 or more but less than 3	17.0	8.6	14.7	7.1	18.7	9.7
3 or more	10.5	3.5	8.2	2.8	12.1	4.1
All households	%	100.0	100.0	100.0	100.0	100.0
	No.	236,580	297,877	97,420	130,914	139,160
				130,914	139,160	166,963

¹ excluding 145 households for which the number of persons or the number of rooms was not stated

² excluding 30 homeless households and 4 households for which the number of rooms was not stated

As can be observed from the table, the density of occupation is still higher in the rural areas than in the urban areas, although the difference is less in 2000 than in 1990. The average number of persons per room in the urban and rural regions was 0.87 and 0.94 respectively in 2000. The corresponding figures for year 1990 were 1.1 and 1.3 respectively.

Table 3.19 shows that the density of occupation was higher for tenant and sub-tenant households (0.98) than for owner-occupied households (0.90). The density was even higher for the type of tenure "free and other" (1.04).

Table 3.19: Percentage distribution of private households by tenure and density per room, Republic of Mauritius, 2000 Census

Tenure	Average number of persons per room
Owner - occupied	0.90
Tenant/sub-tenant	0.98
Free/other	1.04
All households	0.91

3.8 Rent

Rent is the amount paid monthly for the space occupied by a tenant household. The average monthly rent had increased by almost four times from Rs 580 in 1990 to Rs 2,300 in 2000. It should be noted that in 2000, only 15% (or 4,200) of households renting their dwellings lived in crudely subdivided buildings compared to 29% (or 15,500) in 1990. Other factors that may affect the rental value are the number of rooms, the type of available amenities, and whether the house is furnished or not. The geographical location of the buildings, its environment and neighbourhood also play a role in determining rent.

Table 3.20: Distribution of tenant households by monthly rent, Republic of Mauritius, 1990 and 2000 Censuses

Monthly rent (rupees)	Households			
	1990		2000	
	No.	%	No.	%
<100	4,259	11.8	200	0.7
100 - 199	5,762	16.0	481	1.7
200 - 299	13,238	36.7	2,311	8.3
500 - 999	8,021	22.3	4,762	17.1
1000 - 1999	3,307	9.2	7,775	27.9
2000 - 2999	594	1.6	6,616	23.8
3000 +	632	1.8	5,601	20.1
Not stated	217	0.6	84	0.3
All households	36,030	100.0	27,830	100.0

Table 3.20 shows the distribution of households by the amount of rent paid for the two last censuses. The percentage of households paying a monthly rent of less than Rs 1,000 decreased sharply from 87% in 1990 to 28% in 2000. Conversely, households with rent ranging from Rs 1,000 to less than Rs 3,000 increased markedly from 11% to 52%. Likewise, the percentage of households paying a monthly rent of Rs 3,000 and above increased from 2% to 20%.

Table 3.21: Percentage distribution of tenant households¹ by district and monthly rent, Republic of Mauritius, 2000 Census

District	Monthly rent (rupees)							Total	Average monthly rent
	<100	100-199	200-499	500-999	1000-1999	2000-2999	3000+		
Port Louis	41.0	36.0	39.7	34.3	24.2	15.7	7.9	22.2	1,400
Pamplemousses	5.5	7.0	6.5	7.9	6.8	5.9	6.8	6.7	2,300
Rivière du Rempart	1.5	2.0	1.9	2.6	2.8	2.7	3.9	2.9	4,000
Flacq	13.5	9.9	6.7	4.6	4.1	2.7	1.6	3.7	1,700
Grand Port	10.0	12.1	8.3	6.9	5.0	4.4	0.8	4.8	1,500
Savanne	1.0	8.6	6.0	5.4	3.9	1.4	0.2	3.0	1,000
Plaines Wilhems	15.0	17.8	22.5	29.7	44.3	60.9	68.4	48.1	2,700
Moka	8.5	3.5	3.2	4.1	5.3	2.7	1.8	3.6	1,900
Black River	3.0	2.6	4.4	3.9	3.0	3.0	7.7	4.2	4,400
Rodrigues	1.0	0.4	0.9	0.5	0.6	0.6	0.9	0.7	2,000
Republic of Mauritius	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2,300

¹ excludes 84 tenant households for which the monthly rent was not stated; and 27 tenant households from Agalega

Table 3.21 shows that the majority of tenant households are found in the 2 urban districts Port Louis and Plaines Wilhems. Black River had the highest average monthly rent (Rs 4,400), followed by Rivière du Rempart (Rs 4,000). The two districts with the lowest average monthly rent were Savanne (Rs 1,000) and Port Louis (1,400). Further analysis of the data showed that 360 households paid a monthly rent of more than Rs 10,000. The majority (97%) of these households were found in the districts of Pamplemousses, Rivière du Rempart, Plaines Wilhems and Black River.

3.9 Fruit trees of bearing age on residential premises

During the 2000 Housing Census, all fruit trees of bearing age on residential premises were enumerated. These statistics are useful for planning fruit production and for fly control programmes.

Table 3.22 gives the geographical distribution of fruit trees of bearing age on residential premises. A total of 677,000 fruit trees were enumerated, the most common being mango (140,000) followed by banana (92,000). The district with the highest number of fruit trees was Plaines Wilhems (140,000) followed by Rodrigues (96,000). Port Louis had the lowest number of fruit trees (33,000).

Table 3.22: Geographical distribution of fruit trees on residential premises by type, Republic of Mauritius, 2000 Census

Type of fruit trees	Port Louis	Pamplemousses	Rivière du Rempart	Flacq	Grand Port	Savanne	Plaines Wilhems	Moka	Black River	Rodrigues	Republic of Mauritius
Peach	83	398	239	561	210	184	1,656	561	65	2,729	6,686
Bibace	44	192	82	359	362	330	1,218	727	58	77	3,449
Jujuba	403	554	385	419	200	187	402	118	622	1,709	4,999
Guava	2,526	7,323	5,266	8,014	5,650	4,726	18,296	7,624	2,820	7,307	69,552
Mango	13,394	23,456	17,712	18,195	8,684	7,795	24,365	2,849	9,454	14,488	140,392
Pawpaw	2,207	7,553	5,011	7,515	4,478	3,410	15,114	4,440	3,084	11,460	64,272
All citrus	730	3,264	3,048	4,959	2,872	2,461	8,764	4,110	1,423	18,770	50,401
Coconut	3,194	17,834	15,172	10,658	5,769	4,575	6,970	1,163	7,054	6,647	79,036
Longane	318	3,503	2,367	3,561	1,296	869	10,259	1,061	699	405	24,338
Avocado	506	1,613	1,334	1,775	1,141	691	4,264	950	409	319	13,002
Litchi	347	3,905	2,881	2,902	1,700	789	10,199	738	635	536	24,632
Atte	1,185	3,212	2,075	604	299	290	1,756	307	1,761	3,115	14,604
Coeur de boeuf	562	646	459	393	229	215	622	137	404	446	4,113
Grenadine	405	941	649	850	480	368	1,180	496	475	1,303	7,147
Grapes	309	298	170	237	112	92	597	192	163	868	3,038
Banana	1,507	8,373	6,743	14,108	7,988	5,839	19,381	8,520	2,181	17,233	91,873
Jackfruit	187	2,176	1,752	2,403	1,329	1,033	2,754	1,172	438	1,176	14,420
Fruit de cithere	603	3,172	3,054	2,222	643	389	849	209	445	266	11,852
Corrosol	468	658	383	501	245	197	715	121	376	1,251	4,915
Breadfruit	128	592	544	694	331	265	470	57	183	178	3,442
Olive	54	285	98	228	164	95	1,128	302	31	103	2,488
Tamanind	232	358	247	186	53	71	221	44	399	261	2,072
Other	3,416	3,810	2,557	3,424	2,539	1,877	9,065	1,946	1,800	5,584	36,018
Total	32,808	94,116	72,228	84,768	46,774	36,748	140,245	37,844	34,979	96,231	676,741

Chapter 4 – Households

4.1 Introduction

The concept of “household” is based on the arrangements made by persons, individually or in groups, for providing themselves with food and other essentials for living. A household may be either

- (a) a one-person household, that is, a person who makes provision for his own food or other essentials for living without combining with any other person to form part of a multi-person household; or
- (b) a multi-person household, that is, a group of two or more persons living together who make common provision for food or other essentials for living. The persons in the group may pool their incomes and have a common budget to a greater or lesser extent; they may be related or unrelated or a combination of both.

The analysis of census data on households, particularly on their formation, growth and demographic composition, provides valuable information on housing and living conditions and for the estimation of future housing needs.

4.2 Household type

The following types of household were enumerated at the 2000 Housing Census:

- *private households* are those which occupy a housing unit. In some cases the household can occupy part of a housing unit or more than a housing unit. Most households are private households.
- *communal households* consist of inmates of institutions, guests in hotels and boarding houses, and foreign workers living in collective quarters.

Table 4.1 gives the distribution of households by type for the 1990 and 2000 Censuses.

Table 4.1: Distribution of households and population by type of household, Republic of Mauritius, 1990 and 2000 Censuses

Type of household	Households		Population	
	1990	2000	1990	2000
Private	236,885	296,832	1,054,902	1,165,570
Institution	120	154	6,111	6,418
Hotel	111	138	2,960	6,280
Collective quarters	-	316	-	10,843
Total	237,116	297,440	1,063,973	1,189,111

At Census 2000, 297,440 households were enumerated with a total population of 1,189,111. For the purpose of the 2000 Census, the term “collective quarters” was used to identify a group of foreign workers living together in one or more apartments, lodgings, etc. Such quarters may have common facilities which are shared by the whole group. All foreign workers living together in one collective quarter were considered to be members of the same household. A total of 316 such households was enumerated with a population of

10,843. There were 6,418 persons present in the 154 institutional households such as convents, hospitals and prisons. Some 138 hotels were enumerated with a population of 6,280.

From now on consideration will be given only to private households as these constitute the large majority of the population. A total of 297,881 private households was enumerated at the Housing Census carried out between February and April 2000, while the number of households enumerated at the Population Census in July was 296,832, i.e. less by about 1000, due to the following reason: Given that the Housing Census enumeration covered a period of three months (February to April 2000), it may happen that some households who own secondary residences have been counted at both their principal and secondary residences at the Housing Census. However, this was not the case with the Population Census which was taken on a specific census date (night of 2-3 July 2000).

The rate of growth of households (2.3% per annum) has been more rapid than that of population (1.0% per annum) during the intercensal period 1990-2000. This has resulted in a decline in the average household size from 4.5 in 1990 to 3.9 in 2000. Household size in the urban areas was 3.8 compared to 4.0 in rural areas. Rodrigues had a household size of 4.0.

4.3 Household structure and composition

Information on household structure are needed for studies on household formation, household projections and estimates of housing needs. These data are very important for planners, policy makers, as well as for suppliers of many goods and services for which the demand is related to households rather than to individuals.

4.3.1 Types of private households

Private households can be categorized by type according to the number of family nuclei they contain and the relationship between members of the household. The relationship may be through blood, adoption or marriage.

A one-person household is a private household with only one usual resident.

A nuclear household is defined as one consisting entirely of a single family nucleus, i.e. a couple with or without unmarried children, or a lone parent with unmarried children.

An extended household consists of any of the following:

- (i) a single family nucleus plus other persons related to the nucleus
- (ii) two or more family nuclei related to each other, without any other persons
- (iii) two or more family nuclei related to each other with other persons related to at least one of the family nuclei
- (iv) two or more persons related to each other, none of whom constitute a family nucleus.

A composite household is defined as a household consisting of any of the following:

- (i) a single family nucleus plus other persons, some or none of whom being related to the nucleus.
- (ii) two or more family nuclei related to each other plus other persons, some or none of whom being related to any of the nuclei.
- (iii) two or more persons related to each other, none of whom constitute a family nucleus plus other unrelated persons.

- (iv) two or more family nuclei not related to each other
- (v) non-related persons only

Table 4.2 gives the distribution of private households by type at the last two censuses.

Table 4.2: Distribution of private households¹ by type, Republic of Mauritius, 1990 and 2000 Censuses

Type of Private Household	1990		2000	
	Number	%	Number	%
One person household	12,289	5.2	18,484	6.2
Nuclear household	159,463	67.5	203,524	68.7
Extended household	} 64,358	} 27.3	73,065	24.7
Composite household			1,221	0.4
			} 74,286	} 25.1
All households	236,110	100.0	296,294	100.0

¹: Excludes households consisting entirely of non-residents

One person households constituted about 6% of all private households in 2000 compared to 5% in 1990. Nuclear households increased from 68% in 1990 to 69% in 2000. About 25% of households in 2000 were of the extended or composite types compared to 27% in 1990. It is to be noted that composite households constitute a negligible proportion of households.

4.3.2 Household size

Some salient features are revealed by Table 4.3 and Figure 4.1 which show the distribution of private households by household size for the last two censuses.

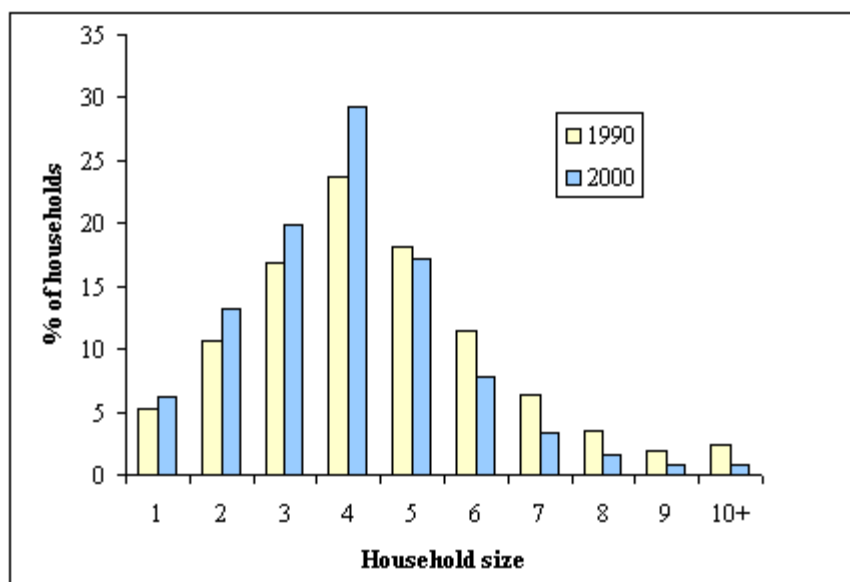
The shares of households of sizes 1 to 4 have increased during the intercensal period, whereas a decrease is noted for all the other sizes. The percentage of households having 2 to 4 members increased from 51% in 1990 to 62% in 2000. The majority of households in this group consisted of nuclear families with one or two children. Households of 5 to 6 persons constituted 25% of private households in 2000, the corresponding percentage for 1990 being 30%. The share of larger households, i.e. those containing 7 persons or more, decreased significantly from 14% in 1990 to 6% in 2000.

Table 4.3: Distribution of private households by household size, Republic of Mauritius, 1990 and 2000 Censuses

Household size	Private households ¹			
	1990		2000	
	No.	%	No.	%
1	12,336	5.2	18,484	6.2
2	25,092	10.6	39,184	13.2
3	39,673	16.8	59,082	19.9
4	55,797	23.6	86,512	29.2
5	42,905	18.2	50,851	17.2
6	26,905	11.4	23,179	7.8
7	15,166	6.4	9,918	3.3
8	8,352	3.5	4,495	1.5
9	4,432	1.9	2,209	0.7
10+	5,452	2.3	2,380	0.8
All households	236,110	100.0	296,294	100.0

¹: Exclude households consisting entirely of non-residents

Figure 4.1: Percentage distribution of private households by household size, 1990 and 2000 Censuses



There has been a significant change in the structure of the mauritian household in terms of household size during the last ten years. The relatively high percentage of households of size 2 to 4 and the low share of the larger households confirms the tendency towards small nuclear households at the expense of nuclear

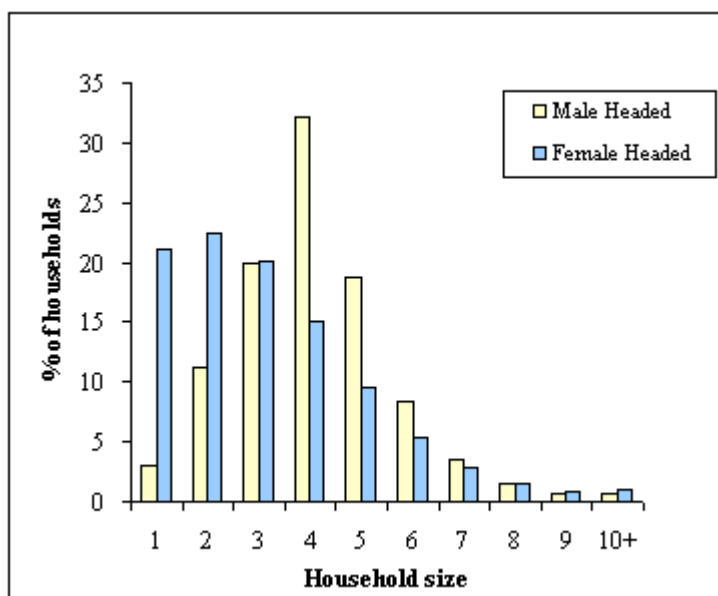
households with large number of children living together or of extended multi-nuclear households. This tendency, together with the slight increase in single-member households, have resulted in a substantial drop (13%) in the average household size from 4.5 in 1990 to 3.9 in 2000. The most common or modal household size is 4 with a share of nearly 30% of all households.

Table 4.4 and Figure 4.2 give the distribution of households by sex of head and size of household for year 2000. The curve for male-headed households is very close to that for both sexes, with the same modal size of 4. This is because the majority of households are headed by males. On the other hand, the percentage of female-headed households is far higher for the lower household sizes, with a modal size of 2. The curve then follows a downward trend, crosses the male curve at household size 3, and becomes much lower for household size 4. The decrease is smoother for intermediate household sizes until the gap between the two curves is almost negligible for larger households. Only 14% of the male headed households were of size 1 or 2 while 79% had 3 to 6 members. The corresponding percentages for female headed households were 44% and 50% respectively.

Table 4.4: Distribution of private households by sex of head and household size, Republic of Mauritius, 2000 Census

Household size	Male		Female	
	No.	%	No.	%
1	7,514	3.1	10,970	21.2
2	27,557	11.3	11,627	22.4
3	48,642	19.9	10,440	20.2
4	78,696	32.2	7,816	15.1
5	45,872	18.8	4,979	9.6
6	20,370	8.3	2,809	5.4
7	8,485	3.5	1,433	2.8
8	3,710	1.5	785	1.5
9	1,813	0.7	396	0.8
10+	1,833	0.7	547	1.1
All households	244,492	100.0	51,802	100.0

Figure 4.2: Percentage distribution of private households by sex of head and size of household, 2000 Census



4.3.3 Head of household

The head of household is any adult member in the household, whether male or female, who is acknowledged as such by the other members.

- (i) Sex, age and marital status of head

Table 4.5: Distribution of heads of households by sex, Republic of Mauritius, 1990 and 2000 Censuses

Sex of head	1990		2000	
	No.	%	No.	%
Male	194,501	82.4	244,492	82.5
Female	41,609	17.6	51,802	17.5
Both sexes	236,110	100.0	296,294	100.0

Table 4.5 shows that there has been no major change in the distribution of heads of households by sex during the period 1990-2000. Out of 296,294 private households enumerated at the 2000 Population Census, 82.5% were male-headed and 17.5% were female-headed. The corresponding percentages for 1990 were 82.4 and 17.6. The sex ratio of head, defined as the number of male heads per 100 female heads, increased marginally from 467 in 1990 to 472 in 2000. Table 4.6 shows that increases in sex ratio occurred mainly in the middle and upper middle age groups. Significant decreases in the sex ratio were however noted in the age group 20-29 and a slight decrease for the age group 60 and above.

Table 4.6: Distribution of heads of households by age, Republic of Mauritius, 1990 and 2000 Censuses

Age group (years)	Head distribution		Sex ratio	
	1990	2000	1990	2000
Less than 20	0.1	0.1	373	464
20-24	1.8	1.3	1,279	925
25-29	7.1	5.0	2,016	1,745
30-34	13.0	10.5	1,662	1,705
35-39	15.3	14.1	1,052	1,230
40-44	13.1	14.8	635	803
45-49	10.4	14.3	457	534
50-54	9.4	11.1	349	377
55-59	8.3	8.1	296	295
60-64	8.1	6.8	242	239
65+	13.2	13.8	174	168
All ages	100.0	100.0	467	472

Figure 4.3: Percentage distribution of heads of households by age group, 1990 and 2000 Censuses.

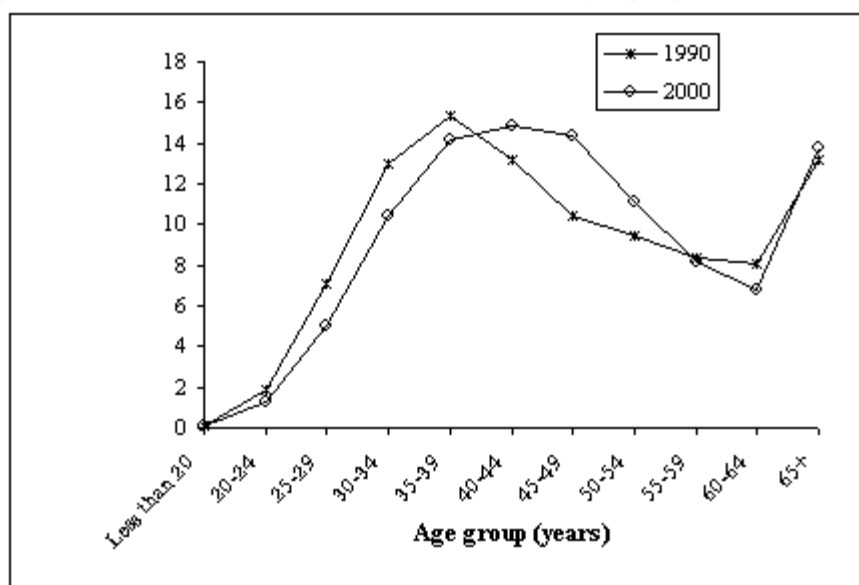


Figure 4.3 gives the distribution of heads of households by age group for the last two censuses. The curve for year 2000 is broader at its apex and is more to the right of the 1990 curve indicating, a shift of heads, during the intercensal period, from the lower and lower-middle age groups (less than 40 years) to the age group 40-54 years, thus resulting in a higher mean age of head: 47.8 in 2000 compared to 47.3 in 1990.

Table 4.7 shows the distribution of the mean and median ages by household size. A great number of households of sizes 1 and 2 consist of relatively old persons; hence, higher mean age and median age of head. For households of sizes 3 and above, the mean and median ages of head increased with household size.

Table 4.7: Mean and Median age of head of household by household size, Republic of Mauritius, 2000 census.

Household size	Mean age	Median age
1	57	59
2	51	52
3	45	43
4	45	43
5	47	46
6	50	49
7	52	52
8	54	54
9	55	56
10+	57	58
All households	48	46

The majority or 78% of heads in 2000 were married, 18% were widowed, divorced or separated, and 4% were single. The distribution of heads by marital status differed largely for male and female (Table 4.8). The percentage of married male heads in 2000 was very high (93%) compared to that for married female heads (7%). On the other hand, the majority of female heads (85%) were widowed, divorced or separated.

Table 4.8: Distribution of heads of households by marital status and sex, Republic of Mauritius, 1990 and 2000 Censuses.

Marital Status	1990				2000			
	Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%
Single	5,829	3.0	2,131	5.1	7,992	3.3	3,203	6.2
Married	181,117	93.1	3,860	9.3	226,494	92.6	3,427	6.6
Widowed/Divorced/Separated	7,392	3.8	35,231	84.7	9,911	4.1	44,234	85.4
Not stated	163	0.1	387	0.9	95	0.0	938	1.8
All heads	194,501	100.0	41,609	100.0	244,492	100.0	51,802	100.0

(ii) Headship rates by sex and age

The sex-age specific headship rate is equal to the ratio of heads to the total population in the same sex and age category. Headship rates provide useful information on household formation and structure, but are mainly used for households projections which will be discussed in detail in Chapter 5.

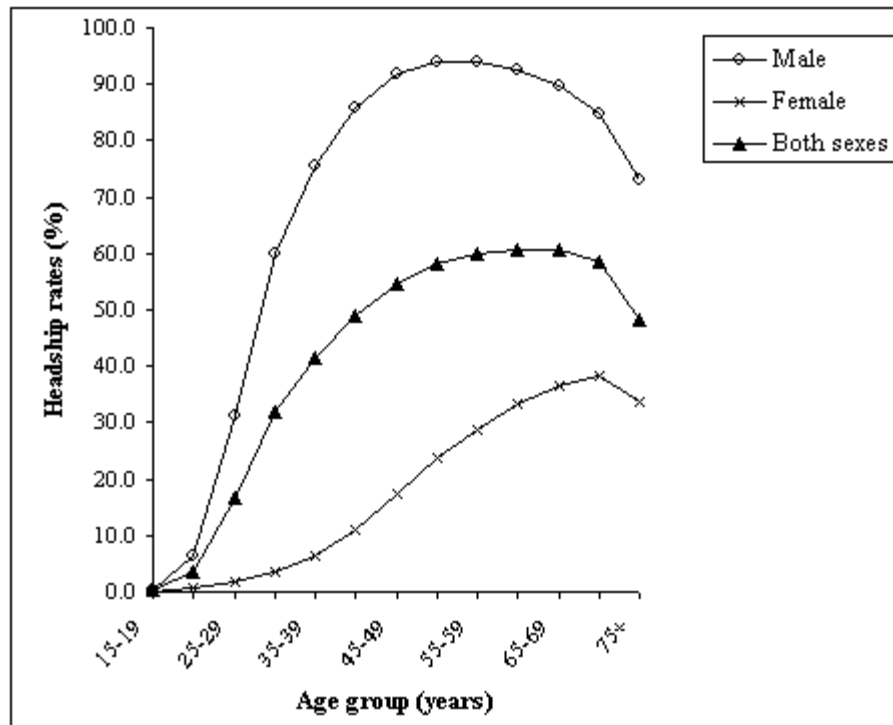
The headship rates for male, female and for both sexes at the 2000 Housing and Population Census are shown in Table 4.9 and Figure 4.4. The proportion of heads ranges from almost zero in some age categories

of the population to over 90 per cent in others.

Table 4.9: Sex-age specific headship rates (%), Republic of Mauritius, 2000 Census

Age Group (years)	Male	Female	Both Sexes
15-19	0.4	0.1	0.2
20-24	6.4	0.7	3.6
25-29	31.1	1.8	16.6
30-34	59.8	3.6	32.1
35-39	75.7	6.3	41.5
40-44	85.8	10.9	48.8
45-49	91.7	17.3	54.7
50-54	93.9	23.8	58.0
55-59	94.1	28.8	59.8
60-64	92.6	33.4	60.8
65-69	89.8	36.5	60.8
70-74	84.9	38.1	58.6
75+	73.1	33.6	48.3

Figure 4.4: Sex-age specific headship rates, Republic of Mauritius, 2000 Census



The age curve for male headship rate takes the form which is found in most countries. It resembles an inverted U shape, i.e. it rises sharply to form a rounded apex and decreases thereafter, first gradually, then rapidly. The curve shows that more than 90% of males in the age group 45-64 are head.

The curve for the female headship rates is far lower and smoother than that for the male curve. At younger ages, the rate is extremely low – less than 4% before 35 years. It then rises substantially to reach a maximum of about 38% for the age group 70-74 years.

As expected, the headship rates curve for both sexes lies between the male and the female curves. For the lower age groups, the gradient is less than the male curve but much more than for the female one. It is quite flat at the apex, with rates close to 60% over the range of 50-74 years.

(iii) Headship rates by sex, age and marital status

Specific headship rates may also be calculated for population categories defined in terms of various characteristics other than sex and age: marital status, type of household, size of household, urban-rural households, etc. Next to sex and age, marital status is the most important demographic factor in influencing headship. Headship rates specific to sex, age and marital status are more stable in different social and economic conditions than headship rates specific only to sex and age.

Table 4.10 gives the headship rates specific to sex, age and marital status for 2000. The male rates for sex, age and marital status are higher than the female rates for all marital status categories, except for widowed/divorced/separated where the male rate is lower than the female rate for the middle age groups. The difference is much more significant for the married, with female rates ranging from 0.4% - 2.4% compared to 43.5% - 97.1% for males.

Table: 4.10: Sex-age-marital status specific headship rates (%), Republic of Mauritius, 2000 Census

Age Group (years)	MALE				FEMALE			
	Total	Single	Married	W/D/S ¹	Total	Single	Married	W/D/S ¹
20-24	6.3	1.6	43.5	17.5	0.6	0.4	0.4	10.8
25-29	30.4	4.8	60.3	26.6	1.5	1.6	0.6	22.1
30-39	67.1	13.1	81.0	41.0	4.6	4.8	0.9	50.5
40-49	88.2	26.9	94.4	61.6	13.6	13.3	1.7	76.0
50-59	93.8	43.3	97.1	77.9	25.6	23.9	2.3	74.5
60+	85.5	46.7	91.6	64.9	34.6	33.1	2.4	51.4
All ages	64.1	7.7	86.4	59.8	12.8	5.4	1.3	58.8

¹: Widowed, divorced or separated

4.4 Household composition

4.4.1 Family nucleus

When estimating housing needs, it is useful to take account of events that may lead to household formation and to identify characteristics of existing households which may result in their subsequent fragmentation into smaller households. Marriage is the most frequent underlying cause of household formation. However, marriage does not always lead to the immediate formation of an additional household: lack of the necessary economic resources or a shortage of housing may delay household formation. Under these circumstances there are likely to be households in the population which are composed of married couples together with married children and their respective families. Identification of the “family nuclei” within households provides a better insight on household formation.

A family nucleus is a couple with or without never-married children, or a lone parent with never-married children.

Table 4.11: Distribution of households by number of family nuclei per household, Republic of Mauritius, 1990 and 2000 Censuses.

Year		Households with indicated number of family nuclei					All households	All family nuclei	Ratio of family nuclei to households
		0	1	2	3	4 or more			
1990	No.	16,689	193,128	22,375	3,332	586	236,110	250,309	1.06
	%	7.1	81.8	9.5	1.4	0.2	100.0		
2000	No.	23,829	244,129	25,071	2,902	363	296,294	304,480	1.03
	%	8.0	82.4	8.5	1.0	0.1	100.0		

Some 304,500 family nuclei were identified in the 296,300 households enumerated at the 2000 Census. This gives an average of 1.03 family nuclei per household for year 2000 compared to 1.06 for 1990, confirming the tendency towards the splitting of households consisting of more than one family nucleus. This average was higher for rural areas (1.04) than for urban regions (1.00), implying that extended families are less common in urban than in rural areas.

4.4.2 Relationship to head

Data on relationship to head can provide information on changing patterns of household composition over time.

Table 4.12: Composition of an average household, Republic of Mauritius, 1990 and 2000 Censuses

Relationship to head	Member	
	1990	2000
Head	1.00	1.00
Spouse	0.77	0.77
Child - single	2.01	1.58
- ever-married	0.14	0.13
Spouse of child	0.10	0.09
Grand child	0.19	0.15
Parent of head	0.07	0.08
Other relative	0.18	0.13
Other and not stated	0.01	0.00
Household size	4.47	3.93

Table 4.12 shows that the average household size of 3.9 in 2000 can be decomposed into 1 head, 0.8 spouse and 1.6 unmarried children. Ever-married children and their family constituted about 0.4 member. The remaining 0.1 member was constituted of the parents of the head, other relatives and non-relatives.

The household size for 2000 (3.93) was lower than that for 1990 (4.47) by 0.54 member. This is attributed mainly to a drop in the share of unmarried children in the average household, from 2.01 to 1.58.

Chapter 5 – Future Prospects

5.1 Introduction

Reliable estimates of housing needs are important in establishing housing policies and for the formulation and evaluation of housing programmes. The most significant element to be considered in estimating future housing needs is the projected increase in the number of households during the period covered by the estimates.

Other factors underlying housing needs are:

- the existing backlog, i.e., the accumulated needs which exist at the beginning of the period covered by the estimates
- dilapidated units, i.e. the number of dwellings that will be lost from the inventory because of their age and/or lack of proper maintenance.
- the “vacancy ratio”, i.e. the proportion of vacant dwellings.

These factors are discussed in detail in section 5.3 while the next section is concerned with the estimation of future households.

It may be useful to clarify at the outset the terms “housing need” and “housing demand”. The term housing need is used in a *social* sense to express the extent to which housing availability and conditions fall below the levels that are considered necessary for normal and decent family living conditions. Housing demand is more applicable in an *economic* sense. It expresses a desire for housing which can be supported or satisfied by the economic ability of the household. Households which represent effective demand for housing may or may not be in need of housing from a social point of view. Households with no social need for housing may desire larger or better equipped homes, or homes found in preferred neighbourhood. Provided they are financially able to purchase improved housing, these households represent effective demand. On the other hand, households who do not possess a dwelling represent a housing need, but if they cannot afford to pay for the housing unit, they do not represent effective demand. Neither would they represent demand if they have the money but wish to spend it on other priorities. Estimates using the demand concept would therefore omit this category of householders.

This chapter deals with the estimation of housing *needs* for the next two decades.

5.2 Projection of households

Numerous methods for projecting households have been devised and applied by different countries. The methods used vary widely from the crude to the highly refined, depending upon the type of data available and the uses of the projections. The headship rate method, which is the most widely used approach has been adopted to project the number of households.

The headship rate method requires the classification of the population by sex and age and, if possible, by marital status. Since population projections by sex, age and marital status are not available, the sex-age specific headship rate technique has been used. The sex-age specific headship rate is equal to the ratio of heads to the total population in the same sex and age category. For each class, projections are made for the population and headship rates. Using the projected headship rates in conjunction with the projected population, one obtains the expected number of heads for each class. The projected number of households in the entire population is obtained by summing over all classes.

5.2.1 Projection of headship rates

Since Mauritius has data on headship rates for the last four censuses (1972, 1983, 1990 and 2000), it has been possible to determine whether an observed trend is fairly recent and may still gather momentum, or

whether it has apparently run its course. Based on the observed trend, the future headship rate for each class has been worked out using either the same or half the growth rate of the headship rate observed during the period 1990-2000.

Tables 5.1 and 5.2 give the projected sex-age specific headship rates for the period 2005 – 2020 for the island of Mauritius and Rodrigues respectively. It should be pointed out that headship rates for the age group “less than 20 years” have not been used for projections of households since they are extremely small – the number of heads who are less than 20 years is almost negligible.

Table 5.1: Sex-age specific headship rates projections, Island of Mauritius, 2005 – 2020

Age Group	Sex-age specific headship rates (%)							
	2005		2010		2015		2020	
	Male	Female	Male	Female	Male	Female	Male	Female
20-24	5.6	0.7	5.0	0.7	4.6	0.7	4.2	0.7
25-29	30.9	1.7	31.3	1.8	31.6	1.8	32.0	1.9
30-39	66.9	4.4	66.1	4.1	65.3	3.8	64.5	3.5
40-49	87.9	12.7	87.5	11.7	87.0	10.8	86.5	10.0
50-59	94.0	25.1	94.0	24.3	94.1	23.5	94.1	22.7
60+	85.9	34.9	85.8	34.9	85.7	34.9	85.6	34.9

Table 5.2: Sex-age specific headship rates projections, Rodrigues, 2005 – 2020

Age Group	Sex-age specific headship rates (%)							
	2005		2010		2015		2020	
	Male	Female	Male	Female	Male	Female	Male	Female
20-24	13.0	2.6	12.4	2.3	11.9	2.0	11.3	1.8
25-29	44.5	8.4	41.0	9.0	37.8	9.7	34.9	10.5
30-39	72.2	13.9	67.9	14.7	63.8	15.5	59.9	16.4
40-49	92.4	19.1	92.0	19.2	91.6	19.2	91.1	19.3
50-59	95.9	24.0	96.6	23.6	97.3	23.2	98.0	22.9
60+	91.5	39.5	92.3	38.4	93.1	37.4	93.9	36.4

5.2.2 Projected number of households

The projected number of households and household size up to year 2020 are given in Table 5.3 below. As stated earlier, these have been derived by applying the projected sex-age specific headship rates to the

population projections classified by age and sex.

Table 5.3: Household and household size projections, Republic of Mauritius, 2005 – 2020

		2000 Census	Projection year			
			2005	2010	2015	2020
Island of Mauritius	- Households	287,700	320,000	350,100	376,400	403,100
	- Household size	3.93	3.77	3.59	3.46	3.34
Rodrigues	- Households	8,600	9,500	10,600	11,800	12,900
	- Household size	4.16	3.93	3.70	3.54	3.42
Republic of Mauritius	- Households	296,300	329,500	360,700	388,200	416,000
	- Household size	3.93	3.77	3.59	3.47	3.34

According to the projections, the number of households will grow by over 40% over the next 20 years, from 296,300 in 2000 to 416,000 in 2020. This represents an annual growth rate of 1.7% over the projection period. Since the growth of households will be more rapid than that of population (projected population growth is 0.8%), a continuous fall is expected in the average household size. Table 5.3 shows a 15% decrease in the average household size, from 3.93 in 2000 to 3.34 in 2020.

5.3 Estimation of housing needs

The principal components of housing needs, over the period covered by the estimates, may be expressed as follows:

$$N = H + B + R + V$$

where, N = total housing needs

H = projected increase in the number of households. It is here assumed that one household is to be housed in one housing unit.

B = the backlog or accumulated needs at the beginning of the period and which has to be met during the projection period.

R = stock replacement, or the number of housing units which will be lost from the inventory and which has to be replaced

V = the allowance made in the estimates for vacant dwellings

The projected housing needs up to year 2020 are shown in Table 5.4.

Table 5.4: Estimation of housing needs, Republic of Mauritius, 2000-2020

Component	Projection period				
	2000-2005	2005-2010	2010-2015	2015-2020	2000-2020
Stock at beginning of period	297,500	338,300	377,000	408,800	
New households	33,200	31,200	27,500	27,800	119,700
Backlog	6,000	6,000	3,000	3,000	18,000
Stock replacement	13,000	13,000	12,700	12,100	50,800
(Dilapidation rate - %)	(0.88)	(0.77)	(0.67)	(0.59)	
Vacant stock of additional housing	1,600	1,500	1,300	1,300	5,700
(Vacancy rate - %)	(3)	(3)	(3)	(3)	
Total needs	53,800	51,700	44,500	44,200	194,200

The existing backlog is the accumulated need which existed at the beginning of the projection period, and is obtained by subtracting the number of housing units which are occupied as principal residence from the total number of households. The backlog therefore represents the number of households doubled-up with other households. A backlog of 18,000 dwellings was noted at the 2000 Census. It is assumed that this accumulated need will be spread over the projection period as shown in Table 5.4.

Estimates of the number of housing units which will be lost from the inventory because of their age or bad conditions can be obtained by applying the dilapidation rate to the stock at the beginning of the projection period. This rate was estimated at 1.3% in 1990 and 1.0% in 2000, and is expected to decrease further as a result of improved construction materials and techniques. It is assumed that the dilapidation rate during the projection period will continue to fall at the same rate of decrease as that observed between 1990 and 2000. The dilapidation rates and the corresponding number of housing units that need to be replaced are shown in Table 5.4.

In estimating housing needs, account must be taken of the fact that a certain proportion of the estimated number will, at any given time, be vacant. The proportion of vacant units among all dwellings, referred to as the vacancy rate, was 2.5% in 1990 and 5.2% in 2000. The normal rate in most countries ranges from 2 to 3 per cent. The high rate at the 2000 Census is due to the fact that many secondary residences have been recorded as vacant units since the occupants were staying at their principal residences at the time of enumeration. The rate that is being assumed for the projection period is 3%.

The total housing needs up to year 2020 amounts to 194,200. This means that about 10,000 dwellings have to be constructed annually over the 20-year period to meet these needs.

5.4 Measures taken by Government to alleviate constraints to housing

- (i) The lower income groups, i.e. families earning up to Rs 10,000

Two initiatives were announced in the 2001-2002 budget to meet the housing requirements of the very low income groups, namely the construction of 5,000 Firinga-type homes over a period of five years and the provision of fully serviced plots. Works on a first batch of 524 such houses on 17 sites were to be completed by the end of year 2002. Work on another 1,500 housing units is due to start in the near future. Sites have been identified for 300 serviced plots at Albion, Bambous and Camp de Masque. The plots will be leased at a nominal rate to those who plan to build their own houses.

The cost of on-site and off-site infrastructure for all housing projects for the low and very low income groups is being met by the Government. An amount of Rs 335 million has been earmarked for the financial year 2002-2003. Low income households will continue to receive from the Mauritius Housing Company Ltd heavily subsidized loans. The 2002-2003 budget provides Rs 100 million for the payment of interest subsidy on these loans. Moreover, Rs 200 million is being provided as interest subsidy on mortgage loans from the National Housing Development Company (NHDC) and as grants for the casting of slabs.

The 2002-2003 budget also mentions the government project to set up a new village to resettle families presently living in the Dockers' Flat. A site has been identified at Riche-Terre and construction is due to start in the financial year 2002-2003. Attention is also being given to "Karo Kalyptis" and "Zenfants la rivi re" squatters at Roche Bois.

(ii) The other income groups

Families earning more than Rs 10,000 monthly will need to resort to self-help within the enabling framework already set up by the Government to encourage home ownership. They will be able to benefit from increased housing supply from the Housing Development Certificate (HDC) and New Incentives for Residential Development (NIRD) schemes once the latter are revisited and have taken off. They may also gain from a stabilized land price as the supply of residential land will increase.

(iii) Land supply

According to the Ministry of Housing and Lands, the supply of residential land will increase through the updating of the various Outline Schemes and through the land exchange mechanisms under the Sugar Industry Efficiency Act and the Finance Act. In addition, large areas of land will be released for real estate development with the implementation of the Policy on Large Development Projects by the Town and Country Planning Board.

5.5 Physical planning over the next 20 years

Out of the 194,000 housing units needed for the period 2000-2020, some 51,000 will be due to the dilapidation of existing units. Since the latter will be constructed "in situ", new housing units which will require additional land amount to about 143,000. According to the revised (Review 2002) National Physical Development Plan (NPDP), these new units will require some 3,240 hectares of land over the next 20 year period.

According to the NPDP, two different approaches can be envisaged: the "*trend approach*", and the "*planned approach*".

- (i) Trend approach: This approach is based on the assumption that development will be determined by market demand and reflect current trends for preferred residential locations. This "*laissez-faire*" approach may result in:
- a worsening of the congestion and environmental conditions in the built-up areas and along the motor-way north and south of Port Louis,
 - a substantial investment divide between the north/conurbation area and the rest of the island,
 - a lack of capacity, especially in Port Louis city to accommodate the proposed level of new development.
- (ii) Planned approach: This approach assumes that future housing developments will need to be controlled and channeled into appropriate locations through the implementation and enforcement of development plans and planning policies.

The strategy recommended by the NPDP incorporates elements of both approaches, that is, policies should be adopted to control the “natural” trend to some extent, while increasing development in less developed regions should be adopted. Targeted regions could be the southern and eastern parts of the island which remain relatively much less densely developed. Significant new capital investments in transport and utilities infrastructure and services are likely to be required in these targeted areas.

The NPDP notes that any strategy based on a significant redirection of population and housing from current demand and urbanization trends, should this be desired, is unlikely to succeed unless the planning system is significantly strong to prevent new development from “naturally” occurring in those areas where significant capital, infrastructure and human investments have already been made.

ANNEX

IN STRICT CONFIDENCE

2000 HOUSING CENSUS - MAURITIUS

I. LOCATION

C01	Geographical District	<input type="text"/>	<input type="text"/>
C02	Municipal Ward/Village Council Area	<input type="text"/>	<input type="text"/>
C03	Enumeration Area	<input type="text"/>	<input type="text"/>
C04	Urban/Semi-urban/Rural	<input type="text"/>	<input type="text"/>
C05	Census District	<input type="text"/>	<input type="text"/>
C06	Locality	<input type="text"/>	<input type="text"/>
C07	Block No.	<input type="text"/>	<input type="text"/>
C08	Building Enumeration No.	<input type="text"/>	<input type="text"/>
C09	No. of Housing Units in Building	<input type="text"/>	<input type="text"/>

C10 IL TYPE OF BUILDING

(a) Under Construction and not Inhabited. 01 **SKIP TO SECTION V**

(b) Wholly Residential

(i) Building used wholly as one housing unit 02

(ii) Building containing more than one housing unit

(1) Block of flats, semi-detached houses, etc. 03

(2) Building intended to be used as one housing unit but crudely subdivided into smaller housing units 04

(3) Other: specify 05

(iii) Detached room intended for use by part of a household 06

(iv) Building or structure occupied as improvised housing unit (e.g. longère, garage, tent) 07

(v) Homeless 08 **SKIP TO SECTION V**

(c) Partly Residential

(vi) Building used partly for residential and partly for other purposes (e.g. shop dwelling) 09

(d) Hotels and Institutions

(vii) Hotel or boarding house with 9 or more rooms 10

(viii) Hotel or boarding house with less than 9 rooms 11 **SKIP TO SECTION V**

(ix) Institution (e.g. convent, infirmary, hospital, barracks) 12

(e) Non-Residential

(x) Public building 13 **STOP HERE**

III. CHARACTERISTICS OF BUILDINGS CODED 02-07, 09 IN SECTION II

C11 STOREYS ABOVE GROUND FLOOR

No. of storeys above ground floor (if none, write 0; if 9 or more, write 9)

C12 YEAR OF COMPLETION

(i) before 1970	...	...	1	<input type="text"/>
(ii) 1970-84	...	...	2	<input type="text"/>
(iii) 1985-89	...	...	3	<input type="text"/>
(iv) 1990-94	...	...	4	<input type="text"/>
(v) 1995-99	...	...	5	<input type="text"/>
(vi) 2000	...	...	6	<input type="text"/>
(vii) Not known	...	...	7	<input type="text"/>
(viii) Not completed but inhabited	...	...	8	<input type="text"/>

PRINCIPAL MATERIAL OF CONSTRUCTION USED

C13 Roof

(i) Concrete slab	...	...	1	<input type="text"/>
(ii) Iron or tin sheets	...	...	2	<input type="text"/>
(iii) Shingles	...	...	3	<input type="text"/>
(iv) Other: specify .....	...	...	4	<input type="text"/>

	13	<input type="checkbox"/>	STOP HERE
(xi) Commercial	14	<input type="checkbox"/>	} SKIP TO SECTION VI
(xii) Industrial	...	...	...	...	15	<input type="checkbox"/>
(xiii) Commercial and Industrial	...	...	...	...	16	<input type="checkbox"/>
(xiv) Warehouse	...	...	...	...	17	<input type="checkbox"/>
(xv) Other : specify .....	...	...	...	...	18	<input type="checkbox"/>

C14 Walls

(i) Stone, concrete, concrete blocks, bricks	...	...	1	<input type="checkbox"/>
(ii) Iron or tin sheets	...	...	2	<input type="checkbox"/>
(iii) Wood	...	...	3	<input type="checkbox"/>
(iv) Other : specify .....	...	...	4	<input type="checkbox"/>