REPUBLIC OF MAURITIUS

Ministry of Economic Planning and Development

CENTRAL STATISTICAL OFFICE

1990
HOUSING AND POPULATION CENSUS
OF
MAURITIUS

ANALYSIS REPORT
VOLUME II - HOUSING AND HOUSEHOLD CHARACTERISTICS

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INTRODUCTION

The Republic of Mauritius, excluding its small dependencies, Agalega and St Brandon, consists of the Island of Mauritius and the Island of Rodrigues with an overall area of 1,973 sq km and a population of 1.1 million residents. About 48% of its land is allocated to agriculture, 13% is occupied by built-up areas and 2% by public roads; the remaining consists of forest reserves, rain water catchment areas, reservoirs and ponds.

Housing data show that the housing situation has improved both in quantity and quality. But with a continually increasing population and a declining household size, there has been consequent bigger rise in the demand for housing. This has resulted in a larger proportion of the limited resource being allocated to housing. When comparing the allocation of land to its various competing uses over time, it is seen that there has been continuous encroachment of population, housing and infrastructure on the agricultural lands and the areas reserved for forests. Another crisis in the housing sector is the escalating prices of houses and rent which is the consequence of the relatively low supply of housing as compared to the demand. Figures indicate that, during the intercensal period 1983-1990, households grew at an average annual rate of 2.0% whilst the growth rate of housing units was only 1.7% . House building activity has been lagging behind the demand by 0.3% point. Also, land which is a crucial element of housing has witnessed soaring prices in the last years.

Much concern has been expressed by the government on the housing problem, the allocation of land to various uses, and also the protection of the environment and the quality of life of citizens. Today, government responsibility for housing is fully recognised as a social measure. For the setting up and implementation of policies, it is important to take stock of the existing situation and know the future prospects on population and housing.

This report analyses data on housing and household, and estimates the future number of households as a prelude to the estimation of future housing requirements. The first chapter presents the background of census taking, and the 1990 Housing Census which forms the basic source of information on housing and household. It also presents the housing situation in the country. Chapters 2, 3 and 4 deal with buildings, housing units and households respectively. While Chapter 5 shows the future prospects, the last chapter concludes with highlights and some thoughts about future actions.

1.1 Historical background

Census taking in Mauritius dates back to the 18th century. The first complete census was taken in 1735 under the French governorship. Numerous complete censuses or partial counts of the population have been taken since. The first census report to be printed was probably that of 1846, but no copy has been traced in Mauritius.

The 1846 Census was followed by that of 1851. From that year, censuses have been taken in the two islands every decade up to 1931. However, it was in 1871 that for the first time a count of houses was made before a population census. The purpose being mainly to serve as a frame for the population census, the information collected was only the location, material of construction, the name of the principal occupier and whether he would be able to fill in the population schedule. Since then, a Population Census has always been preceded by a Housing Census.

The next census, planned for 1941, had to be postponed to 1944 because of the Second World War. 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 1982 census was postponed to 1983 because of parliamentary elections held in June 1982.

If the decennial schedule were to be followed, the next census would have been due in 1993. However, the date had to be advanced to 1990 in order to satisfy a pressing need for detailed up-to-date data on the characteristics of the labour force. These characteristics have changed drastically since the 1983 census because of the rapid economic development which the country has undergone in the recent years. Though it still serves as a frame for the population census, the Housing Census has acquired an importance in its own right in view of the wealth of housing data collected as a result of growing interest in housing and housing conditions.

1.2 The 1990 Housing Census

The 1990 Housing Census which covered the islands of Mauritius and Rodrigues was conducted from February to April and served as a frame for the Population Census held in July.

Buildings, housing units, households, commercial and industrial establishments, hotels, boarding houses and institutions were enumerated at the Housing Census. Information was collected on the characteristics of the buildings, the amenities provided by the housing units and the characteristics of the households.

The 1990 Census was the first census where the data were processed on micro-computers by the Central Statistical Office itself. It was also the first census where data were published down to the level of Municipal Council Wards and Village Council Areas. Localities outside these administrative areas have been grouped together in a number of zones within the district, and data are shown separately for each of these zones as well. It is expected that the regional data will be useful to administrators, planners and policy makers.

1.2.1 Objective and use

The objective of a Housing Census is to provide up-to-date disaggregated data on housing and housing conditions and the spatial distribution of the population. The data are useful in implementing housing policies, and preparing and evaluating development plans both at the national and regional levels. However, the immediate objective of the 1990 Housing Census was also to identify all households and their addresses to serve as a frame for the Population Census.

The Housing Census is probably the only source of information on the stock of the different types of buildings and housing units in the country. It provides valuable information such as the age and durability of residential buildings, the type and tenure of housing units and the number of rooms therein, and the amenities available to the occupants. Thus, the census enables us to study the housing conditions of the population, the adequacy of amenities such as water supply and toilet and the extent of overcrowding measured as the average number of persons per room. It also helps to identify those regions where there is housing shortage and where facilities such as water supply and sewage disposal are inadequate. Another use of census data on housing, when supplemented by current building statistics, is to provide a continuous up-to-date picture of the housing situation in the country.

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. For the Housing Census field operation, there were four grades of fieldstaff working under him. 745 Chief Enumerators worked under 103 Supervisors who were themselves answerable to 13 Senior Supervisors. The Senior Supervisors, in turn, reported to the Chief Supervisor and each of them was in charge of up to 8 Supervisors and 60 Chief Enumerators. 3,989 more persons were recruited as Enumerators for the Population Census held in July 1990.

The fieldstaff was trained on the use of census maps, the application of the Housing Census instructions and the filling in of the questionnaire. The supervisory staff was responsible for the training of their subordinates and control of the quality and timeliness of the fieldwork. The main task of the Chief Enumerator was to enumerate all buildings, housing units, households and non-agricultural establishments in the region assigned to him.

1.2.3 Census cartography

Proper enumeration and prevention of omissions and duplications depend largely on the availability of up-to-date and accurate maps with detailed subdivisions of regions into Census Enumeration Areas. A series of location maps and enumeration area maps (EA maps) were prepared for the fieldstaff. Location maps were distributed to Supervisors and Senior Supervisors to enable them to locate the areas allocated to them. The Chief Enumerator had a location map to show the relative position of each enumeration area he had to cover as well as an individual map for each of these EAs. The EA maps being more important, were used for enumeration purposes, and had to be updated and returned to the office for future use. Changes such as new roads or changes in names might have occurred from the time the maps were prepared.

The total number of enumeration areas for the Island of Mauritius was 3,076 and 87 for the Island of Rodrigues. For the 1983 Census, there were 2,700 enumeration areas in the Island of Mauritius. The number of Enumeration Areas remained the same in the Island of Rodrigues. The country was divided into more EA's to enable better control and supervision of fieldwork. On average, the number of households per enumeration area in urban regions was about 90 and that in rural areas was about 70 at the 1990 Census. Urban areas are defined as thoses falling under the administration of Municipal Councils.

1.2.4 Housing Census questionnaire

For the Housing Census, data were collected on a questionnaire which was almost entirely pre-coded. The data were recorded in enumeration books each containing 25 identical questionnaires. The questionnaire was designed to record information on one building, one housing unit within that building and up to three households within that housing unit. Data were collected on the location, type and characteristics of buildings, characteristics of the housing units and the amenities provided. Some information was also sought on the households and their living conditions.

In addition to the above, the Housing Census enumerated all commercial and industrial establishments, hotels and boarding houses. Questions were asked on the activities of the establishments and the number of persons engaged at time of enumeration. One questionnaire applied to one establishment only. A specimen of the questionnaire is shown in the Appendix.

The definitions used at the census were as follows :

Geographical District

The Island of Mauritius is divided into nine geographical districts since the time of the French occupation. Rodrigues is 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 in the Island of Mauritius.

Village Council Area (VCA)

They are smaller administrative areas, defined by law, within the Districts Council Areas which are the rural counterparts of the Municipal Council Areas. There are 100 Village Council Areas in the Island of Mauritius. Rodrigues, which is considered as one administrative district, has no MCA's or VCA's.

Localities

Localities are names of places, usually inhabited, but since their exact boundaries are often ill-defined, no tabulations have been produced at this level.

Census District

The Island of Mauritius is divided into 20 Census Districts or Electoral Constituencies, whose boundaries are defined in the Constitution of Mauritius for the purposes of the parliamentary elections. Rodrigues is the 21st constituency.

Enumeration Area

For census purposes, the Island of Mauritius was divided into 3,076 Enumeration Areas and Rodrigues into 87 such areas.

Block

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. It could be used for residential, commercial, industrial or agricultural purposes or the provision of services. Detached structures such as toilets, bathrooms, kitchens and garages were not counted as separate buildings. However, detached rooms used for living purposes were counted as separate buildings. Similarly, a detached garage, store room or any improvised shelter used for living purposes were 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 at the time of the census. Although intended for one household, a housing unit could be occupied by more than one household or part of a household. It could be an occupied or vacant place of abode, an improvised structure which was occupied for living purposes at time of census or any other place, not intended for habitation, but occupied for living purposes.

Household

A household was either (i) a person living on his own and making his own provision for food or other essentials for living, or a group of two or more persons, whether related or not, who lived together and made common provision for food and other essentials for living. 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 households in communal establishments such as hotels, infirmaries, hospitals and other institutions. The census covered all households and persons except members of Diplomatic Corps.

Head of household

The head of household was the person acknowledged as such by the other members of the household. For communal establishments, 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 the processing of the Housing Census data. IMPS is a software developed by the US Bureau of Census specially for the processing of censuses and surveys on micro-computers. It is an integrated system made up of several component subsystems. The data-entry was done through one of the subsystems, the CENTRY package, on 20 micro-computers and lasted for about two months. Data were input by Enumeration Area, i.e,. for each EA a file was created. To avoid errors, range checks were inserted at this level. Data collected on establishments at the census were processed separately. One way of verifying the keyed in data was through double entry. All the EA batches of the questionnaires were re-entered on the computer. Back up of verified data was done on Bernouilli cartridges of 20 MB capacity.

The individual verified EA files were then consolidated into one single file, which was used to run the tabulation programmes. The processing of the verified data was done on one high capacity (115 Mb hard disk and 4 Mb RAM) IBM computer using CENTS, the tabulation component of IMPS, to produce tables ready for publication. CENTS offers the facility to produce tables at different levels of geography. All tables were produced at the level of MCA/VCA, district, island and the whole country. Subtotals were provided for urban and rural areas within each district and island, and for the country. The IMPS software also allows the production of statistics report on the performance of the data entry operators, hence, a better monitoring of the work. Housing and household data have been published in great details in Volume I: Housing and Living Conditions in November 1990. Efforts have also been made for the first time to merge the housing and population data such that some demographic and socio-economic variables could be cross-tabulated by housing and household characteristics.

1.3 The housing situation

1.3.1 Housing stock

The 1990 Housing Census enumerated for the whole country about 210,000 buildings of which 185,000 were residential or partly residential. These residential or partly residential buildings contained 224,000 housing units and 237,000 private households with a population total of 1,048,000. At the 1983 Census, for a population of 993,000, there were 165,000 residential and partly residential buildings out of 186,000 buildings whilst the 204,000 existing private households were found in 199,000 housing units. The data reveal significant increase in the housing stock. The number of residential and partly residential buildings and the number of housing units within these buildings have both grown twice as fast as the population therein which had an average annual growth rate of 0.8% .

But, was that increase in stock sufficient enough to satisfy the rising demand for housing? It seems that the answer is no, since formation of households has been more rapid than the supply of housing. During that period, the number of households had an average annual growth rate of 2.0% .

1.3.2 Quality of housing

The housing situation has evolved not only in quantity, but also in quality. There has been a general improvement in the living conditions of the population with regard to living space as well as the amenities provided by the housing units. The average number of persons per housing unit is seen to drop from 5.0 in 1983 to 4.7 in 1990. Also the percentage of households having access to electricity, piped water, bathroom with running water and hygienic toilet facilities has increased markedly over the last decade as discussed in Chapter 3. In spite of this improvement, there still exists a significant number of houses which lack the basic amenities. At the 1990 Census, more than 13,000 housing units in the country had no bathroom, while electricity was not available in 8,000 units, and about 2,000 housing units were without any toilet facility.

The qualitative aspects of building construction have improved, now being stronger and more resistant to cyclones. At the 1990 Census, 71% of the residential and partly residential buildings were wholly in concrete compared to 54% in 1983. Furthermore, 80% of the residential buildings constructed during the intercensal period were wholly in concrete. Another important positive aspect to be noted is the increase in the ownership of dwellings. Nearly 76% of householders were owner of their dwelling in 1990 as compared to 67% in 1983.

1.3.3 Housing shortage

Though the housing situation has evolved both in quantity and quality, there is still a serious shortage of accommodation in the country. Assuming that a household needs to occupy one housing unit, the unmet demand which is taken to be the difference between the number of households and that of housing units, was of the order of 13,000 units at the time of census in 1990. It appears that the housing situation has deteriorated during the last decade, as at the 1983 Census the unmet need was about 6,000 units only. However, in some places, especially on the coastal regions, there were more housing units than there were households. A shortage of housing at one place cannot be compensated by a surplus at another. Furthermore, the surplus of housing units in these areas was made up mainly of secondary residences. Since these dwellings cannot normally be considered for housing projects, this further inflated the shortage of 13,000 units. There were nearly 2,000 secondary residences in the country at the time of the last census.

1.3.4 Government involvement in housing construction

(i) The Central Housing Authority

The government has adopted several measures to solve the housing problem over the last decades. Its first involvement was the creation of housing estates with the construction of 14,000 houses at a highly subsidised rate. This decision had to be taken in the early 60's after two violent cyclones, Alix and Carol, struck the country in 1960 causing substantial damage to the housing stock. The reconstruction programme was undertaken by the Central Housing Authority, a parastatal body set up to serve low income housing needs in general. It was also responsible for the reconstruction programme after cyclone Gervaise in 1975 when it was entrusted with the construction of 7,000 units. Since then, the CHA also built some 2,000 dwelling units on Crown land and on private sites before its closure in 1993.

(ii) The Mauritius Housing Company Limited

The Mauritius Housing Company Limited, previously a parastatal body known as the Mauritius Housing Corporation, was established in 1962. Formerly involved in the construction of houses for various income groups and the provision of housing loans, its main activity is now to offer

housing finance services for the low income and middle income groups. The MHC Ltd has also provided infrastructured plots by purchasing large plots of land, parceling them into smaller plots and selling them to clients, after having provided the necessary infrastructure such as roads, electricity and water. The company has made a significant contribution to housing availability in the country through the construction of some 1,200 housing units, and the provision of an approximately equal number of infrastructured plots and more than 30,000 loans. It caters for both the low income and middle income groups with 60% of its client coming from the lower income group.

As another source of funding in addition to loans, it has launched in 1988 the Plan Epargne Logement (PEL) 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 construct or purchase a house or buy a plot of land for housing construction. These savings can be spent on repairs, additions or alterations to existing houses. Priority is given to the contributors of the scheme for the issue of housing loans or allocation of houses.

(iii) Housing Development Certificates

In 1989, the government attempted to attract private contractors and investors in the housing sector by taking the decision to deliver Housing Development Certificates to building companies and housing promoters, which did not prove to be much of a success. Out of about 18 Development Certificates issued from some 70 applications, only a few actually carried out the project, and the firms catered mostly for the middle and high income groups.

(iv) Task Force on housing

The increasing concern by the government for the housing problem facing the country has led to the appointment of a Task Force on housing in late 1990. The terms of reference was to examine in depth the situation in the housing sector and draw up a master plan for housing development with proposed future plans for different categories of house seekers, especially the low income and middle income groups. The report proposed a National Housing Programme for the construction of 73,000 units for the period 1991-2000. The objective set was also to prioritise areas where housing shortage is more acute and to match with availability of land. Furthermore, the report recommended that 40% of the funds for housing be devoted to lower income groups and that the projects be based on the neighbourhood concept with facilities for community development and essential services and located in the vicinity of employment centres. The report also suggested the creation of a board to manage and control the National Housing Programme. Some other no less important proposals were made in the Task Force Report, for example, to launch pilot projects with particular attention to multi-storeyed apartment buildings.

(v) The National Housing Development Company Limited

In April 1991, while the Task Force was still under way, the government decided to create the National Housing Development Company Limited, NHDC, which supersedes the National Housing Board as proposed in the Task Force report. It was set up with Rs 200m as seed capital to execute the housing programme of government. Its aim, though not directly involved in the construction activity, is to build houses for the low income and middle income groups. These houses are sold to the MHC Ltd which in turn will finance the potential buyers through loans. Since it started its first construction, the NHDC has already, within a lapse of two years, contracted out some 4,000 housing units. The residential buildings constructed were three-storeyed blocks with several housing units. Several other important projects are in the pipeline. The criteria adopted for the allocation of the apartments are first time buyers who are able to repay the loans, and as mentioned above, priority is given to the holders of a PEL account at the Mauritius Housing Company Limited.

Chapter 2

BUILDING

2.1 Introduction

Any study on housing should look into the situation regarding the existing stock of buildings, their location, characteristics and various uses, the rate at which buildings are lost through dilapidation and replaced by new construction.

A building was defined as a 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. For the purposes of the census it was essential to define and specify the coverage of buildings.

The following buildings were enumerated at the time of the census :

(a) all buildings used at the time of census for residential, commercial or industrial purposes or for the provision of services;

(b) all buildings intended for such use but vacant at time of census;

(c) any improvised shelter which, although not in conformity with the definition of a building, was being used for habitation at time of census; and

(d) all building under construction.

The following buildings were excluded from the enumeration :

(a) buildings used for agricultural purposes including livestock keeping;

(b) temporary shelters and improvised housing units not occupied at time of census;

(c) buildings being demolished or awaiting demolition;

(d) dilapidated buildings which were not inhabited at time of census;

(e) embassy buildings except those where Mauritians were residing.

2.2 Building Stock

209,909 buildings were enumerated in the whole country at the 1990 Census, an increase of about 24,000 over the 1983 Census figure of 186,180. This translates into an average growth rate of 1.7% per annum during the seven-year period.

The average life length of a building was estimated to be around 69 years in 1983, which gives a dilapidation rate of 1.5% per annum. This figure is obtained by using the proportion of buildings with the various building materials in conjunction with the estimates of the life of buildings as given in Table 2.1. With this dilapidation rate, it was expected that, in 1990, 167,500 buildings would survive, about 90% of the 1983 existing stock. Thus a depletion of some 18,700 buildings during the seven-year period is estimated.

Table 2.1 - Life length of buildings by type of wall and roof

Construction material		Life length (years)
Wall	Roof	
Concrete	Concrete	90
Concrete	Iron/Tin	60
Wood	Shingle/Iron/Tin	40
Iron/Tin	Iron/Tin	40
Other	Other	20

Source : Ministry of Works

Between 1983 and 1990, some 24,500 building permits were issued for residential purposes and some 3,600 for non-residential purposes. It is estimated that about 1,300 buildings have been built without permits, assuming 5% of new construction to fall in this category. The parastatal bodies contributed about 2,200 buildings to the stock. Adding the number of new construction to the remaining stock of 1983 after depletion, we have a figure of 199,100. The building permits figures quoted above refer to the Island of Mauritius only. In the Island of Rodrigues, where no building permits statistics were available for that period, some 3,000 constructions have been made (from Census figures). This brings the stock of buildings to about 202,000.

But, during the 1983-1990 intercensal period, improvement took place in the quality of building culminating in an increased life span and reduced losses. In 1990, the average life length was estimated to be about 76 years or a dilapidation rate of only 1.3% . This rate would have brought down the number of losses between 1983 and 1990 to 16,300 instead of 18,700. With this rate of dilapidation and the new construction, the estimated number of buildings would be about 205,000 as against 210,000 buildings enumerated at the 1990 Census, a difference of 2.4% . This shows that the Housing Census data and statistics available from other sources are quite consistent.

2.3 Building use

A building may be used for different purposes. It may be occupied wholly for residential purposes. The partly residential type consists of buildings having housing unit as well as commercial, industrial or other non-residential quarters. Non-residential buildings include public buildings, commercial buildings, industrial buildings, commercial and industrial buildings and warehouses.

Table 2.2 - Distribution of buildings(1) by use, Republic of Mauritius, 1983 & 1990 Censuses

Building use	1983		1990	
	No.	%	No.	%
Wholly residential	160,256	90.9	180,688	90.1
Partly residential	5,382	3.1	6,939	3.5
Hotels and Institutions	228	0.1	303	0.2
Non-residential	8,273	4.7	10,408	5.2
Other	2,080	1.2	2,080	1.0
All buildings	**176,219**	**100.0**	**200,418**	**100.0**

(1) excluding buildings under construction

Among all the buildings enumerated at the 1990 Census, 9,491 were under construction and not inhabited, slightly less than the 1983 Census figure of 9,961. Table 2.2 gives the distribution of buildings by their various uses. The total excludes buildings under construction.

2.3.1 Residential and partly residential buildings

Though the proportion of residential and partly residential buildings over all buildings witnessed a slight drop, the number has increased by about 22,000, representing an annual growth rate of 1.8% . Coupled with an annual household growth of about 2.0% during the period, it shows that housing construction has lagged behind formation of households. But partly residential buildings have been growing faster than the wholly residential category, at a growth rate of 3.7% per annum as opposed to 1.7% for wholly residential buildings. Also, the percentage increase observed for partly residential buildings was nearly 30% while that for wholly residential buildings was only 13% . The partly residential buildings are mainly for residential and commercial purposes.

2.3.2 Wholly residential buildings

Table 2.3 - Distribution of wholly residential buildings by type, Republic of Mauritius, 1983 & 1990 Censuses

Type of building	Republic of Mauritius				Island of Rodrigues (rural) 1990
	1983	1990			
		Country	Urban	Rural	
Buildings used as one housing unit	83.9	85.3	78.3	89.2	93.5
Blocks of flats & semi detached houses	6.8	7.8	12.0	5.4	0.2
Crudely subdivided buildings	7.2	5.6	9.0	3.6	0.4
Detached rooms	1.8	1.2	0.6	1.6	5.9
Improvised buildings	0.3	0.1	0.1	0.2	0.0
Wholly residential buildings: Percentage	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	**160,256**	**180,688**	**65,856**	**114,832**	**7,908**

The wholly residential buildings were of different types as shown in Table 2.3. Crudely subdivided buildings are buildings designed to be used as one housing unit but crudely subdivided into smaller housing units for occupation by several households. An improvised housing unit is an independent makeshift shelter built without any predetermined plan for the purpose of habitation, or a structure, not built for human habitation, but used for that purpose. It is noted, from comparison of figures of the 1983 and 1990 Censuses, that these two types of residential buildings decreased in their relative share as well as in number. This indicates that people were less crowded in their dwellings and had better housing.

Fewer households occupied separate detached rooms in addition to the main building they lived in. 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.

In 1990, the number of buildings used wholly as one housing unit stood at about 154,000 as compared to 134,000 in 1983. There were some 14,000 blocks of flats and semi-detached houses. This type of residential buildings increased by 30% while the rise in the one-housing unit buildings was of the order of 15% , hence, showing the tendency to construct buildings with more than one housing unit. In spite of this tendency, the ratio of housing unit to residential building is seen to drop slightly from 1.22 in 1983 to 1.21 in 1990. This fall has occurred because the increase in the multi-housing units buildings has been accompanied by a 15% decrease in the number of crudely subdivided buildings which fell from 11,622 to 10,076.

From Table 2.3, significant difference is seen in the type of the wholly residential buildings between the urban and the rural regions. Rural areas had a higher proportion of buildings used as one housing unit, but fewer blocks of flats and semi-detached houses. This is understandable because more land space is available in the rural regions where the people construct their single-housing unit buildings. In the towns, the extent to which buildings were crudely subdivided was higher, but a lesser number of people lived in improvised housing units.

In the Island of Rodrigues, a large majority of the 8,000 residential buildings were used as one housing unit; there were only fifteen blocks of flats and semi-detached houses and a few crudely subdivided buildings and detached rooms.

2.3.3 Non-residential buildings

A substantial (26%) increase was seen in the stock of non-residential buildings from 8,273 in 1983 to 10,408 in 1990. While the annual growth rate of residential buildings during the intercensal period was 1.8% , non-residential buildings increased by 3.3% per year. It was noted that buildings used for industrial purposes rose by 40% while the number of warehouses increased by 45% , which respectively grew at a rate of 4.9% and 5.4% per annum compared to the average annual rate of 2.7% for all non-residential buildings. The spurt in the economic activities and the anticipated demand in the country necessitated the availability of more industrial buildings and warehouses.

There was also an increase of 15% in the number of commercial buildings, and a substantial rise of 37% in the number of public buildings. Public buildings, representing one third of non-residential buildings, are buildings which are entirely used by the Central and Local Government, and public corporations for general administrative purposes and for provision of social services. They may be owned by the public or the private sector. An approximately equal proportion goes to commercial buildings, while industrial buildings and warehouses respectively constituted 14% and 2% of non-residential buildings.

2.4 Geographical location

About 63% of the residential and partly residential buildings were located in the rural areas of the country. There was a rather high concentration of buildings in the district of Plaines Wilhems which accounted for about one third of the buildings. The share of buildings for each of the districts of Port Louis, Pamplemousses, Rivière du Rempart, Flacq and Grand Port was approximately one tenth of the stock. The remaining 20% was shared fairly equally among the other four districts.

Table 2.4 shows the geographical distribution of residential and partly residential buildings at the 1983 and 1990 Censuses. The districts of Pamplemousses and Black River gained considerably in their share of residential buildings, with an increase of about 24% for both districts. The increase in share was smaller for Rivière du Rempart, Flacq and Moka. The two urbanised districts, Port Louis and Plaines Wilhems lost in their share. The percentage increase in the number of residential

buildings was 12.6% for the district of Plaines Wilhems, while Port Louis had a change of only 4.9% against a national average of 13.9% .

Table 2.4 - Geographical distribution of residential and partly residential buildings(1), and households, Republic of Mauritius, 1983 & 1990 Censuses

District	Building		Household	
	1983	1990	1983	1990
Port Louis	11.4	10.5	14.2	13.0
Pamplemousses	9.4	10.1	8.6	9.2
Rivière du Rempart	8.7	9.1	7.7	7.9
Flacq	10.8	10.9	9.9	10.0
Grand Port	9.4	9.1	9.0	9.0
Savanne	6.0	5.8	5.7	5.7
Plaines Wilhems	30.3	30.0	32.0	31.9
Moka	5.7	5.8	6.0	6.0
Black River	4.1	4.5	3.6	4.2
Rodrigues	4.2	4.2	3.3	3.1
All districts: Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number	**162,814**	**185,425**	**204,346**	**236,635**

(1) excluding detached rooms used by part of household

It is necessary to analyse the availability of residential buildings with respect to households It is therefore required to look at the distribution of households at the district level alongside the distribution of residential buildings as given in Table 2.4. At both censuses, the districts of Port Louis, Plaines Wilhems and Moka had a smaller share of residential buildings than their share of households would call for. This topic will be analysed more deeply in the following chapter on "Housing unit".

2.5 Building characteristics

2.5.1 Building height

Table 2.5 - Residential and partly residential buildings by number of storeys, Republic of Mauritius, 1983 & 1990 Censuses

No. of Storeys	1983		1990	
	Number	%	Number	%
0	152,161	93.4	163,339	88.1
1	10,209	6.3	21,363	11.5
2	357	0.2	581	0.3
3+	87	0.1	117	0.1
Not Stated	-	-	25	0.0
All buildings	**162,814**	**100.0**	**185,425**	**100.0**

Table 2.5 shows the distribution of residential and partly residential buildings by number of storeys. Of the 185,425 residential and partly residential buildings enumerated at the 1990 Census,

88% were constructed on ground floor, nearly 12% had one or two storeys, while the remaining 120 had three or more storeys. The corresponding percentages were 93.4% and 6.3% at the 1983 Census and there were some 80 residential and partly residential buildings with three or more storeys.

The tendency to construct in height is greater in urban areas with a larger share of storeyed buildings, 19% as compared to 8% in the rural areas. Only about 100 storeyed buildings existed in the Island of Rodrigues, slightly more than 1% of the residential and non-residential buildings.

2.5.2 Age of building

At the 1990 Housing Census the year of completion of the building was recorded to assess the age of the existing stock of residential buildings. Data indicate that a rather small proportion of the residential buildings was built before the year 1960, while the share of stock constructed during the period 1960-1980 and 1980-1990 was 41% and 38% respectively. There were some 5% (about 9,000) buildings which were not completed but inhabited. This percentage was higher in the rural areas. Also the stock of houses in the urban regions appeared to be older than that in the rural areas. About 29% of the rural residential buildings were constructed before 1975 while the corresponding percentage in the towns was 45% .

Information on the year of construction of a building can be looked into when assessing the census data. A Building Life Table may be constructed where the year of completion of the building recorded at the 1983 Census and that of the 1990 Census are related to see how far the data are consistent. The Life Table constructed for residential and partly residential buildings is presented in Table 2.6, and it shows, in 1990, how many buildings survived from the 1983 stock. 79% of the 1983 stock of residential and partly residential buildings survived to 1990. It is to be noted that (i) at the 1983 Census, the actual number of buildings constructed was 16,745 for the period January 1980-December 1981 and 10,789 for January 1982-March 1983. 2,158 is the estimated number of buildings constructed in 1983 up to the Housing Census (ii) at the 1990 Census, the actual number was 33,723 for January 1980 - December 1984, and was distributed according to the rate of issue of residential building permits. 2,033 is the number of buildings constructed in 1990 up to the Housing Census.

Table 2.6 - Residential and partly residential buildings(1) by year of completion, Republic of Mauritius, 1983 & 1990 Censuses

Year of completion	Census		Buildings surviving from 1983 to 1990 (%)
	1983	1990	
Before 1960	31,696	20,659	65
1960 - 1974	57,000	43,499	76
1975 - 1979	36,622	32,944	90
1980 - 1982	25,376	21,909	86
1983 - 1984	2,158	11,814	-
1985 - 1989	-	37,330	-
1990	-	2,033	-
Not known	2,738	6,175	-
Not completed but inhabited	7,224	9,062	-
All buildings	**162,814**	**185,245**	**79**

(1) excluding detached rooms used by part of household

The table gives the proportion of buildings that survived out of the different cohorts defined by the year of completion. Of the "Before 1960" cohort of buildings, only 65% survived to year

1990. Slightly more than three quarters of the buildings constructed between 1960-1974 and enumerated at the 1983 Census were still existing at the 1990 Census. A higher proportion (90%) of those buildings built during the period 1975-1979 survived from 1983 to 1990. This shows clearly the shift towards stronger building technology. It is expected that a still higher proportion would survive out of the 1980-1982 cohort. But, the percentage was only 86%. This does not mean that less resistant buildings were constructed during that period. The number of buildings for the 1980-1982 and 1983-1984 cohorts has been estimated, and may have contributed to this lower percentage. Also, the year of completion of the buildings was unknown for a larger number of buildings in 1990 than in 1983. 6,175 buildings, representing 3.3% of the residential buildings had year of completion unknown compared to 2,738 in 1983, with a percentage of 1.7% . It is expected that the percentage surviving for the 1980-1982 cohort would be at least 90%, the figure obtained for the 1975-1979 cohort.

2.5.3 Construction materials

The type of materials of construction indicates the permanency and durability of the building. For census purposes, information was collected for the roof and walls separately. Analysis of figures on buildings by type of construction materials over the last two censuses shows that the existing stock of dwellings in the country was more resistant and durable in 1990. Out of 185,425 residential buildings, about 71% had concrete walls and concrete roof, as opposed to 54% in 1983, i.e., more of the houses constructed during the intercensal period had concrete walls and roof. But, there were still some 18% (34,000) made of iron and/or tin, while about 2% (4,200) had wood walls and iron, tin or shingle roof. Buildings made of wood, iron and tin dropped both in number and percentage.

In the Island of Rodrigues, concrete buildings accounted for 42% of the 7,714 residential buildings, while 47% were made up of iron or tin.

It is interesting as well to look at the evolution of building technology over time through the distribution of residential buildings by year of completion and the type of construction materials. The data are presented in Table 2.7.

Table 2.7 - Residential and partly residential buildings(1) by year of completion and construction materials, Republic of Mauritius, 1990 Census

Year of completion	Type of walls and roof materials					
	concrete walls & roof	concrete walls & iron/tin roof	iron/tin walls & roof	wood walls & iron/tin /shingle roof	Other	Total
Before 1960	6,301	3,461	7,376	2,924	597	20,659
1960-1974	26,530	4,979	9,785	620	1,585	43,499
1975-1979	26,103	1,630	4,817	211	183	32,944
1980-1984	28,226	1,230	3,963	127	177	33,723
1985-1989	29,757	1,172	5,893	171	337	37,330
1990	1,628	60	314	9	22	2,033
Not known	3,830	684	1,396	179	86	6,175
Not completed but inhabited	8,544	344	146	7	21	9,062
All buildings	**130,919**	**13,560**	**33,690**	**4,248**	**3,008**	**185,425**

(1) excluding 2,202 detached rooms used by part of household

It is seen that, over time, wholly concrete buildings had an increasing share of the residential buildings constructed. The proportion rose from 30% before the year 1960 to over 80% in the 80's and 90's. The majority (94%) of the buildings not completed but inhabited had concrete roof and walls. However, in the year 1990, still some 15% of houses constructed were of iron or tin.

The data can also be viewed from a different angle. Out of the existing stock of wholly concrete buildings, less than 5% were built before 1960, while nearly half were constructed during the 1980's. Also, more than half of the iron and tin houses were built before 1975 and about 70% of the wood walls and iron, tin or shingle roof buildings existed before the year 1960. This confirms the shift in the building technology from materials such as wood, iron and tin towards the use of cement. The change from less resistant materials to cement was brought about by the cyclone phobia created when strong cyclones struck the island in the 1960's and the 1970's.

A more detailed Building Life Table, using data collected on year of completion and building materials, has been constructed to assess the census data. Table 2.8 shows how many buildings from each category survived from 1983 to 1990.

Table 2.8 - Residential and partly residential buildings(1) by year of completion and construction materials, Republic of Mauritius, 1983 & 1990 Censuses

Census Year	Year of completion	Type of walls and roof materials					
		concrete walls & roof	concrete walls & iron/tin roof	iron/tin walls & roof	wood walls & iron/tin/ shingle roof	Other	Total
1983	Before 1960	7,063	5,493	13,489	4,900	751	31,696
	1960 - 1974	28,999	7,006	17,547	988	2,460	57,000
	1975 - 1979	24,471	2,687	8,816	298	350	36,622
	1980 - 1982	18,615	1,341	4,974	157	289	25,376
	All buildings	**79,148**	**16,527**	**44,826**	**6,343**	**3,850**	**150,694**
1990	Before 1960	6,301	3,461	7,376	2,924	597	20,659
	1960 - 1974	26,530	4,979	9,785	620	1,585	43,499
	1975 - 1979	26,103	1,630	4,817	211	183	32,944
	1980 - 1982	18,337	799	2,575	83	115	21,909
	All buildings	**77,271**	**10,869**	**24,553**	**3,838**	**2,480**	**119,011**
	Buildings surviving from 1983 to 1990 (%)	**98**	**66**	**55**	**61**	**64**	**79**

(1) excluding detached rooms used by part of household

The figures in Table 2.8 refer to residential and partly residential buildings constructed up to year 1982 only. It is seen that 98% of wholly concrete buildings survived to the 1990 Census. The percentage is 66% for buildings with concrete walls and iron or tin roof, 61% for buildings with wood walls and iron, tin or shingle roof, and 55% for buildings made of iron or tin. But, the data reveal some inconsistencies - the number of wholly concrete residential buildings constructed during the period 1975-1979 reported in 1990 was greater than that reported at the 1983 Census for the same period of construction. The number should have been less due to the depletion of the existing stock. This discrepancy has been caused perhaps by the shifting in the reported year of completion of the building. 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 the problem of memory decay, or by the fact that the buildings were occupied by tenants who, very often, only gave tentative estimates of the year of completion of the building. The year of completion also may have been shifted forwards mainly because of the major addition, renovation and repairs made to the building, and perhaps because some people build their houses over more than one year due to economic reasons and may give the later or earlier year of completion.

2.6 Construction activity

From the 1990 Census figures on year of completion of residential buildings, it is found that the tempo of house building has gone up in the last decade. The tendency in building construction can as well be observed through the rate of issue of building permits, and the trend in investment and employment in the construction sector.

2.6.1 Building permits

Data for the Island of Mauritius on yearly buildings permits issued for new residential buildings from 1983 onwards show a drop in 1985 and a steady increase thereafter to reach the figure of 4,400 permits in 1990. About 3,400 permits were issued in 1983. During the last two years, the issue of permits for residential purposes increased considerably, with changes of 9% and 18% for the period 1990-1991 and 1991-1992 respectively. Some 5,600 permits were issued for new residential buildings in 1992.

Even permits issued for addition to existing buildings increased significantly. The 1983 figure number more than doubled to reach 1,700 permits in 1990. The increase was of the order of 48% from 1990 to 1992. It should be noted that the figures quoted include not only additions of housing units to existing buildings, but also additions of one or more rooms, kitchen, garage, etc. Addition for housing unit is estimated to be about 30% of all additions (estimate from the Ministry of Works).

For non-residential construction, the issue of permits has been on the decline as from 1988, though it slightly increased in 1992. The 1990 figure, which stood at about 480 permits, shows a 35% decrease when compared to that of 1988, but a 60% increase when compared to the 1983 figure.

2.6.2 Investment in construction

In terms of investment as measured by Gross Domestic Fixed Capital Formation, the construction sector, including all types of construction (residential and non-residential buildings and other construction works) had a declining share from 1983 to 1988 for the Island of Mauritius. It then started to rise to nearly 56% of GDFCF in 1992. In 1983, the share was 65% and fell down to its lowest level (40%) in 1988.

Though the amount of investment in the housing sector increased steadily from 1983 to reach a threefold value in 1990, the share of housing in construction investment gives a different picture. The proportion of housing investment stood at 46.5% of the GDFCF for the construction sector in 1983, fell down to 33.5% in 1988 and slightly increased in the years 1989 and 1990. With the recent boom in the residential building sector, the share of housing in the construction capital formation went up from 37% in 1990 to 49% in 1992.

The share of investment in the construction of non-residential buildings had been on the rise from 18% in 1983 to reach a peak of 39% in 1989. It has shown a decline from 1989 onwards.

It is noted that, during the intercensal period 1983-1990, capital formation for non-residential sector grew much faster than that for residential buildings. Also, the percentage increase in investment in non-residential construction was more than three times that of residential construction during the same period.

2.6.3 Employment in the construction sector

Employment in the construction sector, including residential and non-residential buildings and other construction works, has been on the increase from about 4,500 in 1983 to nearly 11,000 in 1990. These figures relate to the Survey of Employment and Earnings in the Island of Mauritius, and refer to large establishments only, i.e., enterprises with ten or more employees. The proportion of employment in construction over total employment in large establishments was 2.4% in 1983 and increased to 3.9% in 1990. Also the number of large firms in that sector went up from 37 in 1983 to 61 in 1990.

No regular statistics exist for employment in small construction firms or for those who are self-employed. According to the 1990 Population Census, a total of about 39,000 people worked in the construction sector, representing 10% of total employment. In 1983, employment in the construction sector numbered about 19,200 , representing 7.5 % of total employment Hence, some 28,000 persons were either employed in small construction firms or worked for themselves in 1990 while the corresponding number in 1983 was 14,700.

Chapter 3

HOUSING UNIT

3.1 Introduction

From the analysis carried out on buildings, it is seen that there has been a positive evolution both in the quantity and the quality of buildings constructed during the last decade. It is important as well to assess the quality of shelter in terms of the availability of basic amenities. Housing units are the structures basic to households and population and hence deeper analysis of this aspect is essential. This chapter analyses data on housing units and the amenities provided.

A housing unit is a separate and independent place of abode intended for habitation or one not intended for habitation but occupied for living purposes. The idea of separation implies that the person or group of persons in the unit can isolate themselves from other persons in the community for the purposes of shelter, sleeping, preparing and taking their meals. The idea of independence implies that the occupants of the housing unit can come in or go out of their abode without passing through the premises of somebody else.

3.2 Stock and growth

The number of housing units contained in the 185,425 residential and partly residential buildings was 223,821 at the 1990 Census compared to 198,591 units in the 162,814 buildings at the 1983 Census. The residential and partly residential buildings include all improvised housing units but exclude detached rooms used as part of a household. Comparison of the situation at the two censuses shows an increase of 25,000 units, or an average growth rate of 1.7% per annum.

3.3 Geographical distribution and flow

Table 3.1 - Distribution of housing units and households by district, Republic of Mauritius, 1983 & 1990 Censuses

District	Housing unit				Household	
	Number		Percentage		Percentage	
	1983	1990	1983	1990	1983	1990
Port Louis	28,743	29,456	14.5	13.1	14.2	13.0
Pamplemousses	17,264	20,756	8.7	9.3	8.6	9.2
Rivière du Rempart	15,214	18,098	7.7	8.1	7.7	7.9
Flacq	19,112	21,850	9.6	9.8	9.9	10.0
Grand Port	17,633	19,376	8.9	8.6	9.0	9.0
Savanne	11,137	12,242	5.6	5.5	5.7	5.7
Plaines Wilhems	63,223	71,333	31.8	31.9	32.0	31.9
Moka	11,437	13,056	5.7	5.8	6.0	6.0
Black River	7,913	9,844	4.0	4.4	3.6	4.2
Rodrigues	6,915	7,810	3.5	3.5	3.3	3.1
All Districts	**198,591**	**223,821**	**100.0**	**100.0**	**100.0**	**100.0**

Table 3.2 - Growth rate and percentage change in housing units and households between 1983 and 1990 Censuses, Republic of Mauritius

District	Growth rate (% per annum)		Percentage change	
	Housing Unit	Household	Housing Unit	Household
Port Louis	0.4	0.9	2.5	6.1
Pamplemousses	2.7	3.0	20.2	23.1
Rivière du Rempart	2.5	2.6	19.0	19.3
Flacq	1.9	2.4	14.3	17.8
Grand Port	1.4	2.0	9.9	14.7
Savanne	1.4	2.1	9.9	15.7
Plaines Wilhems	1.7	2.1	12.8	15.6
Moka	1.9	2.3	14.2	17.2
Black River	3.2	4.0	24.4	31.8
Rodrigues	1.8	1.3	12.9	9.2
All Districts	**1.7**	**2.1**	**12.7**	**15.8**

Tables 3.1 and 3.2 show the geographical distribution and the flow of housing units among districts. They give the relative share of housing units and households in the different districts at the last two censuses, and present the growth rate and percentage change of both housing units and households for the intercensal period 1983-1990.

For every district in the Island of Mauritius, the number of households grew faster than its number of housing units, implying that the construction of residential buildings has lagged behind the formation of households. This can also be observed through the comparison of the percentage change in housing unit to that of household, where the changes in household were larger. But this is not the case for the Island of Rodrigues where housing units have been growing faster than households, showing some improvement in the housing situation. The districts of Port Louis, Pamplemousses, Black River and Rodrigues all had slightly greater share of housing units than their share of households at both censuses.

Port Louis district witnessed a drop in its share of housing units as well as households. As seen in Table 3.2, it registered, among all districts, the lowest growth rate and increase in the number of housing units and households. The percentage increase in the number of housing units for Port Louis is only 2.5% while the highest change noted is nearly 25% for the district of Black River. Port Louis, being the administrative and commercial centre of Mauritius, is the more developed locality and since it is also the smallest district, it has the highest population density among all districts. Over the past years, people have been migrating out of Port Louis to other parts of the island, mainly to the surrounding regions. In fact, Port Louis witnessed a net loss of residents between the 1983 and 1990 Censuses.

Districts with relatively high increase in housing were Pamplemousses, Rivière du Rempart and Black River, indicating that there has been more construction in these regions. Many of the residential buildings constructed in these districts are secondary residences. In fact, these three districts showed the highest percentage of housing units used as secondary residence. But we can see that there has also been formation of new households and inward migration of population with corresponding construction.

The Island of Rodrigues had the same share (3.5% of all housing units) of housing units at both censuses, while it lost in its share of households, from 3.3% to 3.1%. The growth rate and percentage change of housing units approximated the national figures of 1.7% per annum and 12.7%

respectively. As for household formation, the number increased at a rate of only 1.3% per annum against a national average of 2.1%.

3.4 Ownership and Tenure

The ownership of housing and the tenure held are important considerations in the policy option of the government concerned with the provision of shelter for its people. Housing units may be owned by the private sector, i.e., households, private corporations or co-operatives, while public housing is the property of the Central or Local Government and public corporations. From census figures, private ownership of housing, although very high, is seen to have increased further from 97.7% in 1983 to 98.5% in 1990. This change has been brought about by the policy of the government to encourage people to own their houses.

It is interesting to find out how the private and public housing units were located in the different types of buildings. This information is important in the formulation of housing programmes and is an indication of housing conditions. The majority (70%) of the private housing units was found in detached buildings, while about 15% were located in blocks of flats or semi-detached buildings. Some improvement is seen in the living conditions where the percentage of units found in buildings crudely subdivided into smaller units dropped from 13.9% to 10.6% . Also the percentage of improvised housing units was 0.1% as compared to 0.2% in 1983. As for publicly owned housing units, they were mostly found in blocks of flats or semi-detached buildings (63%), slightly more than one quarter being in detached buildings while the rest was located in partly-residential buildings.

Though a high proportion of housing units was privately owned, the question of how many people own their house still arises. The extent to which households own or rent the accommodation they occupy is of significance for housing programmes. Table 3.3 shows the pattern of tenure under which households occupied their residence at the last two censuses.

Table 3.3 - Distribution of households by tenure, Republic of Mauritius, 1983 & 1990 Censuses

Tenure	1983		1990	
	No.	%	No.	%
Owner	136,690	66.9	179,692	75.9
Tenant	36,360	17.8	35,102	14.8
Subtenant	172	0.1	928	0.4
Free	30,573	15.0	20,723	8.8
Other & NS	551	0.2	280	0.1
All households	**204,346**	**100.0**	**236,725**	**100.0**

The figures reveal a positive evolution of tenure towards owner-occupied dwellings. There was substantial increase in the proportion of households living in owner-occupied dwellings, with 76% of households being owners of the housing units they occupied as compared to 67% in 1983. This change, caused by the preference of people to own their house has also been the result of a better economic situation prevailing in the country, and of the government policy encouraging people to own their dwellings. The proportion of owner-occupied dwellings will further increase with the ambitious government policy "UN TOIT POUR CHAQUE FAMILLE". It has been providing loans, subsidies and other incentives to allow people to have necessary credits for the purchase of land or a house or for construction.

The percentage of households living in rented accommodation dropped from nearly 18% in 1983 to about 15% in 1990. Fewer households enjoyed free housing which is usually provided by

employers to employees and also by some persons to their relatives. The percentage fell from 15% in 1983 to 9% in 1990.

There was a marked difference in the way tenure was held in the urban and rural areas. 66% of households were owners and 25% were tenants in the towns while the corresponding percentages in the rural regions were 83% and 7% . Renting households in the district of Port Louis, though still high, fell from 39% at the 1983 Census to 30% in 1990.

Over 90% of the householders in the Island of Rodrigues were owners of their dwellings. It is to be pointed out that most of them had their houses constructed on land leased from the State.

It should be noted that 29% of the 36,000 tenant and subtenant households lived in crudely subdivided dwellings. Some 6% of owners crudely subdivided their dwellings either for rent or to offer free accommodation to their relatives. A very small percentage (0.1%) of the owners and the tenants lived in improvised housing units. Among those households enjoying free accommodation, a significant 13% occupied crudely subdivided dwellings. Such free housing was provided mostly by a relative or other person who did not form part of the household occupying the free accommodation.

3.5 Occupancy and vacancy

A housing unit may be either occupied as a principal or secondary residence, or be vacant. Vacancy data are important; the vacancy rate, defined as the number of vacant housing units to the total number of housing units, is used in the calculation of housing needs to estimate the number of new dwellings that will be necessary to construct.

At the 1990 Census, 97.5% of the 223,821 housing units were occupied as compared to 96.4% at the 1983 Census. The vacancy rate fell from 3.6% to 2.5%, a decrease from about 7,200 to 5,600 in the number of vacant housing units. It should be noted that the rural vacancy rate, nearing 3.0%, was higher than that in the urban areas which stood at 2.0% . A large number of vacant housing units were available for rent as bungalows on the coastal rural regions.

The Island of Rodrigues with 7,810 housing units in 1990 had a higher rate of vacancy of 5.2% while in 1983 it was only 2.2% when the number of housing units was 6,915.

Table 3.4 - Distribution of housing units by type of vacancy, Republic of Mauritius, 1983 & 1990 Cenuses

Type of vacancy	Number		Percentage	
	1983	1990	1983	1990
For Rent	3,465	2,193	48.3	38.9
For Sale	584	259	8.1	4.6
Provided by employer	824	887	11.5	15.7
Under repairs	665	688	9.3	12.2
Other	1,639	1,612	22.8	28.6
All housing units	**7,177**	**5,639**	**100.0**	**100.0**

A housing unit may be vacant for sale, rent, repairs or provided by the employer. Vacancy data classified by type of vacancy, as shown in Table 3.4, furnish useful information concerning the availability of housing. While nearly half of the vacant housing units were available for rent in 1983, the percentage was less than 40% at the 1990 Census. The number as well as the percentage of vacant housing units for sale dropped by approximately half the amount. Though the

percentage of vacant housing units provided by the employer and those under repairs increased, the number remained practically unchanged. 88% of all housing units provided by employer were located in the rural areas. They were mainly housing provided to employees on the sugar estates.

The figures in the above table should be used with caution as a rather high percentage of vacancy fell in the category "Other". They were mostly cases where it was difficult to obtain detailed information on the occupancy status of a vacant housing unit.

A principal residence is the main place of abode of its occupants. A housing unit was considered as a secondary residence if the occupants had a primary residence elsewhere, and the unit was kept for seasonal occupation for the owner's household, friends or relatives. Out of the 218,103 occupied housing units, 1,857 were secondary residences, a decrease of 177 from the 1983 figure. This gives for the intercensal period 1983-1990 a drop from 1.1% to 0.8% in the percentage of secondary residences. In rural regions, the percentage of secondary residence, being mostly bungalows along the coasts, was 1.4% .

3.6 Household amenities

For decent and comfortable living, a household needs, in addition to a dwelling, certain amenities like protected water supply, hygienic toilet facilities, bathroom, kitchen and facilities like electricity and safe refuse disposal. Data from the last two censuses indicate a general improvement in the availability of these amenities and services. Yet, there were some households which lacked these basic amenities. Thus, these data, collected at low geographical level, are useful to planners and policy makers for necessary action.

Table 3.5 - Percentage of households having access to basic amenities, 1983 & 1990 Censuses

Available amenities	Republic of Mauritius		Island of Rodrigues	
	1983	1990	1983	1990
Piped water	96.9	95.2	50.9	61.0
Electricity	91.1	96.9	19.7	70.0
Toilet	98.0	99.3	83.4	90.9
Bathroom	84.2	94.5	43.8	62.6
Kitchen	94.7	97.5	94.5	95.1
Refuse disposal	61.3	68.4	27.3	40.4

Table 3.5 shows the percentage of households having access to piped water, electricity, toilet, bathroom, and kitchen facilities and a safe system of refuse disposal at the 1990 Census. The corresponding 1983 figures are given to assess the progress over time. At the 1990 Census, a greater proportion of the households had access to the basic amenities required for safe health. There has been marked improvement in the availability of all amenities except in the case of piped water which will be studied in the following section.

In the Island of Rodrigues, the availability of amenities improved significantly though a great number of households still lacked certain amenities such as piped water, hygienic toilet facilities and safe refuse disposal. Much progress was made in the distribution of electricity.

Some of the facilities such as toilet, bathing and cooking may not be available for the exclusive use of the occupants of a housing unit. It is therefore important to investigate how far these facilities were shared among housing units.

3.6.1 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. The availability of a protected water supply for the population is essential for the prevention of communicable diseases as well as for cleanliness, general comfort and improvement in the quality of life. It is also considered as a valuable indicator of sanitary conditions.

The type of water supply is the only amenity showing a drop in the percentage of households having access to that facility in terms of piped water. Though a larger number of households were provided with piped water in 1990, in terms of percentage, there seems to be a drop of almost 2% for the whole country. Data analysed at district level show a similar situation. Does that imply a deterioration in the availability of this basic requirement through the island? This was not the case as there has been a marked drop in the percentage of households having their water supply from tank-wagon, well or river from 3.1% to 1.5% . The explanation is that nearly 8,000 households (3.3% as compared to 0.1% in 1983) reported their type of water supply as "Other" and this affected the other percentages.

More than half of households (56%) enjoyed water supply inside their housing unit in contrast with 40% in 1983. Less than 6% of households made use of public fountains as compared to 17% in 1983. The quality of water supply was better in the urban areas as shown by the fact that 2.2% of rural households, representing a population of about 15,000, still depended on well or river water, while the number was negligible for the urban areas.

The Island of Rodrigues still had 36% of households using well or river water and, hence, much is to be done in the water supply infrastructure on this island.

3.6.2 Electricity

At the 1990 Census, more households were provided with electricity, representing 96.9% of the total number as compared to 91.1% in 1983. But this facility was accessible to only 95% of households in the rural areas while 99% of urban households were provided with electricity. Special attention should be given to extend this necessity to these deprived rural areas.

Further more attention should be given to the Island of Rodrigues where 30% of the households still did not have this facility in 1990; however, much progress was made as 80% of households were without electricity in 1983.

3.6.3 Toilet facility

The extent to which the housing units are equipped with satisfactory means of disposing human waste is extremely important from a health point of view. Table 3.6 shows the type of facilities that were available in the country at the last two censuses and indicates to what extent this amenity was shared among housing units.

About 1,600 households (0.7%) as compared to 3,200 (1.6%) in 1983 still lived in housing units without any type of toilet facility. On the other hand, there has been qualitative improvement in the provision of toilet with nearly 63% of households having access to flush toilet, in contrast to 47% in 1983. Absorption pit or septic tank with flush toilet was the most common toilet system in the Island of Mauritius. A small number of the rural households had flush toilet connected to the sewerage system; they were provided mainly with flush toilet connected to an absorption pit or septic tank, and a large number was also of the pit latrine non-water seal type.

In the Island of Rodrigues, where a very high proportion of households (9%) had no toilet facilities, the non-water seal pit latrine type was most widely used.

Table 3.6 - Distribution of households by type of toilet facitlity, 1983 & 1990 Censuses

Type of toilet facility	Republic of Mauritius				Island of Rodrigues (rural)
	1983	1990			
		Country[1]	Urban	Rural	1990
Flush toilet connected to	**96,982**	**148,588**	**81,451**	**67,137**	**658**
Sewerage system	39,354	44,734	41,980	2,754	0
Not shared	27,082	34,450	31,951	2,499	0
Shared	12,272	10,284	10,029	255	0
Absorption pit/ septic tank	57,628	103,854	39,471	64,383	658
Not shared	51,495	93,472	35,254	58,218	641
Shared	6,133	10,382	4,217	6,165	17
Pit latrine	**103,344**	**86,287**	**15,720**	**70,567**	**5,944**
water seal	10,125	15,070	4,008	11,062	5
Not shared	7,118	11,328	2,520	8,808	0
Shared	3,007	3,742	1,488	2,254	5
Other	93,219	71,217	11,712	59,505	5,939
Not shared	64,641	53,407	7,037	46,370	5,370
Shared	28,578	17,810	4,675	13,135	569
Pail	**840**	**194**	**102**	**92**	**4**
None	**3,180**	**1,566**	**168**	**1,398**	**662**
All households	**204,346**	**236,635**	**97,441**	**139,194**	**7,268**

(1) excluding 90 households with number of persons not stated

It is observed that a much lower percentage of households shared toilet facilities. Only 17.8% of households shared toilet at the 1990 Census as compared to 24.5% in 1983. Most housing units are now provided with their own toilet facility. The extent to which toilet facilities were shared among housing units was lower in the rural regions than the towns. This is expected as the proportion of detached buildings used as one housing unit was higher in the rural areas.

3.6.4 Bathing facility

The availability of bathing facilities in the housing units is also an important factor in considering the adequacy of housing from a health point of view. 48.3% of households had bathroom inside their housing units, a marked improvement since the 1983 Census when only 36.3% of total households had bathing facilities inside their house. While 91.6% of bathrooms found inside the building were with running water, only 42.1% of those outside had running water.

Access to bathroom facilities differed largely between urban and rural regions. 63% of urban households had bathroom inside while the corresponding figure for the rural areas stood at 38.4% . Also, while 84.5% of households in the towns had running water in their bathroom, the percentage was only 54% in the rural areas. As in the case of toilet facility, the amount of sharing has considerably

reduced, and it was shared to a lesser extent than toilet facilities. It is also seen that the extent of sharing was less in rural regions.

Though the percentage of households having no bathroom dropped from 15.8% to 5.5% during the intercensal period 1983-1990, there were some 13,000 households, representing a population of about 53,000, which had no bathing facilities. The problem was more acute in the rural areas, and the Island of Rōdrigues where more than one third of the households had no bathroom facilities.

3.6.5 Kitchen facility

Availability of a kitchen to a housing unit is another important aspect in considering the adequacy of housing. More than 5,000 households, representing 2.4% of total households, still did not have any kitchen facility at the 1990 Census, though it showed an improvement over the 1983 Census where the number of households without this facility stood at nearly 11,000 (5.3%).

A greater share of the households, 65%, had inside kitchen facilities as opposed to 49% in 1983. Again, significant difference was observed between the urban and rural areas; more than 80% of urban households had kitchen inside while the corresponding figure in the rural areas was 54% . In some cases, outside kitchen may have been found to be more practical in the rural areas, where still a highly significant proportion of the households (38%) used wood as cooking fuel and this might cause inconvenience if kitchen were found inside the housing unit.

Only 27% of households in the Island of Rodrigues enjoyed inside kitchen facility.

Among the amenities to be found in a housing unit, the kitchen was the least shared, and the amount of sharing dropped since 1983. In 1990 only 1.4% of households shared kitchen as compared to 2.2% in 1983. The extent of kitchen sharing in urban areas was more or less similar to that in rural regions

As expected, sharing of this amenity was higher for kitchen found outside the housing unit. At the 1990 Census 2.3% of the outside kitchen were shared compared to 0.9% for the inside kitchen. The corresponding figure for 1983 were 3.3% and 1.5% .

3.6.6 Fuel used for cooking

Table 3.7 - Distribution of households by type of fuel used for cooking purposes, Republic of Mauritius, 1983 & 1990 Censuses

Type of fuel	Number		Percentage	
	1983	1990	1983	1990
Wood and charcoal	111,459	62,257	54.5	26.3
Kerosene	71,196	51,262	34.8	21.7
Electricity	10,558	3,627	5.2	1.5
Gas	10,507	119,008	5.1	50.3
Other & NS	626	571	0.4	0.2
All households	**204,346**	**236,725**	**100.0**	**100.0**

During the seven-year intercensal period there has been a remarkable change in the type of fuel used by households for cooking purposes as revealed by the figures in Table 3.7. Rising prices of electricity caused a substantial shift towards the use of gas, from 5% to 50%. Gas was found to be

relatively cheaper and became the principal source of fuel for cooking. Wood and charcoal, not being easily available, was used to a lesser extent.

Except for kerosene, the extent to which the other cooking fuels were used differed between the urban and rural regions. Gas and electricity were more widely consumed in the urban areas. Also about 38% of rural households used wood and charcoal as opposed to less than 10% in the urban areas.

In Rodrigues, about one quarter of the households used gas for cooking, while more than half depended on wood collected on the island.

3.6.7 Method of refuse disposal

From a health and environment point of view, it is important to know the means of refuse disposal available to housing units. Much improvement was seen in the way people disposed of their refuse. The percentage of households using receptacle with cover rose from 5.8% in 1983 to 30.1% in 1990. This included sealed plastic bags used for disposal of refuse until collection by some organised body. Enclosure and ash pit were used to a lesser extent. Still a large number of households, representing 30.6% of all households, dumped their refuse on the roadside or in the backyard, though there has been some improvement from the observed 37.4% in 1983.

Urban households used more of receptacle and enclosure to dispose of their refuse, while rural households would rather use the ash pit or simply dump the refuse in the backyard or on the roadside.

In Rodrigues, about 59% of households dumped their refuse in the backyard or the roadside, and 39% disposed of their refuse in ash pit. Very few households used receptacle or enclosure.

3.7 Living space

Sufficient space is needed by occupants of a housing unit to avoid over-crowding and congestion. The ratio of households to housing units provides information on the extent to which households share housing units with other households. It also provides an important basis for estimating housing needs. It is observed that, at the 1990 Census, there were 1.06 household per housing unit as opposed to 1.03 at the 1983 Census. It therefore seems that the extent to which households share a housing unit has deteriorated by about 3% during the intercensal period.

Table 3.8 - Distribution of housing units(1) by number of rooms per housing unit, Republic of Mauritius, 1983 & 1990 Censuses

Number of rooms per housing unit	Percentage		% Change
	1983	1990	1983-1990
1	9.0	6.1	-22.5
2	21.0	18.0	- 2.8
3	21.4	17.6	- 6.6
4	25.9	25.1	10.0
5+	22.7	33.2	66.7
All housing units: %	**100.0**	**100.0**	**13.7**
No.	**189,372**	**215,384**	

(1) housing units occupied by private households

But this does not necessarily imply that the density of occupation has deteriorated. In fact, the average number of rooms per housing unit, which is an indicator of living space and quality of life, has increased from 3.5 to 3.9 during that period. Table 3.8 shows how the housing units were distributed by type (number of rooms per housing unit) at the last two censuses.

At the 1990 Census, one third of the units contained five or more rooms, while the corresponding figure for 1983 was 23% . It was noted that housing units with three or fewer rooms witnessed negative change in number, while the bigger housing units (5 or more rooms) increased by 67% . The combined effect of a larger number of rooms per housing unit with a reduction in the household size from 4.8 to 4.5, has led to a fall in the average number of persons per housing unit from 5.0 in 1983 to 4.7 in 1990.

However, because of the heterogeneity of housing units, a better measure of the density of occupation is the average number of persons per room used for living purposes. It is a widely recognised measure of the adequacy of housing conditions. For the whole country, this ratio dropped from 1.5 to 1.2 between 1983 and 1990. The lower density per living room indicates the improvement in the living space available to occupants of housing units. Table 3.9 gives the distribution of households by density per living room. Slightly more than one quarter of households had less than one person per room, while most households (63%) had more than one but less than three persons in a room.

Table 3.9 - Distribution of households(1) by density per room, 1990 Census

Number of persons per room	Republic of Mauritius			Island of Rodrigues
	Country	Urban	Rural	
less than 1	26.5	32.7	22.1	21.1
1 or more but less than 2	46.0	44.4	47.1	41.6
2 or more but less than 3	17.0	14.7	18.7	22.7
3 or more	10.5	8.2	12.1	14.6
All households: %	**100.0**	**100.0**	**100.0**	**100.0**
No.	**236,580**	**97,420**	**139,160**	**7,265**

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

The amount of space available to an occupant in a housing unit differed considerably between the urban and the rural households, the density being higher in the rural areas as can be observed in the table. The average number of persons per room in the urban and rural regions were 1.1 and 1.3 respectively.

The situation was not as good in the island of Rodrigues, where the density was 1.5.

Analysing the density of occupation by type of tenure in Table 3.10, it was found that tenants and sub-tenants were more crowded than the occupants of the owner-occupied housing units. 24% of tenant and sub-tenant households had less than one person per room compared to nearly 28% for households in owner-occupied housing units. Also about 30% of tenant and sub-tenant households had two or more persons per room while the percentage was less than 26% for owner occupied households. The amount of congestion was even higher for the "free and other" type of tenure, where only 19% had less than one person per room and 39% with two or more persons per room.

Table 3.10 - Distribution of households[1] by tenure and density per room, Republic of Mauritius, 1990 Census

Number of persons per room	Owner-occupied		Tenant & sub-tenant		Free, other and not stated	
	No.	%	No.	%	No.	%
Less than 1	49,824	27.8	8,793	24.4	4,036	19.3
1 or more but less than 2	83,553	46.5	16,450	45.7	8,828	42.2
2 or more but less than 3	28,982	16.1	6,922	19.2	4,384	21.0
3 or more	17,298	9.6	3,861	10.7	3,649	17.5
All households	**179,657**	**100.0**	**36,026**	**100.0**	**20,897**	**100.0**

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

3.8 Rent

Rent refers to the amount paid monthly by a household for the space it occupies. It is related to the space, number of rooms and to the type of available amenities provided. The geographical location of the building, the environment, infrastructure and neighbourhood also play a role in determining rent.

Table 3.11 - Distribution of renting households by monthly rent, Republic of Mauritius, 1983 & 1990 Censuses

Monthly rent (rupees)	Republic of Mauritius			
	1983	1990		
		Country	Urban	Rural
< 100	32.4	11.8	8.7	19.4
100 - 199	24.0	16.0	13.8	21.4
200 - 499	27.6	36.7	36.6	37.0
500 - 999	12.7	22.3	25.2	15.1
1000 - 1999	3.0	9.2	11.6	3.3
2000 - 2999	0.2	1.7	2.0	0.8
3000+	0.1	1.7	1.7	2.0
Not stated	-	0.6	0.4	1.0
All households: %	**100.0**	**100.0**	**100.0**	**100.0**
No.	**36,532**	**36,030**	**25,510**	**10,520**

Table 3.11 shows the change in the distribution of households by the amount of monthly rent paid. The amount of rent paid has substantially increased between 1983 and 1990. The percentage of households paying a monthly rent of Rs200 or less decreased sharply from 56% in 1983 to 28% in 1990. On the other hand, households with rent ranging from Rs200 to Rs1,000 increased from 41% to 60% between the same period. It might also be noted that while only 0.3% of households paid rent above Rs2000 in 1983, 3.5% of households paid that amount in 1990. The shift in the percentage from the lower to the higher rent range indicates high increases in the rental value of houses. In fact, the average monthly rent almost doubled from Rs300 to Rs580 during the intercensal period 1983-1990. This tendency is also confirmed by figures from the 1991-1992 Household Budget Survey where monthly rent stood at about Rs650. The average monthly rent in urban areas was found

to be one and a half times higher than that in rural regions. This is to be expected as more facilities are provided in the towns such as transport and other infrastructure.

We cannot say that prices of rent are solely determined by market forces as the Landlord and Tenant Act puts restriction on increases in rent. The law was enacted mainly to protect the tenants after the devastating cyclones in 1960 when the country was facing a housing crisis. As increases on rent were restricted, the overall increase observed in rent during that period has occurred mainly through the construction and letting of new buildings. Or they might have been caused when old tenants moved out to be replaced by new ones who had to pay higher rents. Demand to rent houses come mainly from the low income and the lower middle income group, while the type of housing being mostly supplied are for the higher income group.

The Act makes it difficult for landlords to charge a rent that reflects market rates. Rent is affected by the cost of financing the house. Prices in the housing market are often distorted when the monthly rent is lower than the monthly cost of financing the purchase or construction of the house for letting purposes, based on a certain length of time to recover the cost. Hence, many tenants were subsidised by landlords and there has been no incentive on the latter's part to invest in terms of maintenance and improvement of the existing stock.

The distortion of prices in the housing market has also been caused by the rising cost of construction and land, and the subsequent incapacity of paying high rents. Landlords, then, had to let at uneconomic prices. According to the Three-Year National Development Plan 1992-1994, the government expresses its concern and intends to review the Act to allow for increases in rent so as to encourage private investment in construction, house repairs and upgrading of property.

Chapter 4

HOUSEHOLDS

4.1 Introduction

A household may be either (a) a one-person household, that is, a person who makes provision for his or her 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 and other essentials for living. The persons in the group may pool their income and have a common budget. They may be related or unrelated persons or a combination of both.

Since the population live in such groups, it is essential to study these groups. A household occupies usually a single housing unit and is therefore the most relevant concept for use in planning for the future needs. Furthermore, the family formation and the life cycle of the family play a major role in the distribution of housing needs. They show how the family size and composition undergo changes which have widespread social and economic effects on the family.

In order to estimate the future housing needs and improve living conditions, a thorough analysis of households - their size, growth, composition and structure needs to be undertaken.

4.2 Type, number & size

There were 237,019 households as enumerated at the Housing Census carried out between February to April 1990. At the Population Census held on night 1-2 July, the total number of households came out to be 237,116, showing that the figures are remarkably close. Actually, the difference of about hundred is the net result of the dissolution of existing households and the formation of new households during that period. Nearly 60% of the existing 237,000 households were found in rural areas of which 7,000 in the Island of Rodrigues.

At the 1990 Population Census, 120 institutions and 111 hotels were enumerated, out of which 10 institutions and 8 hotels were found in Rodrigues. In our country, as in most countries, a small proportion of the population was enumerated in institutions and hotels. About 9,000 individuals were found to be present in the communal households, i.e., hotels and institutions, and the corresponding figure for the last census was around 5,000. There were about 6,000 persons present in institutional households such as hospitals, asylums, prisons and convents. However, only 1,800 were permanent residents of the institutions and they constituted 0.17% of the total resident population in 1990. The sex ratio (defined as the number of male per 100 female) of the institutional resident population was 72 which is much lower than the sex ratio of 99.8 for the private household population, indicating a higher proportion of female residing in the institutions.

On the other hand, private households and population therein increased by about 30,000 and 60,000 respectively since the 1983 Census. The private households include the homeless population, which was estimated to be between 200 and 300, for which no provisions were made at the Housing and Population Census to identify them separately. From now on consideration will be given only to private households as these are the ones constituting most of the population. During the intercensal period 1983-1990, the growth of household was 2.0% per annum, which was much faster than the population growth rate of 0.8% for the whole country. This resulted in a decline in the average household size from 4.8 in 1983.to 4.5 in 1990. Household size in the urban areas was 4.2 while the rural household size was 4.6.

It should be noted that Rodrigues had a greater household size of 4.8. The reason for the difference in size will be looked into, when analysing household composition.

4.3 Household structure

4.3.1 Size distribution

Households vary significantly from one to another in their size. It can be a one-person household or a multi-person household with up to 10 or more members. Table 4.1 gives the distribution of private households by household size for the last two censuses.

Table 4.1 - Distribution of households by household size, Republic of Mauritius, 1983 & 1990 Censuses

Household size	Number		Percentage	
	1983	1990	1983	1990
1	12,479	12,336	6.0	5.2
2	20,825	25,092	10.1	10.6
3	30,473	39,673	14.8	16.8
4	38,674	55,797	18.7	23.6
5	34,076	42,905	16.5	18.2
6	25,851	26,905	12.6	11.4
7	17,780	15,166	8.6	6.4
8	10,977	8,352	5.3	3.6
9	6,757	4,432	3.3	1.9
10+	8,494	5,452	4.1	2.3
All households	**206,386**	**236,110**	**100.0**	**100.0**

In 1990, out of the 236,110 private households, only about 5% were one-person households; they were mainly old persons, a greater proportion of whom was female. The majority of households (51%) had 2 to 4 members and they were considered to be mostly nuclear families with one or two children. Nearly 30% of the households were intermediate sized households with 5 to 6 persons. The larger households (7 or more members) constituted about 14% of the total number of households. They were relatively large families of the nuclear type with a large number of children living together or of the extended multi-nucleus type. Comparison of the corresponding percentages for the 1983 Census shows clearly the tendency towards small sized family. The data reveal that there is a slight decrease in the one-person households and rather consequent falls in households with 6 or more members. The proportion of households of size 2 to 5 has increased, the rise being smallest for household size 2. The slight fall in the one-member households greatly outweighed by the larger fall in the bigger households has resulted in the decline of the household size from 4.8 in 1983 to 4.5 in 1990.

The modal household size was 4, with a share of nearly one fourth of all private households. The same was true for male headed households. But for female headed households the 2-person type household had the highest frequency, with a percentage of 19% . The distribution is shown in Table 4.2. Of the male headed households, only 11% were of size 2 or less and about 75% had 3 to 6 members, while for female the corresponding percentages were 37% and 52% respectively.

Table 4.2 - Distribution of households by sex of head and size of household, Republic of Mauritius, 1990 Census

Household size	Male		Female	
	No.	%	No.	%
1	4,930	2.5	7,406	17.8
2	17,291	8.9	7,801	18.7
3	32,236	16.6	7,437	17.9
4	49,447	25.4	6,350	15.3
5	38,188	19.6	4,717	11.3
6	23,734	12.2	3,171	7.6
7+	28,675	14.8	4,727	11.4
All households	**194,501**	**100.0**	**41,609**	**100.0**

4.3.2 Head of household

The head of household is a person recognised as such by all members of the household. The head may be a male or a female member and not necessarily the oldest person in the household. The number of housing units is determined by the number of households and since each household has only one head, this means that the number of heads is an important information in the study of households and housing.

(i) Characteristics of head

The 1990 Population Census enumerated 236,110 heads of private households of which 194,501 were male, representing about 80% of all heads. Below, in Table 4.3, is the distribution of heads by sex at the two last censuses.

Table 4.3 - Distribution of heads of households by sex, Republic of Mauritius, 1983 & 1990 Censuses

Sex of head	1983		1990	
	No.	%	No.	%
Male	168,154	81.5	194,501	82.4
Female	38,232	18.5	41,609	17.6

As Mauritius is a rather strong patriarchal society, it is expected that a vast majority of heads of households would be male. In fact, the percentage was over 80% for the last two censuses. Small changes, in favour of male heads can be observed in the distribution. There is thus a small fall in the proportion of female heads, resulting in a higher sex ratio of head (defined as the number of male heads per 100 female heads) of 467 compared to 440 at the 1983 Census.

Table 4.4 gives the age distribution of heads of household at the 1983 and 1990 Censuses. It shows a shifting of heads from the lower age group (less than 35 years) and the age group 45-59 years to the age group 35-44 years and the higher age group (60 years and over). This has brought about a rise in the mean age of the head from 46.5 years in 1983 to 47.3 years in 1990. It is also noted that, for almost all age groups, the sex ratio has increased, indicating a fall in the proportion of female heads at the different ages during the intercensal period.

Table 4.4 - Distribution of heads of household by age, Republic of Mauritius, 1983 & 1990 Censuses

Age group (years)	Head distribution		Sex ratio	
	1983	1990	1983	1990
Less than 20	0.2	0.1	326	367
20 - 24	2.7	1.8	835	1,279
25 - 29	9.5	7.1	1,387	2,016
30 - 34	14.4	13.0	1,101	1,662
35 - 39	12.7	15.3	763	1,052
40 - 44	10.4	13.2	563	635
45 - 49	10.9	10.4	441	457
50 - 54	9.5	9.4	368	349
55 - 59	10.7	8.3	288	296
60 - 64	7.5	8.1	240	242
65+	11.5	13.3	168	174
All ages: Percentage	**100.0**	**100.0**	**440**	**467**
Number	**206,386**	**236,110**		

As expected the median and mean ages of head increase with household size as shown in Table 4.5. The increase starts as from size 3. A great number of the households with one or two members consist of relatively old persons whose children have moved out to form a new household after marriage, hence, higher mean age and median age of the head.

Table 4.5 - Mean and Median age of head of household, Republic of Mauritius, 1990 Census

Household Size	Mean Age	Median Age
1	58	62
2	50	51
3	43	38
4	43	40
5	46	44
6	48	47
7	51	50
8	52	52
9	54	54
10+	56	57
All households	**47**	**45**

As regards the marital status, most heads of households were married. Out of the 236,000 heads, 78% were married either religiously and civilly, religiously only, civilly only or lived in consensual union. Approximately 18% were either widowed, divorced or separated whilst only 3% were single. The situation has hardly changed since 1983. Since sex differentials among householders are quite large, it is important to look at the distribution of heads of households by marital status and sex, as shown in Table 4.6.

Table 4.6 - Distribution of heads of households by marital status and sex, Republic of Mauritius, 1990 Census

Marital Status	1983		1990	
	Male	Female	Male	Female
Single	3.5	6.7	3.0	5.1
Married	92.7	13.1	93.1	9.3
Widowed/Divorced Separated	3.8	80.2	3.8	84.7
Not stated	-	-	0.1	0.9
All heads: Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number	**168,164**	**38,222**	**194,501**	**41,609**

It is observed that most of the male heads of household were married and the rest was shared between the single and the widowed/divorced/separated group into approximately equal proportion. A small percentage of the female heads was single and nearly one tenth were married, while most of them were widowed, divorced or separated.

Comparing the above distribution with that of 1983 Census, it is found that the situation was almost the same for the male, whereas for the female the proportion of married head witnessed a fall in favour of the widowed/divorced/separated group.

(ii) Headship Rates

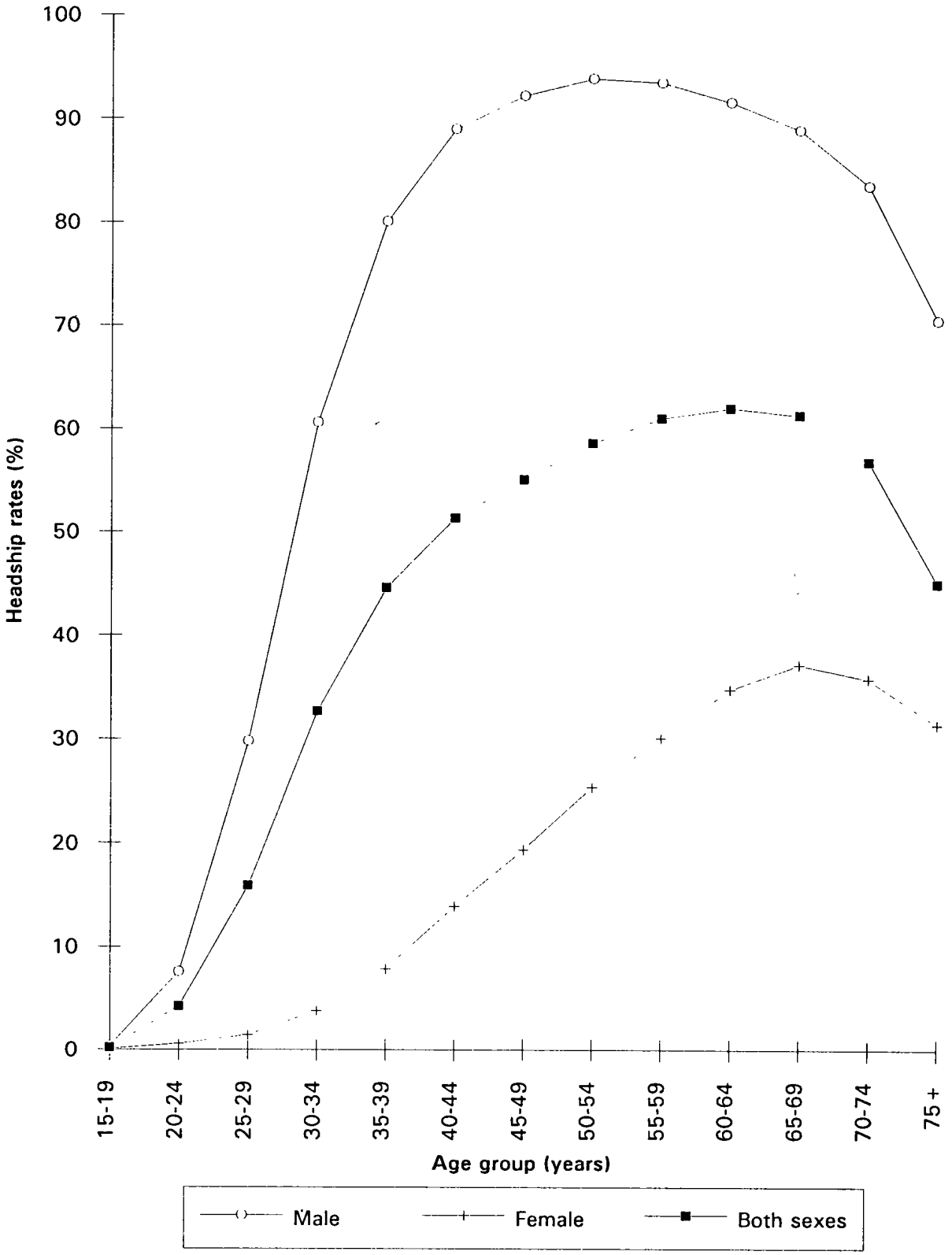
Data on householders, when classified by age and sex are important to understand household formation and evolution. The headship rate by age and sex is defined as the ratio of heads of household to the population in that age-sex category. If available in time series, the headship rate by age and sex is valuable for learning various aspects of the structural changes of households. Also, the headship rates are often used as an important tool for making projections.

Table 4.7 gives the age-specific headship rates by sex with five-year groupings and Figure 4.1 shows the pattern of the rates for both male and female, and the two sexes together.

Table 4.7 - Age-sex specific headship rates (%), Republic of Mauritius, 1990 Census

Age group (years)	Male	Female	Both sexes
15-19	0.4	0.1	0.2
20-24	7.6	0.6	4.2
25-29	29.8	1.5	15.9
30-34	60.6	3.8	32.7
35-39	80.1	7.9	44.6
40-44	89.0	13.9	51.4
45-49	92.2	19.4	55.1
50-54	93.9	25.4	58.6
55-59	93.5	30.1	61.0
60-64	91.6	34.8	62.0
65-69	88.9	37.2	61.3
70-74	83.5	35.8	56.8
75+	70.5	31.4	45.0

Figure 4.1 - Headship rates, Republic of Mauritius, 1990 Census



As expected, the headship rates increased with age to a maximum, then decreased rather sharply. For the total population, the peak was at age group 60-64 years. The proportion of heads of households differed largely between the two sexes and in the different age categories of the population ranging from over 90 per cent in some categories down to nearly zero in others. The male rates were consistently higher than the female rates at every age, the gap being the greatest at age group 40-44 years. The low female headship rates reflect the custom of patrilineal societies where headship is normally accorded to males.

The graph shows an inverted U-shaped curve skewed to the left for the male rates, i.e., there is a heaping of values towards the right at the upper end of the distribution. Males become heads of household at various ages, mostly as from the age of 30 and nearly all are heads by age 50. They showed an increase over age attaining a peak of 94% around 50-54 and then a decrease. However, for females the level of headship rates was extremely low at younger ages and increased substantially after age 40. The peak was at age group 65-69 with a rate of 37% . The pattern is also an inverted U-shaped curve but with a much higher skewness to the left.

Since households are usually formed when marriages take place, the marital status of an individual, apart from his age, is an important determinant of the incidence of headship. Divorce, separation or the loss of partner may also result in a person, more often a woman, assuming the responsibility of head. Thus, the study of headship rates by sex, age and marital status is essential to understand the evolution of household.

Table 4.8 - Headship rates by sex, age and marital status (%), Republic of Mauritius, 1983 & 1990 Censuses

Census Year	Age group (years)	Male				Female			
		Total	Single	Married	W/D/S[1]	Total	Single	Married	W/D/S[1]
1983	20-24	9.2	1.9	59.3	19.5	1.1	0.7	1.0	12.5
	25-29	39.7	6.2	70.4	30.4	2.9	1.9	1.5	28.1
	30-39	74.2	15.1	84.5	48.4	8.1	6.5	2.4	55.5
	40-49	90.3	30.1	95.0	69.3	17.9	19.0	3.3	80.5
	50-59	92.6	42.7	96.4	76.9	28.7	31.0	4.4	74.5
	60+	83.8	45.7	90.5	62.4	34.1	33.7	7.7	47.7
	All ages	**61.3**	**6.9**	**86.7**	**62.4**	**13.5**	**4.9**	**2.8**	**57.2**
1990	20-24	7.6	1.6	50.2	17.6	0.6	0.4	0.4	12.2
	25-29	29.8	4.0	62.2	25.6	1.5	1.3	0.6	23.0
	30-39	69.7	11.2	82.7	40.0	5.7	4.3	1.3	53.3
	40-49	90.4	29.5	95.1	64.8	16.3	14.2	2.4	77.3
	50-59	93.8	42.4	97.3	77.4	27.5	27.0	3.4	77.5
	60+	86.4	45.5	92.5	65.7	34.8	34.5	5.3	50.7
	All ages	**60.8**	**6.0**	**85.8**	**60.6**	**12.7**	**4.4**	**1.8**	**58.7**
% Change	20-24	-17.5	-17.2	-15.3	-10.0	-44.7	-37.4	-59.0	- 2.2
	25-29	-25.0	-36.6	-11.7	-16.0	-46.8	-31.7	-61.4	-18.0
	30-39	- 6.0	-25.5	- 2.1	-17.5	-29.5	-33.4	-43.4	- 3.9
	40-49	0.2	- 1.9	0.1	- 6.5	- 8.9	-25.3	-26.9	- 4.0
	50-59	1.3	- 0.8	0.9	0.6	- 4.1	-13.1	-23.6	3.9
	60+	3.2	- 0.4	2.1	5.4	2.0	2.3	-31.1	6.2
	All ages	**- 0.8**	**-13.3**	**- 1.1**	**- 2.9**	**- 5.4**	**- 8.8**	**-34.7**	**2.6**

W/D/S[1]: Widowed, divorced & separated

Table 4.8 gives the age-sex-marital status specific headship rates for the 1983 and 1990 Censuses. Among the marital status groups, the single shows the lowest value since a single person would rarely be the head of a household unless he is the only member. It is also noted that the male rates were usually higher than the female rates as expected in a patriarchal society where the head is the male.

Between 1983 and 1990, male headship rates decreased for ages up to age 40, but consistently increased at older ages showing improvement in mortality of the older male. However on the whole there was a decline, which was predominantly due to the fall in the headship rates among the young single males. The proportion of head among the young widowed, divorced or separated also dropped, but increased for the higher age groups. Even for the married males, the headship rates among the young ones fell but showed some marginal increases at older ages. This is indicative of the fact that household formation has not been as fast as marital status distribution would call for and this may be due to economic reasons and the socio-cultural ties within families.

The female headship rates witnessed bigger falls than the male rates at almost all ages. The decrease was most significant among the married females and it occurred at all ages. Only among the old single, widowed, divorced and separated females did there occur a slight increase in headship rates. On the whole, female headship rates fell over the period, and this would have been more pronounced but for the increasing proportion of widowed, divorced and separated females and the increase in headship rates thereof.

4.4 Household composition

4.4.1 Family nucleus

For the 1990 Population Census, the 236,000 private households in the Republic of Mauritius contained about 250,000 family nuclei. A family nucleus is defined as a couple with or without unmarried children or a lone parent with unmarried children.

Table 4.9 shows the distribution of households by the number of family nuclei at the 1983 and 1990 Censuses. The slight change observed in the distribution of households by number of family nuclei in household towards households of 1 or more family nuclei explains the small rise in the average number of family nuclei per household. There were 1.06 family nuclei to a household compared to 1.03 in 1983 showing a very slight increase in the past years inspite of the tendency towards the splitting up of extended families and increase in housing.

Table 4.9 - Distribution of households by number of family nuclei per household Republic of Mauritius, 1983 & 1990 Censuses

Number of family nuclei per household	1983		1990	
	Number	Percentage	Number	Percentage
0	17,282	8.4	16,689	7.1
1	168,127	81.4	193,128	81.8
more than 1	20,977	10.2	26,293	11.1
All households	**206,386**	**100.0**	**236,110**	**100.0**

It is noted that on average there were 1.04 family nuclei to one household in urban areas whereas a rural household contained 1.07 family nuclei. This indicates that in urban areas there was a

greater proportion of one-nucleus households, i.e., nuclear households consisting entirely of a single family nucleus, or households of the extended or composite type with a single family nucleus plus other persons. Therefore, it is expected that urban household size is lower than that of the rural as stated earlier.

Table 4.10 shows the average number of family nuclei per household by household size at the 1983 and 1990 Censuses. The number of family nuclei increased with household size as it is expected. Comparison over time shows that the increase observed in the number of family nuclei spread throughout every household size, and was greater for the larger households.

Table 4.10 - Number of family nuclei per household by household size, 1983 & 1990 Censuses

	Household size										
	1	2	3	4	5	6	7	8	9	10+	All households
Republic of Mauritius											
1983 census	0	0.86	0.97	1.01	1.06	1.13	1.21	1.31	1.43	1.87	**1.03**
1990 census	0	0.89	0.98	1.02	1.09	1.20	1.35	1.51	1.71	2.29	**1.06**
Island of Rodrigues											
1990 census	0	0.86	0.98	1.02	1.07	1.11	1.16	1.18	1.22	1.44	**0.99**

The 1990 figures for Rodrigues show that there was an increase with household size but to a much lesser extent. For household with 10 or more members, there was a difference of nearly one family nucleus when compared to that of Island of Mauritius where there were on average 2.35 family nuclei in such households. Though this small island had a larger average household size of 4.8 compared to 4.5 for the Island of Mauritius, it had on average only 0.99 family nucleus in a household, showing that few of its households were extended or composite households with more than one family nucleus. The bigger size was most probably due to a greater number of children in the family. This may be confirmed when looking at the composition of household by relationship to head.

It is also interesting to view the household composition from a different angle, i.e., by size of the different types of household. In 1983, the one family nucleus household had an average of 4.8 persons and those with two nuclei had 7.4 persons as compared with the 1990 figures of 4.3 and 6.8 respectively. The size of the zero family nucleus household and those with three or more nuclei slightly dropped from 1.5 to 1.4 and from 10.1 to 9.7 respectively. An average fall of 0.5 member occurred in households with one family nucleus and of 0.6 in two-nuclei households. Thus, the real fall in household size has taken place mostly in the one-family nucleus household, with its preponderance among all households (82%) and partly to two-family nuclei households. This fall must have happened mostly through fertility reduction.

4.4.2 Relationship to head

Table 4.11 shows the composition of an average household at the 1990 Census. The 1983 figures are also given for comparison.

At the 1990 Census, the average household comprised 1 head, about 0.8 spouse and 2.1 children, representing 22%, 17% and 48% respectively of household members. Ever-married children and their family, representing 0.4 member, constituted about 9% of the household. Other

relatives and non-relatives represented slightly less than 6% of an average household. The disaggregated components of the household added up to an average size of 4.8 for 1983 and 4.5 for 1990. This shows a drop of 0.3 person per household which was attributed mostly to children present in the household. Figures show that the proportion of children in the household population fell from 51% to 48% in that period. They further demonstrate that it was mainly the single children who contributed to this decline. It can also be noted that parents of the head constituted about one third of the 0.25 other relative, the proportion of parent being about 1.5% of the resident population in households.

Table 4.11 - Composition of an average household, 1983 & 1990 Censuses

Relationship to head	Republic of Mauritius		Isl of Rodrigues
	1983	1990	1990
Head	1.00	1.00	1.01
Spouse	0.75	0.77	0.77
Child	2.48	2.15	2.66
ever-married	(0.12)	(0.14)	(0.09)
single	(2.36)	(2.01)	(2.57)
Spouse of child	0.08	0.10	0.04
Grand child	0.20	0.19	0.20
Other relative	0.26	0.25	0.13
Other & NS	0.04	0.01	0.02
Household size	**4.81**	**4.47**	**4.82**

The composition of the household in Rodrigues shows that an average household contained about 2.7 children, representing 55% of the household population. The proportion of ever-married children was just below 2% compared to 3.2% for the whole country. Also, relatives including parents of head constituted only 2.7% of the household population while the corresponding percentage for the whole country was 5.5% . From the above analysis, it can be said that the larger household size in Rodrigues is mainly due to the presence of more unmarried children in the family rather than the existence of extended or composite households with more than one family nucleus. The high fertility regime in the past contributed to this situation.

Looking at the presence of spouse in household, it is seen that 93% of male headed households were with spouse, the remaining households had widowed, divorced, separated or single male heads. Only 4% of households having female heads were with spouse, female heads being mostly widowed, divorced and separated. The number of households with spouse present has been on the increase for both male and female headed households.

Table 4.12 - Number of married heads and spouses by sex, Republic of Mauritius, 1990 Census

Sex	Married heads	Spouses
Male	180,915	1,818
Female	3,855	180,376
Both sexes	**184,770**	**182,194**

It is interesting to point out the discrepancy that exists between the number of married heads of household and the number of spouses as shown in Table 4.12. Over 2,500 spouses are missing. When the figures are analysed by sex, the cases of female head/male spouse seem to

contribute largely to this discrepancy. It is thought that this difference has occurred mainly because many female heads reported themselves as married when they were in fact separated or divorced.

4.4.3 Characteristics of household members

Table 4.13 gives the distribution of household members by relationship to head, age and sex.

Regarding the spouses of head, 99% were found to be female, again showing that nearly all Mauritian households were male headed. Less than one tenth of them were below the age of 25. Female spouses seemed to be younger than male spouses. The mean age difference between the male head and female head at the 1990 Census approximated 10 years. It was also found that, on average, the head was about 7.5 years older than the spouse.

Table 4.13 - Distribution of household members by relationship to head, age and sex. Republic of Mauritius, 1990 Census

Relationship to head and sex	Age group (years)							
	15-19	20-24	25-34	35-44	45-54	55-64	65+	All ages
Spouse	**2,316**	**14,975**	**61,198**	**51,676**	**28,937**	**16,443**	**6,618**	**182,163**
Male	11	55	379	445	328	333	265	1,816
Female	2,305	14,920	60,819	51,231	28,609	16,110	6,353	180,347
Child	**84,684**	**67,728**	**68,875**	**15,257**	**2,402**	**439**	**52**	**239,437**
Ever married	761	4,777	19,277	7,230	1,113	211	30	33,399
Male	171	2,524	14,193	4,625	541	84	2	22,140
Female	590	2,253	5,084	2,605	572	127	28	11,259
Single	83,923	62,951	49,598	8,027	1,289	228	22	206,038
Male	44,922	40,871	33,667	3,559	582	98	5	123,704
Female	39,001	22,080	15,931	4,468	707	130	17	82,334
Spouse of child	**2,353**	**8,017**	**10,938**	**1,984**	**287**	**83**	**34**	**23,696**
Male	34	468	2,050	830	178	59	18	3,637
Female	2,319	7,549	8,888	1,154	109	24	16	20,059
Parent of head	**-**	**-**	**-**	**179**	**1,299**	**4,130**	**11,358**	**16,966**
Male	-	-	-	3	92	531	2,228	2,854
Female	-	-	-	176	1,207	3,599	9,130	14,112
Other relative	**3,838**	**5,619**	**9,174**	**4,836**	**2,595**	**2,790**	**6,543**	**35,395**
Male	1,955	3,270	5,302	1,856	1,008	987	1,381	15,759
Female	1,883	2,349	3,872	2,980	1,587	1,803	5,162	19,636

Out of 508,700 children living with their parents, only about 7% were currently married or had been married in the past, as it is usual for a child to move out of the family and form a new household at marriage. 66% of the ever married group were male. The corresponding figure for the currently married children was 80%, indicating that it is much more likely for a male child to get married and still be a member of the household than in the case of a female child. This is confirmed by the high proportion (85%) of female among spouse of child. 94% of the ever married children were found within the age group 20 to 44 years.

260,200 of the 508,700 children present in households were single and under the age of 15 years. As expected, the proportion of single children living with head decreased with age, being

about 57% for children below 15 years, 31% for age group 15 to 24 years and 10% for age group 25 to 34 years, and only a very small proportion was older than that. Among the single male children, about 29% was within the age group 20 to 34 years, while the corresponding female proportion was only 18%. The presence of more single male children of that age group in the household confirms that females usually marry earlier.

Parents living with the head of household numbered about 17,000 and the higher proportion of female, over 80%, indicates higher male mortality. As the median age of head was about 45 years, it is reasonable to find that over 90% of parent of head were above 55 years.

Among the 41,600 other relatives living in the households, 6,200 were below 15 years and nearly 55 % were female. It is interesting to note that among the male relatives 45% were within the age group 20 to 34 years and only 7% above 65 years, while the corresponding percentages for female were 27% and 23 % respectively.

Chapter 5

FUTURE PROSPECTS

5.1 Housing needs and demand

The needs and demand for housing are mainly influenced by demographic, economic, social and physical factors.

The population growth is an important factor in determining housing needs. However, changes in population structure are more important than population size in household formation, the determining factors of the population structure being the age, sex and marital status. For example, every married couple is expected to need a separate home. Sometimes, the widowed, divorced and separated persons require their own dwellings. Thus, the basic demographic variables are important to assess family formation and housing needs. Headship rates reflect these to a large extent.

Most of the overcrowding is due to economic reasons. Families of low income level cannot afford to own or rent a house. Basic requirements like food and clothing consume most of the income and housing has low priority. Harsh economic conditions and high rents force families to join together and form larger households. Hence, family affordability for housing, i.e., how much of the family income may be spent on shelter, determines the demand for housing. Due to a more favourable economic situation in the country and a higher proportion of working members in the household, many families are better off. The affordability to construct, buy or rent a house has considerably gone up these past years, thus increasing the demand for housing.

Housing needs are also affected by sociological factors such as the doubling up in the joint families. The splitting up of the joint family system as a consequence of industrialisation and social and economic development may result in a fall in household size and a consequent rise in the demand for housing. There are also some psychological factors like attachment to a particular house or locality specially by the old or lone persons. On the other hand, there are families, who for purposes of education of their children and other reasons prefer to occupy overcrowded or inadequate housing even when alternate accommodation is available at other location.

Future housing needs are affected by physical factors such as life of building, vacancy rate and climatic and geographic situation. The better and stronger the quality of housing, the lesser will be the depletion of buildings, and hence lower demand for housing. On the other side, violent cyclones may bring down the stock of houses, hence raising the demand for housing.

The existing legislation as well as government intervention in the housing sector also play a role in determining the housing demand. Creation of bodies such as the Mauritius Housing Company Ltd and the various financial incentives offered will help meet the demand for housing.

5.2 Projection of households

In order to estimate the future housing needs, the projected number of households is required. The Headship Rate method which is widely applied in many countries is used to project the number of households. Although this method does not directly take into account the dynamic aspects of the family life cycle, namely formation, growth and dissolution of households, it certainly has methodological advantages over many other methods of projection. As it employs available population projection by sex, age and marital status as its base, it can reflect changes in population composition which largely affect the size and proportion of households. The Headship Rate method also provides

useful information such as the distribution of future heads of households by demographic characteristics which is needed for economic and social planning purposes.

The future number of households is obtained by applying specific headship rates estimated for the future years to the corresponding population projections.

5.2.1 Projection of Headship Rates

It would have been more appropriate to project the headship rates by age, sex and marital status categories and apply the rates to corresponding population. But, this requires population projection of marital status group, which has not been prepared. Hence, attempt will be made to project headship rates only by age group and sex, taking into account changes that are expected to occur in the marital status distribution under the influence of demographic and socio-economic factors.

The changes and patterns observed in the headship rates between 1983 and 1990, as described in Chapter 4, Section 4.3.2 (ii), portend further fall in headship rates for both males and females. The widowhood rate will fall as a consequence of continuous improvement in the mortality of both sexes. However, if there is corresponding increase in divorce and separation due to socio-economic changes, then some of the fall in headship rates may be cushioned.

According to the age-sex-marital status distribution, it is found that males become widowed at much higher ages than females. Since the males are dying earlier than the females, the latter become heads on widowhood. In addition to the observation that mortality improvement occur for both male and female, though it is favourable to the female, it is to be noted that the male/female gap is closing at the older ages. It implies that the differences in male and female life expectancy at old ages have gone down. Thus, widowhood will decrease at older ages for female, and consequently female headship rates will continue to fall in the future. On the other hand, male headship rate at the older ages may increase, though not as fast as the observed 1983-1990 change.

From the above, it can be assumed, for the purpose of household projections, that the female headship rates will continue to fall with the same rate of decrease. For the males, it is expected that the rate of increase of headship rates will be only half of that observed in 1983-1990 for ages 40+, while at the lower age-groups the rates will decrease at the same rate of decline.

5.2.2 Projected number of households

Population, based on the 1990 Census figures adjusted for the underenumeration of young children and after prorating "Not stated" ages, has been projected up to year 2010 with certain assumptions on fertility, mortality and migration.

Table 5.1 - Number of heads of households by sex, Republic of Mauritius, 1995 - 2010

Sex of head	Projection Year			
	1995	2000	2005	2010
Male	214,500	234,100	254,600	274,700
Female	45,600	50,800	57,400	64,700
Total	260,100	284,900	312,000	339,400

The headship rates by age and sex are then operated on the corresponding projected population to obtain the projected number of heads by age and sex. The total by age gives the number of heads by sex, hence the number of households, as shown in Table 5.1.

A continuous increase is noted in the number of households from about 236,000 in 1990 to nearly 340,000 in the year 2010. It shows a 44% increase for the twenty-year projection period while in the eighteen-year intercensal period 1972 to 1990 the increase was slightly bigger, i.e., 48% .

The average annual growth rate of the number of households for the projection period is 1.8% . With a projected population growth rate of nearly 1% , a continuous fall is expected in the average household size from 4.5 in 1990 to 3.8 in 2010, showing a 16% decrease.

5.3 Estimation of housing needs

The projection of housing needs is to be based on the level of housing required for the forecast population, with the objective of providing decent shelter for all families. The exercise involves the estimation of gross demand, resulting from population increase and formation of new households, and the estimation of net demand, taking into account the gradual wearing out of buildings and the vacant housing units.

Table 5.2 - Estimation of housing needs, Republic of Mauritius, 1990-2010

	Projection Period				
	1990-1995	1995-2000	2000-2005	2005-2010	1990-2010
Stock at beginning of period	223,800	266,700	311,500	357,600	-
New households	24,000	24,800	27,100	27,400	103,300
Stock replacement (Dilapidation rate %)	13,100 (1.2)	14,300 (1.1)	15,300 (1.0)	15,800 (0.9)	58,500
Backlog	5,000	5,000	3,000	2,000	15,000
Vacant stock of additional housing (Vacancy rate %)	800 (2.0)	700 (1.5)	500 (1.2)	400 (0.9)	2,400
Total needs	**42,900**	**44,800**	**45,900**	**45,600**	**179,200**

The projected housing needs are shown in Table 5.2. The additional housing units required due to new household formation at the different five-year projection periods are obtained from the household projection figures, assuming one household is to be housed in one housing unit.

To estimate the net housing needs, certain assumptions are required on the dilapidation rate and vacancy rate. The projected dilapidation rate and vacancy rate for the different five-year periods are also given in the table. The vacancy rate is seen to decrease at an average annual rate of 5% (from 3.6 in 1983 to 2.5 in 1990) during the intercensal period 1983-1990. It has been assumed that vacancy will continue to fall at the same rate throughout the projection period. The vacancy rate, which allows for a turnover of housing among owners and tenants, is computed for the projection period and the number of vacant units out of the additional stock calculated. The dilapidation rate, which was estimated at 1.5% in 1983 and at 1.3% in 1990 is expected to decrease further as a result of the construction of stronger buildings with longer life length. The 2% annual rate of decrease observed between the last two censuses is assumed up to year 2010. The dilapidation rate is calculated, and subsequently the stock replacement for each five-year period.

In order to eliminate the existing backlog, the unmet demand has to be assessed. The backlog at the 1990 Census was found to be about 15,000 units, assuming one household is to be

housed in one housing unit. The figure includes 2,000 secondary residences as surplus of housing in certain regions, and which cannot be considered for the estimation of housing needs. It is assumed that this shortfall of 15,000 units will be spread over the twenty-year period as shown in table. Hence, the total of additional housing units that will be needed up to year 2010 amounts to nearly 180,000. An average of 9,000 units has to be constructed every year to eliminate the backlog of unmet demand and to satisfy the housing needs of new households. This gives an average of 8 units per 1,000 popualtion as compared with much larger figures for developing countries. The lower figure for Mauritius is mostly due to the lower growth rate of the population.

The government objective is to construct some 3,000 housing units every year through the National Housing Development Company Ltd, which was set up in 1991 to execute the housing programme. The initial target set was to build 5,000 housing units yearly. But the objective was modified due to the contribution of the private sector which has been given several incentives.

The private sector will have to cater for the remaining 6,000 housing units. The average number of building permits issued for new residential buildings over the last three years, 1990-1992, was about 4,900 and permits for addition of housing units to existing buildings was about 600. This gives an addition to stock of some 5,500 units. If the housing needs are to be fully met, then the private sector requires some more boost up to satisfy the demand.

Some other points have to be considered while estimating the housing needs. It has been assumed that each household is to be housed separately in a housing unit due to factors such as split in the extended family system, growing personal income and changes in the mode of living. But, some households will still be doubling up with others. Then, the estimated housing needs will be reduced. If, during the period 1990-2010, an average of 10% of all households as against 16% in 1990 is assumed to share housing unit with other households, the housing needs will decrease by some 18,000 units for the same period.

It should also be noted that a non-negligible number of residential buildings are being converted to other uses, mainly commercial and industrial, hence the loss of housing units. No data are available to estimate the loss. However, the conversion rate is not so high as to affect the estimation of housing needs.

5.4 Some main issues

5.4.1 Constraints to housing

(i) Land

A major constraint to housing is the use of land for construction. Land, being a limited resource, is in short supply for housing, specially in the towns and their outskirts. Thus, individuals who wish to construct their own house are confronted with the continually increasing price of land. The purchase of land for the construction of a house is almost impossible for those families with low income. The high prices of land combined with the increasing cost of construction have made some people give up the hope of ever owning a house.

(ii) Construction cost

Another constraint for people who wish to build a house is the construction cost. The rises in the construction cost, mainly caused by the increase in the cost of building materials, shortage of labour in the construction industry and inflation, contribute to the reduction of the capacity of the economically weak to own their house. Building materials account for between 40% to 60% of total construction cost. The country depends largely on imported materials, which may take up to 90% of the

total cost of materials used. Increasingly larger volume of cement, iron and steel is being imported, hence the loss of foreign exchange. According to the three-year National Development Plan 1992-1994, the government objective is to minimise cost of construction. There is, therefore, the need to develop and adopt new approach and technique to improve productivity and bring down housing cost within the reach of more people.

(iii) Shortage of labour

Labour, being the second most important input to construction, represents about 40% of construction cost which is much higher than that in countries like India and Malaysia where the percentage would not exceed 30% . Skilled labour for construction and related works is in shortage, and there has been consequent rise in the wages of these workers. The housing sector does not easily hold its employees and recruit new ones. Recently a few construction firms had to import labour at cheaper rate. Some enterprises even set up training programmes for their employees. Shortage of labour also slows down the rate of construction.

(iv) Finance

Finance for housing is obtainable from sources like commercial banks, insurance companies and organisation such as the Mauritius Housing Company Limited. Loans with special rate of interest and facilities of repayment are provided for the construction, repair and addition, and purchase of houses as well as for the purchase of land for the purpose of construction.

The main objective of the Mauritius Housing Company Ltd is to help as many Mauritians as possible to become home owners or improve existing homes by making loans available at cheap cost. The MHC Ltd caters mainly for the lower and middle income group. Loans provided to prospective owners have been on the increase. The average yearly (financial year) number of loans approved was about 1,000 for the period 1984-1989 and reached nearly 3,500 for the financial year 1991-1992, with a value amounting to Rs519 million.

The Plan Epargne Logement, launched in 1988 to raise funds to finance housing loans, has been a success. The number of account holders reached nearly 40,000 in 1992 with a balance of about Rs185 million. The yearly number of new accounts more than doubled from about 7,000 in 1989 to nearly 16,000 in 1992. Several incentives are offered to PEL savers such as tax exemption, tax-free bonuses and interest. They also have a preferential right to a housing loan from the company.

The government took several steps to allow Mauritians to have the necessary credits for the purchase of land or a house or for construction such as lowering the interest rate on loans taken at the MHC Ltd and extending the period of repayment. It also increased the exemption of registration duties on the first acquisition of land or house.

With such incentives and facilities offered to the public there has been a substantial increase in the proportion of households living in owner-occupied dwellings. At the 1990 Census, 76% of households were owners of their dwellings as compared to 67% in 1983. This proportion will rise further as a result of the recent steps taken by the government in the housing sector.

5.4.2 Future type of housing

During the past years, there has been the tendency to construct multi-apartment residential buildings or semi-detached houses. Land is scarce and it would be uneconomic to use agricultural land for the construction of houses. Hence, the trend to high rise apartment is inevitable. Mauritius has to move slowly into the age of multi-storeyed apartments and the people have to get used to living in height. But some promoters have engaged in the construction of apartments without any

professionalism and without any study of the market. There has been unplanned construction without any standard for aeration and security. On the other side, there has been reasonable construction satisfying the basic requirements.

It is reasonable to construct medium-rise buildings with three or four storeys without lift. But construction of multi-apartment buildings requires a sound management of common areas. The proprietors need to group into association which will collect service charges from the households and organize maintenance, cleaning and repair. Hence, it is important to set up and introduce the appropriate legislation to define and control the right of property and for the efficient management of this type of housing.

For future type of construction, the preference of the Mauritians to live in detached houses has to be considered. Some people in the urban areas, who are not ready to live in apartments, moved out of the towns. In some parts of the urban areas demand for apartment is rather high, but quality is looked for. Also, the evolution of the society has to be taken into account when designing houses and planning new housing projects. The family size needs to be taken into consideration. Rural housing requires larger units with more rooms as the household size is greater than that in the towns. Among the NHDC Ltd projects, the rural apartments have a higher proportion of three-bedroom units for the large families as compared to the urban ones. Furthermore, the house should be spacious enough to accommodate what are considered necessary household appliances. The Mauritian family is now better educated with higher income, more concerned with health and environment and aspiring to a higher quality of life.

Though the social policies of the country have always considered the people in unfavorable economic situation, housing accommodation has not always been within the reach of the old people, the pensioners, single parent families and the handicapped. Appropriate housing should be provided for this category of house seekers who have limited capacity to pay.

5.4.3 Provision of infrastructure

The construction of buildings is not sufficient and does not solve the housing problem. The necessary amenities and infrastructure such as water, sewerage, electricity and roads should be accessible to all occupants. New settlements should be provided with schools, social and health centres, shopping centres, police station, etc. The government intends to develop and provide all necessary infrastructure in these regions where there is housing development, and has allocated considerable financial resources to that sector. In addition to the large subsidisation of the NHDC buildings constructed, the government also bears the cost of the necessary on-site and off-site infrastructure on these housing sites so as to keep prices of the housing units within the reach of low income families. The development of infrastructure should always go along the development of new areas for housing.

The government has also decided to improve the infrastructure and services of the existing housing estates and those of the sugar industry. The post-cyclone public sector housing estates and the sugar estate camps, lacking appropriate and adequate amenities and services, urgently need major improvement and upgrading. The rehabilitation of some estates is already underway.

5.4.4 Physical planning

Since the housing problem varies from place to place and houses cannot be moved from one place to another, and also since a shortage of housing at one place cannot be compensated by a surplus at another, projections of housing needs would be more accurate if considered at small area levels instead of at the national level. A breakdown of the needs at regional level will result in better and

more meaningful estimates. Also, more land should be provided for housing to satisfy the needs of the growing population. But, land for housing is in short supply, hence, planning is very important. Any housing project should take into account the requirements of agricultural land preservation, the protection of the country's natural resources and preservation of its flora and fauna.

Land is required not only for construction of houses, but also for various uses such as agriculture, economic and social activities, transport, office development, etc. Though the population growth is slow, Mauritius has one of the highest densities in the world, and the demand for scarce land resources is increasing as a result of accelerated development. The land has to be allocated judiciously among the various competing uses. But, how to minimise conflicts in the use of land? How to make optimum use of this scarce resource without affecting the environment? How to improve the quality of life, while at the same time ensuring economic development of the country?

There was an urgent need for a physical development plan to ensure the optimum use of the scarce land in the overcrowded island. The country has been showing signs of pollution, which are of concern to the environment - industries with chemical dye effluents; hotels interfering with natural resources; increased urbanisation leading to congestion. A regional type of planning is, therefore, essential as it is important that there is no misuse of resources and land. The Ministry of Housing, Land and Town and Country Planning has embarked on this difficult task through the preparation of the National Physical Development Plan (NPDP). The study, which covers the whole of the country, including Rodrigues and the Outer Islands, has been undertaken in three stages and was completed at end of 1993. The National Physical Development Plan relates to the preparation of a strategic plan that would guide all future investment from a locational angle. It is a geographical base for the future location of all economic and social infrastructure, be it agriculture, industry, housing, tourism, education and so on.

The objective of the NPDP is to help to minimise conflicts between various land uses, maximise economic benefits, while at the same time protecting environmental assets and increasing quality of life. It encompasses socio-economic activities, solutions to road transport, agriculture, industrial, tourist and office development, human settlements as well as terrestrial and marine ecosystems. To carry out the task, the plan worked through the analysis of the existing population and its projection, its composition by age and sex, active member, school population, etc on a spatial basis. Hence, needs like employment, housing, health, education, etc can be assessed over a certain number of years and their land requirements appropriately provided. The plan is over a period of twenty years up to year 2010, but comprises short term objectives over a span of five years.

Chapter 6

CONCLUSIONS

1. The analysis shows significant increase in the housing stock. But there is still an urgent need to boost up the supply of housing which has been lagging behind the demand. Government policy for the housing sector should keep pace with the growing population and the formation of new households in order to satisfy the demand.

The demand for housing comes mainly from the low income and the lower middle income group, while the type of housing supplied is mostly for the higher income group. The government must cater mostly for the economically weak, particularly the old persons living on their own, the widowed and the disabled.

2. There has been considerable improvement in the living conditions of the people. But there can be further improvement through the provision of proper infrastructure such as water, sewerage and electricity, specially in the regions where the problem is more acute. Census data tabulated at low geographical level helps in the formulation of programmes which need to be related to specific regions.

3. The projection of housing needs has been done at the national level. But, it is advisable to consider projection at small area levels since housing problem differs from place to place. A shortage of housing at one place cannot be compensated by a surplus at another. Hence, a breakdown of the needs at regional level will result in better and more meaningful estimates.

Also, census data helps to identify those regions with high housing shortage. But physical planning and judicious allocation of land to various uses does not always make it feasible and easy to bring housing to these people. In some cases, particularly in the urban regions, increasing the density of the highly populated agglomerations may aggravate certain problems or create new ones. Hence, incentives and provision of basic amenities, essential services and infrastructure will encourage people to move.

4. As land is a limited and expensive resource, the tendency nowadays is to construct high rising multi-apartment residential buildings. These buildings may not attract people who would prefer to live in detached houses. Therefore, the preference and needs of people have to be taken into account when setting up housing policies, while at the same time have proper educational campaign for them to realise the inevitability of the trend to multi-apartment buildings.

However, this modern type of housing should be adopted cautiously. Too close proximity to neighbours, insufficient privacy and open space, etc may cause social and psychological problems. Appropriate legislation should also be available for management and upkeep of this particular type of settlement.

5. Census data shows improvement in the housing conditions in terms of a lower density per living room. But, has there been real improvement in terms of available space to a person? In fact, quite a number of rooms in the country are too small for comfortable living. Hence housing projects should focus on adequate living space as well as ventilation and pleasant architecture and design, and take into account the expectations of the population always aspiring to higher living standards. Consideration should also be given to the fact that different type and quality of housing are needed over different regions.

6. Information on current building construction is available from building permits issued by Municipal Council in urban areas and the Ministry of Works in rural regions. Problems regarding date of construction cropped up during the analysis. The number of buildings constructed during a period of time did not tally with the number of building permits issued in the corresponding period. Surveys in

sample localities may help to arrive at time lag between issue of permit and completion of building, and to estimate the extent of housing construction without permit.

7. Decrease in the residential building stock is also due to demolition of houses. As no reliable information is available, the rate of dilapidation is estimated from the average life expectancy of building. Surveys may be useful to obtain such information. The housing stock is also reduced through the conversion of houses to non-residential uses. This growing tendency of buildings to migrate from one use to another may also need to be investigated.

BIBLIOGRAPHY

1. Central Statistical Office : 1983 Housing and Population Census of Mauritius

   Volume II : Demographic Characteristics (Island of Mauritius), 1984
   Volume IV : Housing and Living Conditions, 1985
   Volume V : Housing and Population Results (Island of Rodrigues), 1985
   Volume VI : Households (Island of Mauritius), 1985

   Analysis Report :
   Volume III : Households and Housing Needs: Estimates and Implications (Island of Mauritius), 1986
   Volume VIII : Rodrigues: A Population Profile, 1988

2. Central Statistical Office : 1990 Housing and Population Census of Mauritius

   Volume I : Housing and Living Conditions, 1990
   Volume II : Demographic and Fertility Characteristics, 1991
   Volume V : Household characteristics, 1992

3. Task Force Report on Housing, 1991

4. Ministry of Economic Planning and Development, National Developemnt Plan 1992-1994

   Volume 1 : Programmes and Policies, 1993

5. A Corporate Profile, MHC Ltd, 1993

6. Ministry of Housing, Lands and Town & Country Planning : National Physical Development Plan

   Stage I : Survey and Analysis, 1992
   Stage II : Formulation and Evaluation of Alternative Strategies, 1992

7. UN : Methods of Estimating Housing Needs, Series F No.12, 1967

8. UN : Principles and Recommendations for Population and Housing Censuses, Series M No. 67, 1980

9. UN : Manual VII: Methods of Projecting Households and Families, ST/SOA/SER. A/54, 1973

IN STRICT CONFIDENCE

APPENDIX

1990 HOUSING CENSUS — MAURITIUS

I. LOCATION

C01 Geographical District .....

C02 Municipal/Village Council Area/Outside M/V.C.A. .....

C03 Enumeration Area .....

C04 Urban/Semi-urban/Rural .....

C05 Census District .....

C06 Locality .....

C07 Block No. .....

C08 Building Enumeration No. .....

C09 No. of Housing Units in Building .....

II. TYPE OF BUILDING

C10

(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 ☐

(c) Partly Residential

(v) Building used partly for residential and partly for other purposes (e.g. shop dwelling) ... ... 08 ☐

(d) Hotels and Institutions

(vi) Hotel or boarding house with 9 or more rooms ... 09 ☐

(vii) Hotel or boarding house with less than 9 rooms ... 10 ☐ } SKIP TO SECTION V

(viii) Institution (e.g. convent, infirmary, hospital, barracks) ... 11 ☐

(e) Non-Residential

(ix) Public building ... ... 12 ☐ STOP HERE

(x) Commercial ... ... 13 ☐

(xi) Industrial ... ... 14 ☐

(xii) Commercial and Industrial ... ... 15 ☐ } SKIP TO SECTION VI

(xiii) Warehouse ... ... 16 ☐

(xiv) Other : specify ..... 17 ☐

III. CHARACTERISTICS OF BUILDINGS CODED 02-08 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 1960 ... ... 1 ☐
(ii) 1960 - 74 ... ... 2 ☐
(iii) 1975 - 79 ... ... 3 ☐
(iv) 1980 - 84 ... ... 4 ☐
(v) 1985 - 89 ... ... 5 ☐
(vi) 1990 ... ... 6 ☐
(vii) Not known ... ... 7 ☐
(viii) Not completed but inhabited ... 8 ☐

PRINCIPAL MATERIAL OF CONSTRUCTION USED

C13 Roof

(i) Concrete slab ... ... 1 ☐
(ii) Iron or tin sheets ... ... 2 ☐
(iii) Shingles ... ... 3 ☐
(iv) Other : specify ..... 4 ☐

C14 Walls

(i) Stone, concrete, concrete blocks, bricks 1 ☐
(ii) Iron or tin sheets ... ... 2 ☐
(iii) Wood ... ... 3 ☐
(iv) Other : specify ..... 4 ☐

IV. FOR ALL HOUSING UNITS
(i.e. CODES 02-05, 07, 08 OF SECTION II)

C15 SERIAL NO. OF HOUSING UNIT ☐☐

HU1 OWNERSHIP
- (i) Private ... ... 1 ☐
- (ii) Public ... ... 2 ☐

HU2 OCCUPANCY

(a) Occupied
- (i) Principal residence ... ... 1 ☐
- (ii) Secondary residence ... ... 2 ☐

(b) Vacant
- (i) For rent ... ... 3 ☐
- (ii) For sale ... ... 4 ☐
- (iii) Provided by employer ... ... 5 ☐
- (iv) Under repairs ... ... 6 ☐
- (v) Other : specify _____ 7 ☐

HU3 WATER SUPPLY
- (i) Piped water
  - (1) Inside housing unit ... ... 1 ☐
  - (2) Outside, on premises ... ... 2 ☐
  - (3) Outside, public fountain ... ... 3 ☐
- (ii) Tank-wagon (camion-citerne) ... 4 ☐
- (iii) Well/River ... ... 5 ☐
- (iv) Other : specify _____ 6 ☐

HU4 AVAILABILITY OF ELECTRICITY
- (i) Available ... ... 1 ☐
- (ii) Not available ... ... 2 ☐

HU5 TOILET FACILITIES

	Not shared	Shared
(i) Flush toilet connected to sewerage system	1 ☐	2 ☐
(ii) Flush toilet connected to absorption pit or septic tank	3 ☐	4 ☐
(iii) Pit latrine — water seal	5 ☐	6 ☐
(iv) Pit latrine — other	7 ☐	8 ☐
(v) Pail	9 ☐	
(vi) None	0 ☐	

HU6 BATHING FACILITIES

	Not shared	Shared
(i) Bathroom inside with running water ...	1 ☐	2 ☐
(ii) Bathroom inside without running water ...	3 ☐	4 ☐
(iii) Bathroom outside with running water ...	5 ☐	6 ☐
(iv) Bathroom outside without running water ...	7 ☐	8 ☐
(v) None	0 ☐	

HU7 AVAILABILITY OF KITCHEN

	Not shared	Shared
(i) Kitchen inside housing unit ...	1 ☐	2 ☐
(ii) Kitchen outside housing unit ...	3 ☐	4 ☐
(iii) None	0 ☐	

HU8 REFUSE DISPOSAL
- (i) Receptacle with cover ... ... 1 ☐
- (ii) Receptacle without cover ... ... 2 ☐
- (iii) Enclosure made of bricks/stones ... 3 ☐
- (iv) Ash pit ... ... 4 ☐
- (v) Dumped on the roadside ... ... 5 ☐
- (vi) Dumped in backyard ... ... 6 ☐
- (vii) Other : specify _____ 7 ☐

V. HOUSEHOLDS

Household number	Household type *	Name and address of head of household Insert in following order *(IN BLOCK LETTERS)* First line *(a)* : Title (e.g. Mr, Mrs, Ww, Dr, Hon, etc.), name, surname Second line *(b)* : No. and Street/Road/Lane Third line *(c)* : Locality/Town/District	No. of persons T	M	F	Tenure *	Number of rooms for living purposes	for business or prof.	Monthly rent (Rs)	Principal fuel used for cooking *
1		*(a)* : ..... *(b)* : ..... *(c)* :								
2		*(a)* : ..... *(b)* : ..... *(c)* :								
3		*(a)* : ..... *(b)* : ..... *(c)* :								

* *Insert appropriate numerical code :*

Type : Single ... ... 1; Combined ... ... 2; Part of household ... ... 3; Institutional ... ... 4; Hotel population ... ... 5; Not applicable: vacant ... ... 6; under construction 7

Tenure : Owner ... ... 1; Tenant ... ... 2; Sub-tenant ... ... 3; Free ... ... 4; Other : specify _____ 5

Principal fuel used for cooking : Wood ... ... 1; Charcoal ... ... 2; Kerosene ... ... 3; Electricity ... ... 4; Gas ... ... 5; Other : specify _____ 6

VI. COMMERCIAL AND INDUSTRIAL ESTABLISHMENTS, HOTELS AND BOARDING HOUSES

(To be filled in for every non-agricultural private establishment, including those relating to small crafts)

A. Name of establishment or working proprietor/manager *(IN BLOCK LETTERS)* : .....

B. Address : (i) No. and Street/Road/Lane : ..... ☐☐☐☐☐

(ii) Locality/Town/District : ..... ☐☐☐

C. Main activity in which the establishment is engaged : .....

D. No. of persons engaged at the time of enumeration
(Include also persons usually employed full time by the establishment, but who are temporarily absent from work because of sickness, accident, holiday or strike)

(a) Less than 10 ... ... 1 ☐ (b) 10 or more ... ... 2 ☐