Introduction

This publication contains the Analysis of Census 2006 covering demographic and socio-economic aspects of the population. The report comprises of the following 15 chapters. Census history and procedures used in Census 2006; Population growth, age and sex composition; Fertility; Mortality; Migration; Nuptiality, patterns, trends and differentials; Education characteristics; Youth; Labor force and employment; Housing conditions and household amenities; Family structure and households; Situation population displaced by the tsunami; Population projections; and Gender and development. It also compares 2006 data with the past censuses to explore the ways the population of Maldives has changed overtime. A chapter on the characteristics of establishments in the country and their economic activities is also included in this report.

Although, a modern type of census was first conducted in the Maldives in 1977, the first census, a rudimentary process, was undertaken in the year 1911. The enormity of the costs involved and the experiences of prior censuses, together with rapid changes in the population characteristics, population censuses have been carried out every five years from 1985 to 2000. Census scheduled for 2005 was postponed to 2006 due to the Tsunami in December 2004.

Census 2006 was carried out in all 194 administrative islands, 88 resort islands and 34 industrial and other islands of the country. Data relating to size, geographical distribution, and socio-economic characteristics of the population such as age, sex, educational attainments, marital status, and employment were collected in the census and are analysed in the chapters of this report. Four questionnaires were administered for census data collection, namely: Household listing form, Persons listing form, Household form (includes household and persons information) and Establishment Form.

The countrywide exercise involved a total of 2,808 census staff. The enumeration of the people was carried out similar to previous censuses, on a de facto basis (i.e. counting the person where he/she was present at the time of enumeration). However, Maldivians who were temporarily out of the country were also included. Foreigners residing in the country for employment purposes were not included in the census. The Census 2006 also marks a change in census taking in the country, with engendering of the census and the use of Intelligent Character Recognition (ICR) for data scanning.

Since the population census was carried out during 21-28 March 2006, many different publications have already been released with many tabulations at national, atoll and island level, graphs and summaries, census questionnaires, manuals and the complete data base. For easy access and reference, all these publications are also made available on the MPND website www.planning.gov.mv.

It is important for data users to keep in mind that census provides a snapshot of the country. Hence, at the time of the census, population of some of the islands were displaced due to the 2004 tsunami and were living in temporary shelters, many of whom have already moved back to their home islands or other islands. Similarly, the census enumerates the population in the island where they were living at the time of the census, and hence the registered population figures in the administrative records of the Ministry of Atolls Development and maintained by the island offices may differ from the census figures.

Ministry of Planning and National Development
Male' Republic of Maldives
September 2008

Foreword

The Population and Housing Census is a unique source of information. It presents enormous amount of statistical data at the national, atoll and island level on demographic and basic socio-economic characteristics of the people and the country. Hence, it is extremely important to utilize this information as much as possible. This analytical report aims to provide an in-depth view of what is behind the census figures, to highlight the underlying population issues and will provide an enhanced knowledge of population and development issues in the country.

Recognising the importance of acknowledging the role of women and their socioeconomics as different from that of men, extensive efforts were made to engender the Census 2006. The engendering process was undertaken at all stages of the operation from stakeholder awareness, modifications to questionnaires, training manuals, enumerator and supervisor training sessions, data collection till the census analysis. This engendering process is expected to have enabled a better coverage of women's economic activities and provided a larger amount of gender disaggregated information and analysis.

Analytical work involves drawing meaningful conclusions from a collection of data. This is by no means is this an easy task. I would like to take this opportunity to thank United Nations Population Fund for providing financial support through out the process and for facilitating the technical input of the consultants. I would also like to thank everyone involved in undertaking the detailed analysis and write-up of this report.

I hope the findings of the census analysis will provide a basis for informed discussions among policymakers on population and development related issues, and provide government agencies, private sector, businesses, community organizations and civil society at large, useful and relevant input for the formulation of development programs, projects and strategies at island, atoll and national levels.

At this juncture, when the country is undergoing a new phase in its political history, with a newly revised constitution and taking rapid strides towards a multiparty democracy, it is of utmost importance that statistics be used for promoting evidence based journalism, discussion and policy making, and to steer the country in the right direction in the future.

Hamdun Hameed
Minister of Planning and National Development

Acknowledgement

Ministry of Planning and National Development (MPND) expresses sincere gratitude to the United Nations Population Fund (UNFPA) for their financial and technical support for the preparation and printing of this report. It also enabled MPND to get assistance of local consultants for this analysis. The ministry would, therefore, like to thank 'Niyaaz and Afaal partnership' for accepting the consultancy to do the analysis work. The involvement of many staff from MPND and those from other related areas of government led to capacity building and increased use of census data sets to enhance knowledge and awareness. We would like to acknowledge the valuable input provided by of Dr. Meena Achariya, the gender expert funded by UNFPA, in guiding the analyses to incorporate gender dimensions in the analysis. The support and cooperation extended by Dr.Bhanu Niraula, International Programme Specialist, UNFPA Maldives and Minister of Gender and Family Hon. Aishath Mohamed Didi in this process is also noteworthy.

Perhaps, more than writing a draft, commenting meaningfully to a draft is more time consuming. However, Ms. Aishath Saadh, Ms. Aminath Umaima, Ms. Asfau Hassan and Ms. Loona Abdul Hakeem, has been exceptional in giving their time to such an arduous task. Their contribution in assisting the chapter authors is greatly acknowledged.

Special thanks are due to the Social and Population Planning Section and Demographic and Social Statistics section for their untiring efforts and perseverance throughout the analysis, from providing assistance and logistical support to the authors, co-ordinating the process and consolidating the chapters. We also thank the Documentation and Publication Section, especially Ms. Aishath Yumna Rasheed and Ms. Aishath Nuha Rasheed for their hard work in the design and layout work of this document. We would also like to offer special thanks to Mr. Fuwad Thowfeek, Ms. Aishath Shahuda, Mr. Ibrahim Naseem, Ms. Fathimath Shafeega, Mr. Ahmed Nihad, Ms. Fazeela Yoosuf and Ms. Ikrisha Abdul Wahid for overseeing this exercise. We would also like to note with appreciation the guidance and support of the Permanent Secretary of MPND Ms. Rasheeda Ali and the Minister of Planning and National Development Hon. Hamdun Hameed in this whole exercise.

Ministry of Planning and National Development (MPND) thanks the following persons for undertaking the analysis of 2006 census data. The report would not have been possible without the efforts of the following individuals

Chapter 1: History of Census taking in Maldives
Mr. Ahmed Nihad and Ms. Fathimath Shifaza

Chapter 2: Population Growth Size and Structure
Ms. Aminath Umaima

Chapter 3: Lifetime Migration in Maldives
Mr. Mohamed Faisal

Chapter 4: Nuptiality
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Chapter 5: Fertility levels, patterns and differentials
Dr. Hussain Niyaaz

Chapter 6: Mortality levels, patterns and differentials
Ms. Mariyam Nazviya

Chapter 7: Education
Dr. Aishath Shehenaz and Ms Fathmath Shafeega

Chapter 8: Labour force and Employment
Ms. Aishath Shahuda and Ms. Mariyam Niyaf

Chapter 9: Family structure and Households
Ms. Aishath Azfa

Chapter 10: Youth Population in the Maldives
Ms. Mariyam Waheeda, Ikrisha Abdul Wahid, Ms. Aishath Leeza

Chapter 11: Gender Analysis
Ms. Fathmath Yumna and Ms. Aminath Shaeera

Chapter 12: Situation of Population Displaced by the tsunami
Ms. Aminath Haifa Naeem

Chapter 13: Population Projections 2006 - 2050
Mr. Ibrahim Naseem and Mr. Ahmed Nihad

Chapter 14: Housing Conditions and Household Amenities
Ms. Shahma Haleem

Chapter 15: Establishments and Economic activity
Ms. Mariyam Niyaf and Ms. Ashiyath Shazna

Finally, we would like to acknowledge the support and whole-hearted cooperation given by the respondents during the census and thank them for their valuable time and willingness to provide the required information. We would also like to express our gratitude to various other government agencies for their involvement, support and assistance, and to all those who contributed their services, time and effort towards making census 2006 a success.

Ministry of Planning and National Development
Male' Republic of Maldives
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1. Introduction

The Republic of Maldives consists of 1,192 coral islands which form a chain of 820 km in length and 130 km in width, set in a territorial area of 859,000 sq. km. of the Indian Ocean. The total land area of the Maldives is approximately 300 square kilometers. Sri Lanka and India are the country's closest neighbors, lying 750 km and 600km north and north-east of Maldives, respectively. The islands of the Maldives are formed into 26 natural atolls, which for purposes of administration, are grouped into 20 administrative regions. the 26 natural atolls of the Maldives have been classified into 20 groups, each of which is referred to as an "administrative atoll".

Most of the islands are quite small and low-lying, with an average elevation of 1.6 m above mean sea-level. The islands are surrounded by shallow, crystal-clear lagoons enclosed by coral reefs. Out of the 1192 islands, 193 are inhabited and 91 islands have been developed as tourist resorts.

The Maldives has a tropical climate. With two monsoons in the year, it is warm and humid throughout. Daily temperatures vary little. The annual mean temperature is 28.3°C with temperatures ranging from 25.1°C to 31.5°C. The average relative humidity ranges from 78% to 85%.

Maldivian society is very consistent, with one language, one culture and one religion. The official language is Dhivehi, which is unique to the Maldives. However, English is spoken by a majority of the people, and is also widely used in business and commerce. The population of the Maldives, according to the national census of 2006 is 298,968 at the time of census. The population is spread over 193 inhabited islands. The most populous of the inhabited islands and the centre of commerce is the capital, Male'. The rest of the islands are largely uninhabited, except for 88 islands which have been developed exclusively as luxury resorts.

The people are generally enterprising and very hospitable. Approximately 71% of the population is under 35 years of age, and the national literacy rate currently stands at a very impressive 94%, and is the highest in the region.

2. Modern type censuses

A population census was taken for the first time in the year 1911. This was followed by decennial censuses in 1921 and 1931. Decennial census taking is carried most of the countries of the world till today. The practice was interrupted during World War II and was resumed again in 1946. For reasons not easily ascertainable, the next census was held in 1953, followed by another in 1957. Thereafter annual censuses were taken until 1972 and then in 1974, followed by the 1977 census. The Ministry of Home Affairs was responsible for census operation throughout.

For the first three decennial censuses, the office of the Superintendent of Census of Sri Lanka prepared the questionnaires, which were translated into Dhivehi in the office of the Maldivian Government Representative in Colombo, and forwarded to the Maldives for canvassing. In the 1911 census, the filled questionnaires were sent back to Colombo for tabulation of data, while in the next two censuses only abstracts of necessary information were sent, which was tabulated by the Maldivian Government Representative in Colombo. From 1946 onwards, the census data were tabulated in the Maldives itself.

In the censuses during the period 1969-74, particulars of individual members of a family were collected in separate rows of a household schedule. Information was collected on sex, age, literacy, education, marital status, occupation and activity status.

The enumeration in the outer islands was done by the island chiefs, and in Male' by selected secretaries and clerks of the Government departments. The island chiefs prepared tabulations of data for each island and the atoll chiefs did tabulations for the atolls. Compilation of data at national level was done in the Ministry of Home Affairs, Male'.

In all the past censuses, only the Maldivian citizens were enumerated on de jure basis and no information was collected on de facto resident at census time.

The first modern type census was conducted in 1977, with financial and technical assistance from the United Nations Population Fund (UNFPA), which laid the foundation for a new era of census taking in the country. The enormity of the cost involved, and the experience of the 1977 census, as well as the rapid change in population characteristics led to the decision by the government that censuses at a regular interval of five years would be appropriate in the Maldives. The new quinquennial series began in 1985. Next census was in 1990, 1995 and then in 2000. However, the 2005 census was delayed to 2006 due to the Asian Tsunami in December 2004.

3. Census administration in 2006

3.1 Coverage & Data collection

The most important aspects of the coverage and data collected in the Population and Housing Census 2006 are:

- As in all past censuses, all Maldivian citizens were enumerated in the Population and Housing Census of Maldives 2006 living in the country as well as abroad.

- Foreign nationals who were in the country with work permit were counted in the listing operation but their individual information was not collected. Tourists on tourist visa were not counted in the census.

- Information were collected in the census regarding the types of materials used for the construction of walls and roofs of all houses in the country regardless if occupied or unoccupied, either by Maldivian or foreigners.

- Data were collected on the available source of water, latrine and electricity facilities in the houses only in respect of the living quarters that were occupied.

- As in the past four censuses, the enumeration of people in the census 2006 was carried out on de facto basis, i.e. where they were currently residing. Information was also collected of the Maldivians living abroad. Maldivians living abroad at the time of census for various reasons were collected at the place where they were residing before leaving the country.

- In addition to the general information on social and economic characteristics of the enumerated population, attempts were also made in the census 2006 to collect data on migration, education, economic activities, nuptiality, and data on the past and current fertility.

3.2 Organization

The President appointed an advisory committee to oversee and guide the Ministry in conducting the Population and Housing Census. The Minister of Planning and National Development was the Chairperson of the advisory committee.

The Statistics Section of Ministry of Planning and National Development was responsible for the census 2006. The technical, administrative and managerial tasks are shouldered by the Director of the Census and the Technical Committee comprising staff from the different ministries and departments of the government. Around 3200 enumerators, supervisors and officials were engaged in the data collection phase of the census 2006.

This was the first time that Maldives has given a strong emphasis to engendering the census 2006. Separate workshop were conducted to aware the enumerators, supervisors and all the officials who were involved in census operations. Different training sessions were conducted for the master trainers, publicity of the census campaign; posters were prepared and distributed to all the inhabited islands on engendering the census.

Training of enumerators and supervisors in atolls were conducted in three rounds for a period of seven days in each.

Coordinators were sent to each atoll during the census period. The coordinators role is to over sea the whole census operation within the atolls during the census period.

Data processing activities were handled by a team of twelve staff of from the Statistics Section and additional 20 persons recruited on temporary basis for the special operations, such as editing, coding and data entry.

United Nations Population Fund provided technical assistance of a consultant from country Support Team based in Kathmandu. The consultant's advice and guidance were received in finalizing the census data.

3.3 Island maps and household list

Island maps were prepared for the census 2006. All the inhabited and industrial island maps were collected from the island offices. Most of the maps were redrawn according to the census blocks and used for the fieldwork during the enumeration period. Male' map was updated from Male' Municipality and block maps and supervisor maps were prepared for the census 2006. These maps demarcated the roads and house compounds. The inhabited area of each island was divided into a number of clearly demarcated census blocks. Each block containing a certain number of houses was assigned to each team. Census blocks varied from a population of 250 to 380.

The enumerators carried out the housing census and recorded information in the questionnaire called the "house list". The listing of houses was done in an orderly manner commencing with the census house situated in the northeastern corner of each census block, and visiting all houses in the block by the shortest systematic route. The structures were identified by continuous serial number given to them in the same order as in the route followed by the enumerator. These numbers were different from the registration numbers already given by the local administration to the houses and affixed on their entrances. The serial numbers given for the census enumeration were used only for the purposes of census fieldwork and its control.

3.4 Enumeration of Population

During the enumeration of population and housing census of Maldives 2006, each enumerator visited every household in the assigned census block. Census enumeration team consists of two person, each team was assigned around 50-60 households to complete within the census period. By interviewing the head of the household or responsible member of the household, data were collected regarding each person in the household within the census reference period.

The enumeration of population was completed in 8 days, from 21-28 March 2006.

A slip of enumerations was provided to the travelers from island to islands or for island to other countries in order to avoid duplication. Another slip was given to people who work in the National Security Services and in the industrial islands where they have 2 usual places of residence. This was another measure to avoid duplication.

The supervision of the field work in Male' was carried out by 61 supervisors and 6 senior officials of the Statistics Section of the Ministry. The results proved to be quite satisfactory. In the atolls, the coordinators visited most of the islands in their respective atolls to supervise the fieldwork of the enumerators. The coordinators in the atolls collected the population figures for each island. These population figures were sent by fax to census center in Male', where daily progress checks were monitored.

3.5 Preliminary Figures

On the receipt of the population figures from Male' and all atolls, the Ministry of Planning and National Development released preliminary census figures, by sex for the whole country, Male' and each atoll on 6 April 2006. Minister of Planning and National Development inaugurated preliminary results of the census 2006. According to the preliminary estimates, the population was 294,842 of which 151,769 were males and 147,073 females. The population growth rate was 1.7 percent per annum between the intercensal period 2000 to 2006. Male' had a population of 104,403 of which 52,963 were males and 51,440 were females. Atolls had a population of 194,439 of which 98,806 were males and 95,633 were females.

3.6 Data Processing

It took four months to complete editing, coding and scanning the census data. A total of 20 computers were used for data entry and its verification. Intelligent Character Recognition (ICR-Smart Form) is a system to capture Digital information from the scanned images. ICR is one of the latest and advanced technologies in the field of data capturing. Advantage of ICR system is speed and accuracy using ICR the speed can be tremendously increased to 3-10 times faster than a normal data entry process.

The data entry system was set up by the assigned staff of the Statistics Section, coding and editing was done simultaneously. Consistency checks of the recorded information were made during the coding operation. If there were any mistakes or errors in the forms, the information was edited according to the given procedures. If there was a major error, first the forms were checked and corrections were made after discussing with the technical and subject matter persons. The data editing process also involved correcting the data. This required checking the raw data and removal of the errors. For the data editing, a program was developed so that it was possible to impute correction automatically. Validation procedures were built into the system and permit to edit the data.

3.7 Final Result of the Census 2006

The Minister of Planning and National Development Honorable Hamdun Hameed released the final result of the Population and Housing Census of Maldives 2006 on 28 January 2007.

The population was 298,968 (151,459 males and 147,509 females). The population of Male' (Capital) was 103,693 (51,992 males and 51,701 females). The atoll population was 195,275 (99,467 males and 95, 808 females).

The result of the population and housing census has been published on CD-ROM and on the Internet in addition to the book. This publication contains 55 tables of which 36 tables are on population and 18 tables are on housing.

1. Introduction

The population changes in the Maldives reflect the country's trends in fertility and mortality, and on internal and international migration. These components underlie the changes in the size of the population, growth, distribution, and its age and sex composition, which in turn have significant government policy implications.

This chapter draws on the latest population and housing census of the Maldives and past censuses to explore the way the population of the Maldives has changed overtime. The chapter looks at the population size, growth and main components of population change in the 2006 census. It examines the age-sex composition of the population and also highlights recent population trends impacting the Maldives and its regions. The chapter also contains an analysis on accuracy of age data.

Analysis of each topic in the chapter focuses on overall changes and trends for the country, the Atolls and Male'. The trends analyses are based on past census data from 1985 to 2000. The population changes and trends are shown through the use of "headline-style" findings, tables, figures, and accompanying text.

2. Maldives Population Growth

The population of the Maldives enumerated in the 2006 census was 298,968. Of this total, 147,509 were females and 151,459 were males. Between 2000 and 2006 the population increased by 28,867, a 10 percent increase from the 2000 census population of 270,101. The Maldives population surpassed 300,000 in July 2006, reaching a momentous milestone in population growth.

Although the size of the population increased each time census is taken, the annual population growth rate declined significantly from 3.43 percent in 1985–1990 to 1.69 percent in 2000-2006 (see Table 1). If current growth rates of 1.69 percent continue the population of the Maldives will double in about 40 years.

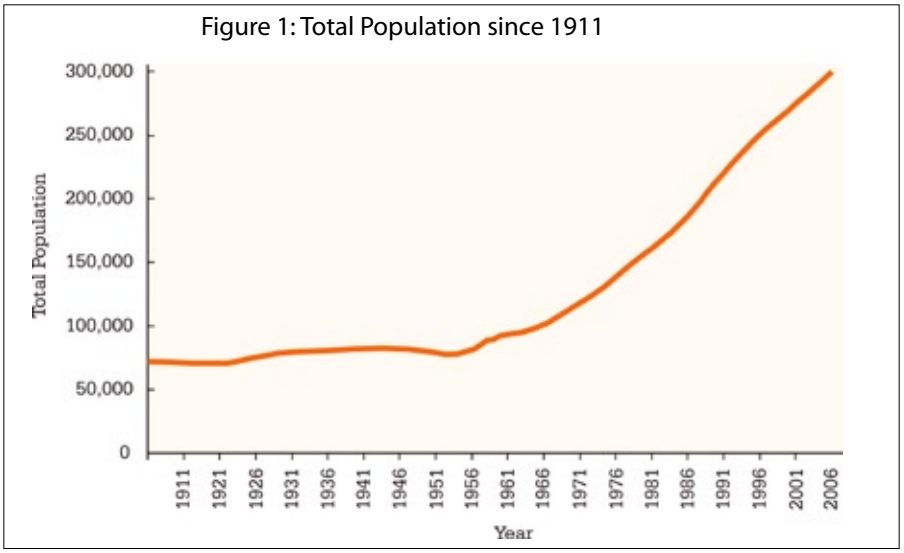
Table 1: Population growth 1911 - 2006

Year	Date	Population	Numerical Increase	Average Annual Growth
1911	October	72,237	-	-
1921	March	70,413	-1,824	-0.27
1931	June	79,281	8,868	1.18
1946	June	82,068	2,787	0.23
1953	June	77,273	-4,795	-0.86
1957	June	83,075	5,802	1.81
1958	June	87,582	4,507	5.28
1959	June	89,290	1,708	1.93
1960	June	92,247	2,957	3.26
1961	June	92,793	546	0.59
1962	June	92,744	-49	-0.05
1963	June	94,527	1,783	1.90
1964	1 June	93,960	-567	-0.60
1965	28 June	97,743	3,783	3.95
1966	24 June	100,883	3,140	3.16
1967	30 June	103,801	2,918	2.85
1968	28 June	106,969	3,168	3.01
1969	27 June	110,770	3,801	3.49
1970	26 June	114,469	3,699	3.28
1971	25 June	118,818	4,349	3.73
1972	30 June	122,673	3,855	3.19
1974	28 June	128,697	6,024	2.40
1977	31 Dec	142,832	14,135	2.98
1985	29 March	180,088	37,256	3.20
1990	2 March	213,215	33,127	3.43
1995	25 March	244,814	31,599	2.73
2000	31 March	270,101	25,287	1.96
2006	28 March	298,968	28,867	1.69

2.1 History of population growth

In 1911, the population of the Maldives was 72,237, and by 2006 the population had grown four-fold to 298,968. The population growth during the 20th century is characterized by two distinctive patterns. The first half of the century experienced sluggish growth, while the second half of the century experienced rapid growth.

Figure 1: Total Population since 1911



Early in the century from 1911-1953 the size of population remained quite stable at around 70 to 80 thousand. It took 60 years from the beginning of 1911 for the population to almost double to 142,832 in 1977.

The annual growth rate of the population was 1.0 percent or less until 1958 when population reached 87,582. Moreover, the period from 1911 to 1921 and 1946 to 1953 experienced negative growth rates of -0.27 and -0.86 per annum. The highest growth rate observed during this period was 1.18 percent, which was from 1921-1931. This was the period after the end of First World War. The low growth rate in these decades was due to high levels of mortality which exceeded the high levels of uncontrolled fertility during the time.

The slow growth rate continued through the 1930s into the 1940s, during World War II. The upward trend in population occurred in the late 1950s and strengthened in the following decades (see Figure 1). This was the Baby-boom period when a dramatic increase in fertility rates and in the absolute number of births occurred during the period following World War II (1946-1964) around the world. The highest recorded average annual growth rate (5.28%) occurred in 1958. However, the period 1961-1964 experienced decline in growth rates. Owing to the changes in mortality and fertility rates, from 1965 the population started to grow at an unprecedented rate, (about 3 percent) from the 1960s to 1980s.

However, the growth rate started declining in the 1990s and is currently at 1.69 percent per year (see Table 1). The main force behind the decline in population growth rate in the 1990s and 2000s was a remarkable decrease in the fertility during the period. In the 1990s, the total fertility rate (TFR) was about 6.4 children per women and 2.2 in the 2006 census. The initiation of family planning programmes by the government, non-governmental and international organizations to solve the population growth problem played a major role in the rapid decline of fertility.

2.2 Factors affecting population change

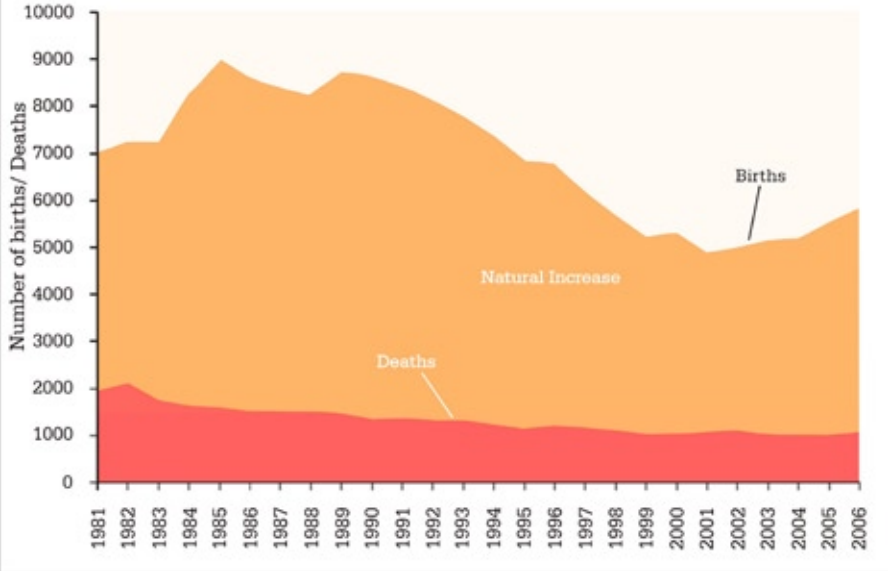
The change in population between two censuses reflects the effect of births and deaths and of movements of persons into and out of the country during the relevant period. The natural increase (excess of births over deaths) has always been the only component affecting population change in the Maldives. This is reflected by the steady and relatively slow growth in population throughout history. Populations with net migration usually give an irregular pattern to population change (See figure 1).

The pattern of natural increase for the Maldives closely follows variations in the number of births (See figure 2). Over time, the number of deaths has declined steadily. The decline in number of deaths from 1963 in 1981 to 1073 in 2006 has occurred alongside the improvement in the life expectancy as a result of improved health facilities and the control of communicable diseases. Between 1980 and 2005 the life expectancy at birth for men increased by over 20 years, from 51 to 71.6 years, and for women by just under 24 years, from 49 to 72.7 years.

Variation in births reflects social and demographic changes such as changes in family structure. Maldivians today are having fewer children and having them later in life. Average family size as implied by the total fertility rate declined from 6.4 children per woman in 1990 to 2.2 in 2006. The total fertility rate is now very close to the replacement level fertility - the level required for the population to replace itself.

Thought births rose dramatically in the 1980s resulting in a baby boom, during the 1990s the number of births declined. There was an increase in the number of births from 2001 onwards, largely because of a rise in the number of baby boom women entering childbearing age.

Figure 2: Total Births & Deaths, 1981 - 2006



The impact of the natural increase in the population growth of the Maldives can easily be shown by comparing the inter-censal change of population with the natural increase (births – deaths) during the period. The number of births and death are known from the Vital Registration System (VRS) - the compulsory registration of births and deaths. Table 2 shows the components of population change for each inter-censal period since 1985.

Generally, the residual of natural increase and population change is used as a measure of "net migration" i.e. the difference between the inward and outward movement. In the case of the Maldives, this residual should be very small as no significant in or out- migration is observed. On the other hand, in the absence of data on immigration and emigration it is not possible to determine the size of net migration from this residual.

Table 2: Components of population change 1985 - 2006

Census Period	Total Births	Total Deaths	Natural Increase	Inter-censal Population Change	Residual change
1985 (29 March) to 1990 (2 March)	42,468	7,470	34,998	33,127	(1,871)
1990 (2 March) to 1995 (25 March)	40,395	6,716	33,679	31,599	(2,080)
1995 (25 March) to 2000 (31 March)	30,350	5,666	24,684	25,287	603
2000 (31 March) to 2006 (28 March)	31,164	6,267	24,897	28,867	3,970

The natural increase was the largest during 1985 to 1990 when population growth rate was at its highest, with an annual average growth rate of 3.43 percent. The natural increase has been declining steadily since then. A larger natural increase observed for the last inter-censal period than the previous is due the increase of one year in the inter-censal period of the last census.

The residual change was negative for the periods 1985-1990 and 1990-2005, while it was positive for the periods 1995-2000 and 2000-2006. A negative residual value may imply under-enumeration or out-migration, whereas a positive residual may imply double-count, improved coverage of census or immigration into the country. However, the accuracy of the residual change not only depends on the completeness of the census but is also affected by the completeness of the vital registration system. The vital registration data is considered to be complete and therefore estimates based on this data are considered to be accurate.

Given the absence of International migration and the completeness of the VRS, a plausible explanation for the substantially large residual change for 2006 is a significant improvement in the coverage, resulting in the large population increase of 3970 (See Table 2).

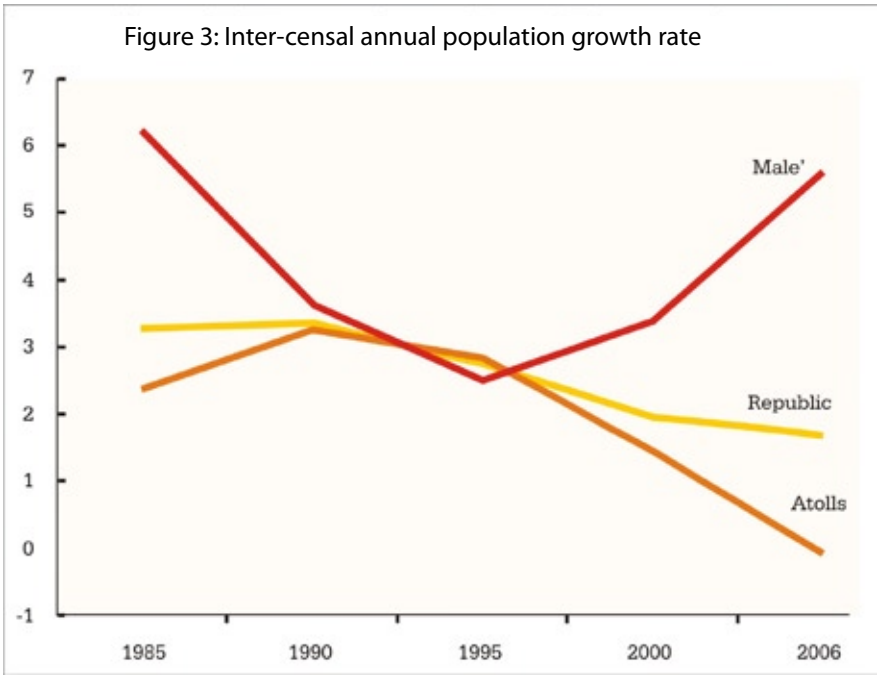
2.3 Changes in regional patterns of population growth and size

The average annual population growth rate during the inter-censal period 2000-2006 for Male' is 5.7 percent, which is four percentage points above the national growth rate of 1.69 percent. Assuming that the annual rate for the Male' population is also equal to the national growth rate, this excess of four percentage points can be justified as the component of internal migration growth rate in Male'. Additionally, given the annual growth rate of negative 0.8 percent for the Atolls, this justification is more substantiated.

The Atolls population experienced negative growth rates for the first time in history

The patterns of population growth rates experienced by Male' and the atolls varied significantly over the past years. A distinct change in the pattern is observed from 1995 onwards (see figure 3). Over the period 1995 to 2006, the population growth rate of Male' has been increasing rapidly while population growth in Atolls has been declining. During this period, the population increased by almost 40 percent for Male' and only 6.6 percent for the Atolls.

Figure 3: Inter-censal annual population growth rate



However, between 1985 and 1995 the population growth rate figures shows a different pattern for Male' and the Atolls (See figure 3). Male' had experienced a decline in growth rates while the growth rate of Atolls was on the rise till 1990 and then started to decline slightly. It was from 1995 onwards that the population started to decline rapidly in the Atolls. Between 1995 and 2000, the growth rates had declined form 2.5 percent to 1.2 percent, though by 2006 the growth rates has reversed and it is now at -0.8 percent.

The decline in the Male' population during this time may have been due to the increased awareness among people about family planning. Also the realization of the scarcity of land in Male' to accommodate more children may have caused the decline.

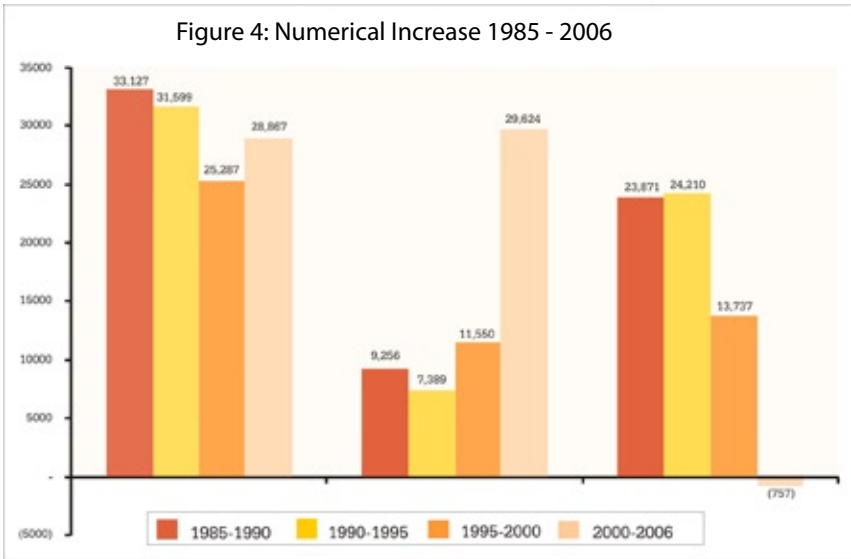
However, from 1995 onwards the growth rate of the Male' population started to increase, signalling the onset of heavy in-migration to Male' or in 'urbanization': With the intuitive perception of better advantages of Male', a large number of people in the islands are migrating to Male'.

Table 3: Population change for Republic, Male'& Atolls: 2000 to 2006

Locality	Total Population		Change 2000 to 2006		% Share of total population	
	2006	2000	Numerical	Percent	2006	2000
Republic	298,968	270,101	28,867	10.7	100	100
All Atolls	195,275	196,032	-757	-0.3	65.3	72.6
Male'	103,693	74,069	29,624	39.9	34.7	27.4

As shown by Table 3, the population of Male' has increased by 29,624 (40%) during the last 6 years, while the population in the rest of the country decreased by 757 (-0.3%). Male' remained the country's fastest growing and most populated island, passing the 100,000 threshold for the first time. In 2006, 35 percent of the Maldivian population were living in Male', and migration to Male' has brought improvements in the lives of the migrants. However, the problem lies in the expansion of services in the already overcrowded Male' to accommodate for everyone.

Figure 4: Numerical Increase 1985 - 2006



The inter-censal population gain for the Atoll had remained much larger than that for Male' until 2000 (see Figure 4). The population gain for the Atolls during 1985 -1990 was 23,871, while the increase for Male' was 9,256. The period from 1995 to 2000 was the first time when the gain in the Atoll population declined, from 24,210 in 1990-1995 to 13,737 to a level nearly equal that of Male' (11,550).

2.3.1 Population change in Atolls

The average annual growth rate of all atolls was below national average of 1.69; 12 of the 20 atolls experienced negative growth

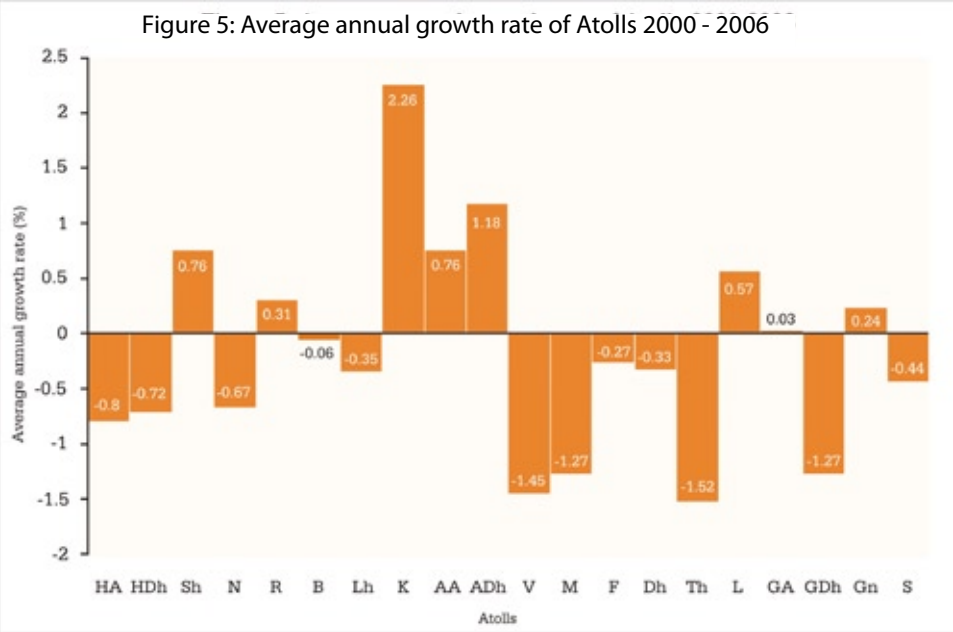
In 2006, atoll population totals ranged from a low of 1606 in Vaavu atoll to 18,026 in Addu atoll (see Table 4). The majority of the atolls were characterized by decline in the size of population.

The percentage decline in atoll populations ranged from 0 to -9 percent. Among the 20 atolls, 12 atolls experienced decline in their populations during 2000-2006. However, all atolls remained among the highest or lowest ranking in terms of their population size.

Table 4: Population change in Atolls, 2000 - 2006

Atolls	Population		Numerical change	Percentage Change
	2006	2000	2000-2006	2000-2006
North Thiladhunmathi (HA)	13,495	14,161	-666	-4.7
South Thiladhunmathi (Hdh)	16,237	16,956	-719	-4.2
North Miladhunmadulu (Sh)	11,940	11,406	534	4.7
South Miladhunmadulu (N)	10,015	10,429	-414	-4.0
North Maalhosmadulu (R)	14,756	14,486	270	1.9
South Maalhosmadulu (B)	9,578	9,612	-34	-0.4
Faadhippolhu (Lh)	9,190	9,385	-195	-2.1
Male' Atoll (K)	15,441	13,474	1,967	14.6
North Ari Atoll (AA)	5,776	5,518	258	4.7
South Ari Atoll (ADh)	8,379	7,803	576	7.4
Felidhu Atoll (V)	1,606	1,753	-147	-8.4
Mulakatholhu (M)	4,710	5,084	-374	-7.4
North Nilandhe Atoll (F)	3,765	3,827	-62	-1.6
South Nilandhe Atoll (Dh)	4,967	5,067	-100	-2.0
Kolhumadulu (Th)	8,493	9,305	-812	-8.7
Hadhdhunmathi (L)	11,990	11,588	402	3.5
North Huvadhu Atoll (GA)	8,262	8,249	13	0.2
South Huvadhu Atoll (GDh)	11,013	11,886	-873	-7.3
Fuvahmulah (Gn)	7,636	7,528	108	1.4
Addu Atoll (S)	18,026	18,515	-489	-2.6

Figure 5: Average annual growth rate of Atolls 2000 - 2006



The average annual growth rates of all atolls except Kaafu were below the national annual growth rate of 1.69 percent (see figure 5). Vaavu and Thaa Atoll experienced the largest decline in their populations growth rates (around -1.5%), followed by Meemu and Gdh (-1.27%). In terms of the decline in number of people, Vaavu atoll had lost 147 people while Thaa atoll had a loss of 873 people between 2000-2006. In fact Thaa atoll experienced the largest decline numerically. The numerical change in the populations of atoll between 2000 and 2006 range from a gain of 1967 in Kaafu atoll to a loss of 34 people in Baa atoll.

At atoll level, the population in Kaafu atoll grew fastest from 13474 in 2000 to, 15,441 in 2006, followed by AA and ADh Atoll, experiencing an increase of 258 and 576. The location of capital Male' and a large number of resorts in Kaafu atoll is the main reason for its increase in population.

Observed changes in the population size and growth of the Atolls between 2000 and 2006 are closely linked with the number of people moving to the capital for better opportunities. The development of new residential islands Villingilli and Hulhulmale' to ease the living congestion in Male' may have helped in accommodating a large number of people moving to Male' from the Atolls. In fact, this may provide some explanation for the large increase in the Male' population and the decline in the Atolls population during the past six years.

3. Population structure

The growth and the changing age-sex composition of the Maldives can be portrayed through the use of population pyramids. The overall shape of the pyramid and the size of the bars depict the changes. The population pyramids of the Maldives for the years 1985,1995, 2000 and 2006 are shown in figures 6 and 7.

The general shape of the pyramids remain essentially the same into 2006, although declining fertility rates led to smaller proportions of the total population in the youngest age groups. The age and sex composition of the Maldives in 2006 continued to resemble that of a developing country with a relatively large proportion of people in the younger age categories (less than 20 years of age), and a relatively small proportion of people in the older age categories (65 years or more).

Even though young people still comprised a relatively large proportion of the population, the base of the pyramid took on a more rectangular look in 2006. Another feature of the census 2006 age sex pyramid is the less "cone–like" shape at the top of the pyramid compared with the 1985 and 1995 pyramids. The larger proportion of the population in older age groups results from low fertility levels and from the decline in mortality at older ages in the recent decades.

The most populous 5 year age group was under age 5 in 1985. In 2006, people aged 15 to 19 years out numbered all the other groups

Figure 6: Total population by age & sex, 2000 - 2006

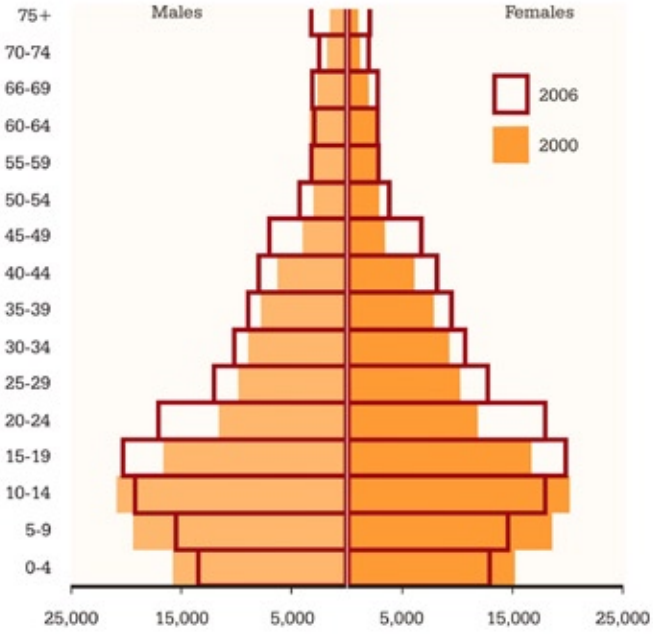
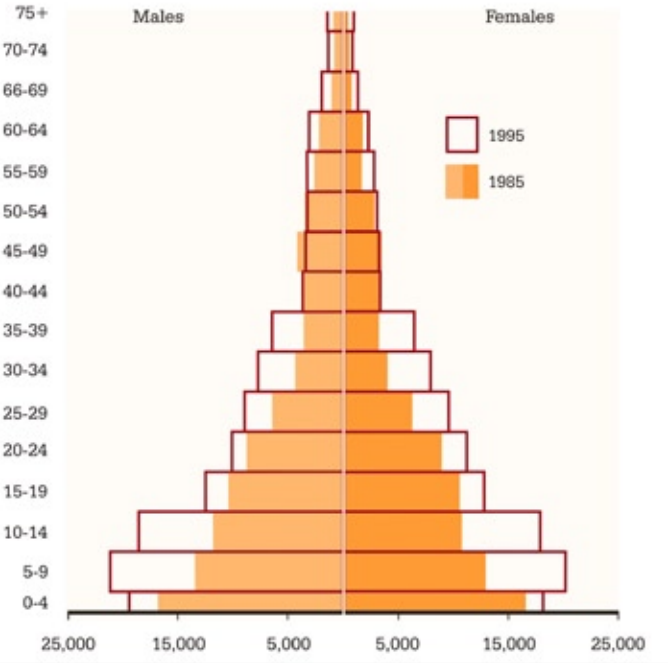


Figure 7: Total population by age & sex, 1985 & 1995



The age structure of the population at any point in time depends on past trends in fertility, mortality and migration. For instance, the small bulge in the population pyramid in Figure 6 is a consequence of the "baby boom" generations of 1980-1990. The decline in fertility starting in the 1990s changed the age composition. With each passing decade since 1985, the largest five-year age group has fallen in the range of ages that included the baby boomers. By 2000, the 10-14 year age group (corresponding essentially to people born from 1985-1990) was the largest. In 2006 the largest age groups were 15-19, 10-14 and 20-24.

4. Age Distribution

Changes in the age structure may also be illustrated by population pyramids where each bar represents the percentage of the total population in each age-sex group.

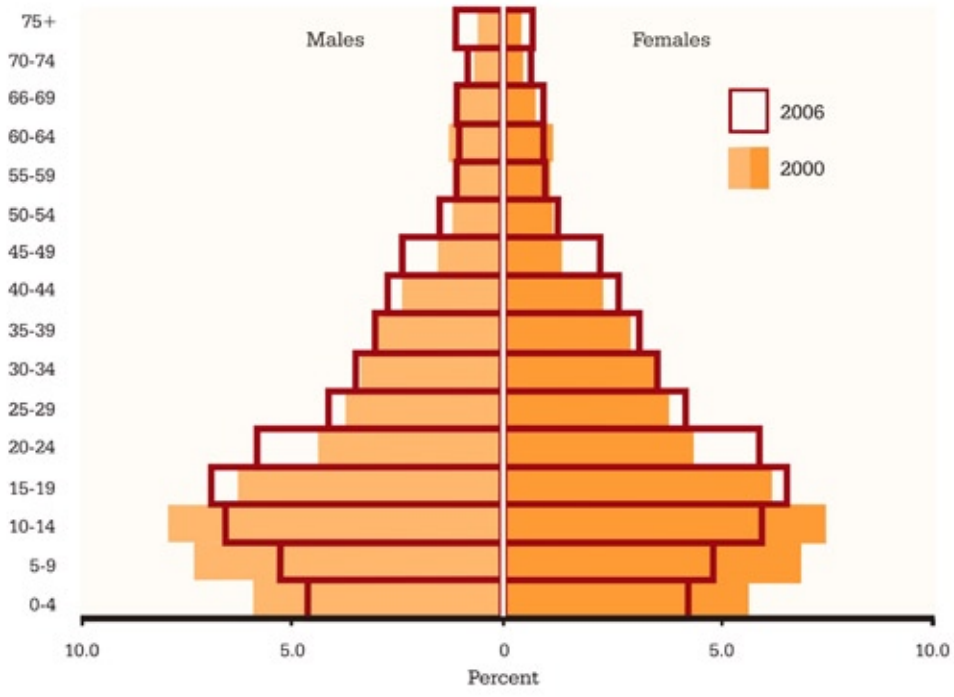
The age distribution of the population has changed significantly since 1985, when children under age 5 accounted for 18 percent of the Maldivian population whereas in 2006 the age group accounted for 8.7 percent.

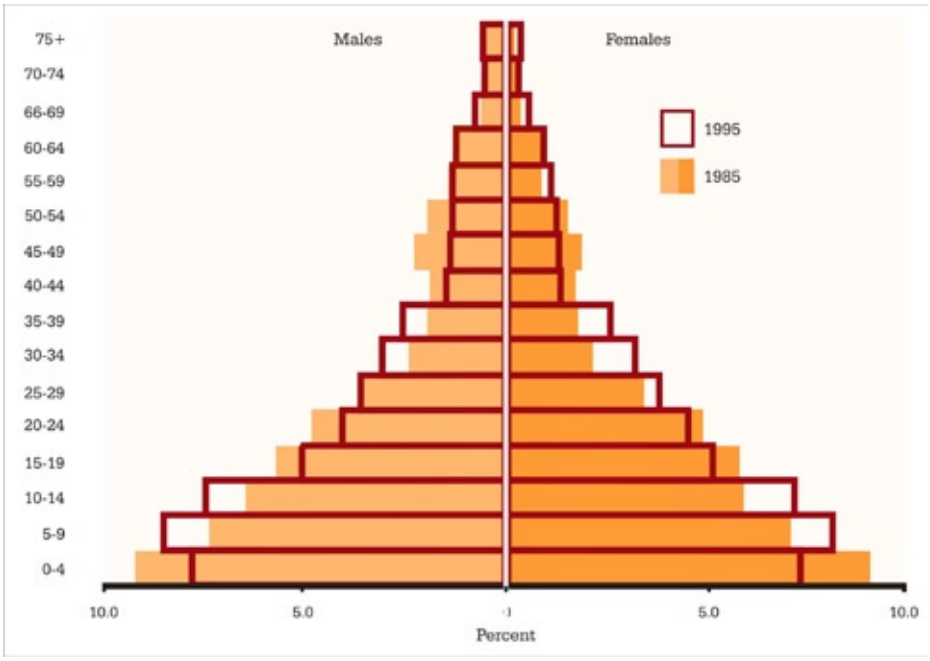
In 2006 the number of people in all the age groups above age 15 continued to grow, except for the ages 55-64 which remained relatively stable from 2000. The population decline for people under the age 15 in 2006 reflect the drop in fertility starting in the 1990s. Large population increases in some age groups are also related to the fluctuation in fertility. This is especially evident in the rapid increases in the age groups 20-24 and 45-49 in 2006. The entry of the baby boom generation into each of these age groups yielded rapid population growth.

The population of over 65 age group will begin to increase significantly starting in 2025 when the first of the baby boom generation reaches (people aged 45-49 years in 2006) age 65.

Over the years, the age distribution of the population remains relatively young

Figure 8: Age - sex distribution of total population 1985, 1995, 2000 & 2006





Ages 15-19 years represented the largest 5-year age group (13% of the total population) in 2006, with a population of 40,157 (males and females). The second largest 5-year age group was 10-14 year olds with 37,062 people, representing 12.4 percent of the total population. The age group 20 to 24 years experienced the largest percentage growth since 2000, representing 11.7 percent of the total population in 2006, compared with 8.7 percent in 2000. The relatively large number of people in the age groups 10-24 is represented in Figure 8 by a bulge in the age distribution. People in these age groups were born during 1980 to 1990.

Five age groups shown in Figure 8 and Table 5 experienced decline over the intercensal period 2000-2006: 0-4 year olds (a -14.7-percent decrease), 5-9 year olds (-20.7 percent), 10-14 year olds (9.5 percent), and 60-64 year olds (-8.9 percent). The number of people in the younger age groups, especially those in ages 5-9, fell as the baby boom cohort moved into older age groups and as a result of the low number of births during the past decade. The decline in the 55-64 years olds is associated with a relatively low number of births during the 1940s to early 1950s.

Table 5: Population change by age, 2000 - 2006

Age	2000		2006		Change 2000-2006	
	Number	Percent	Number	Percent	Number	Percent
0-4	30,990	11.5	26,424	8.8	-4,566	-14.7
5-9	38,006	14.1	30,120	10.1	-7,886	-20.7
10-14	41,168	15.2	37,252	12.5	-3,916	-9.5
15-19	33,346	12.3	40,157	13.4	6,811	20.4
20-24	23,594	8.7	35,062	11.7	11,468	48.6
25-29	20,170	7.5	24,834	8.3	4,664	23.1
30-34	18,241	6.8	20,889	7.0	2,648	14.5
35-39	15,779	5.8	18,428	6.2	2,649	16.8
40-44	12,482	4.6	16,125	5.4	3,643	29.2
45-49	7,541	2.8	13,823	4.6	6,282	83.3
50-54	6,047	2.2	8,190	2.7	2,143	35.4
55-59	6,076	2.2	6,114	2.0	38	0.6
60-64	6,392	2.4	5,821	1.9	-571	-8.9
65-69	4,691	1.7	5,933	2.0	1,242	26.5
70-74	2,953	1.1	4,441	1.5	1,488	50.4
75+	2,625	1.0	5,355	1.8	2,730	104.0
Total	**270,101**	**100**	298,968	100	28,867	10.7

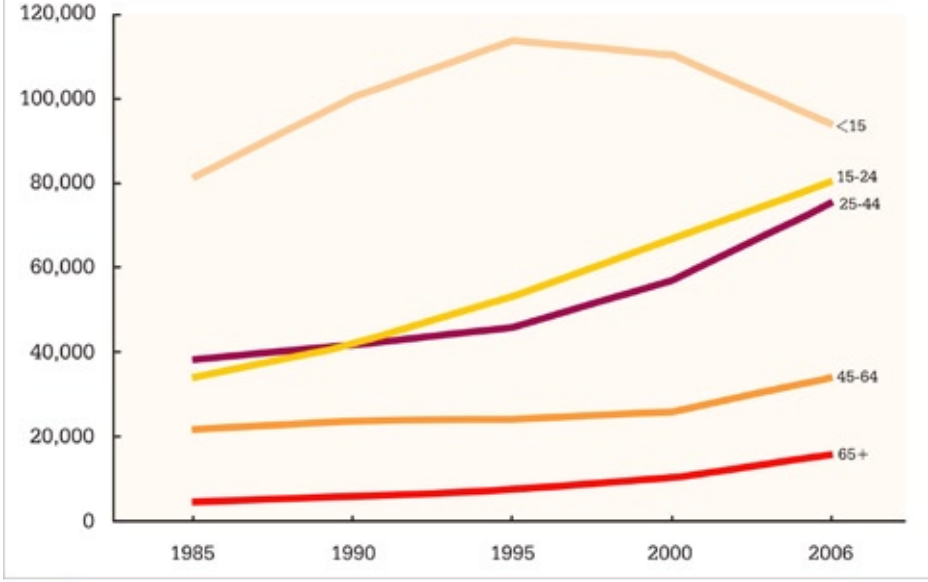
4.1 Population growth in broad age groups

The population in every age group except the age group under-15, was much larger in 2006 than in the previous censuses. The decadal trends in specific broad age groups show that for some groups, such as age ranges 15-24 and 25 to 44 increases occurred during every intercensal period (see Figure 9). In contrast, the under-15 age group experienced some population declines between censuses.

The population decline for people under 15 from 1995 to 2000 reflect the drop in fertility after the baby boom. Large population increases from one decade to the next are also closely related to these fluctuations in fertility. This is especially evident in the rapid increase in the population under age 15 in the period 1985 to 1990 and in the 15 to 24 year group in 1995.

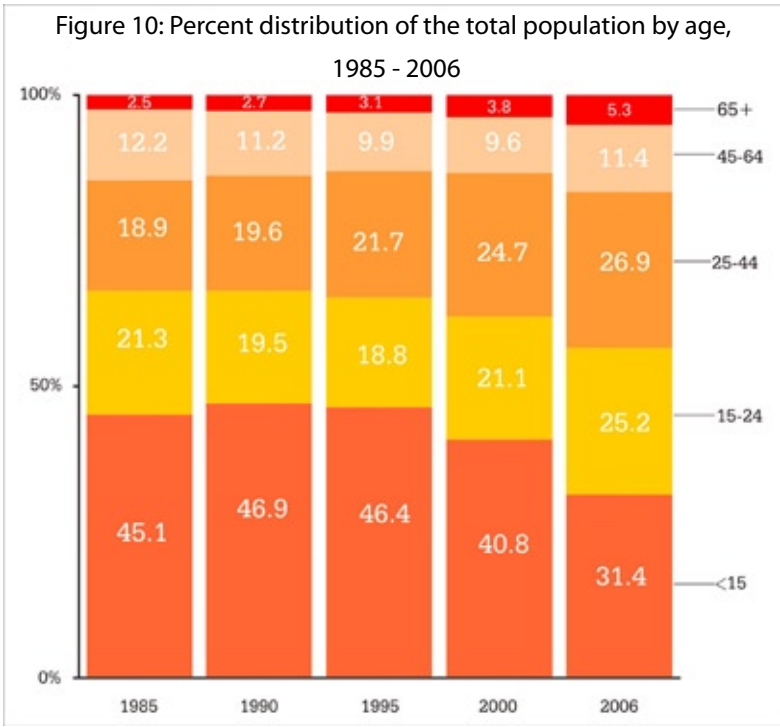
In 1985, the youngest broad age group (under 15 years) had the most members, and the oldest group (65 years and over) had the least. In 2006, the oldest group was still the smallest, but people age 15 to 24 and those age 25 to 44 increased relatively and was close to the size of the population under age 15.

Figure 9: Total population by broad age group, 1985 - 2006



The population under age 15 continues to decline rapidly starting 1995 onwards

Figure 10: Percent distribution of the total population by age, 1985 - 2006



The share of population in ages 25 - 44 increased more than the share of any other broad age group

The proportional shares of the total population in the five broad age groups changed in different directions as a result of the different rates of growth for each group. In general, shares of the population of the older age groups increased, while those of the younger groups declined (See Figure 10).

The growth trend over 1985 to 2006 in specific broad age groups shows that proportion of the population representing age groups 15-24, 25-44, 45-64 and 65 and over had increased. In contrast the under age 15 age group experienced decline in the proportion.

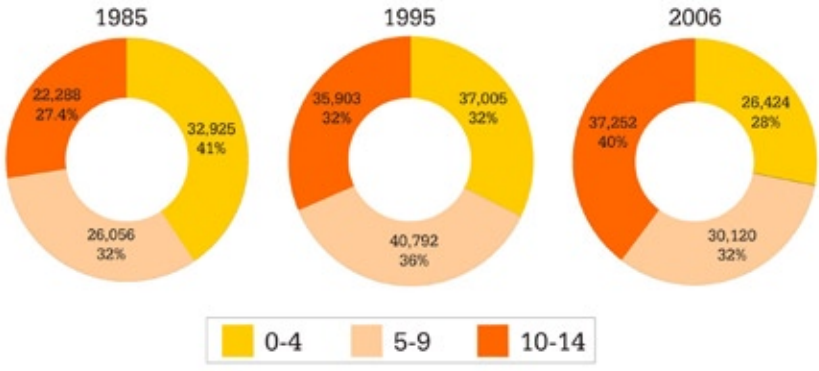
4.1.1 Population under 15 years

In 2006, the number of children under age 15 years comprised 31.4 percent of the population. There were a total of 93,796 people in this age group, with 45,479 female and 48,317 males.

The number of children in the Maldives almost doubled between 1967 and 1995 from 46,086 to 117,212. Most of the growth occurred from the late 1960s, through the 1980s, and to a lesser extent through the 1990s. The growth over this period started with the improvement in health, to which has been attributed the rapid increase in the proportion of children surviving, due to the reduction of diseases such as malaria, influenza and the effects of famine which continued until the mid-1960s.

The proportion of children in the population also increased with the increased number of children. In 1985 children accounted for 45% of Maldives' total population. By 1995, this had increased to 47%. This trend is related to increases in levels of fertility. However, these influences on the relative size of the child population has changed. The rapid decline in fertility from 1995 onwards has decreased the proportion of children to 31.4 percent (93,796 children) of the overall population in 2006. In 1985, almost 1 out of every 2 people was under age 15 years, whereas, by 2006, 1 of every 3 people was under age 15.

Figure 11: Age distribution of child population, 1985, 1995 & 2006



Together with changes in the size of the child population, the age distribution of children has fluctuated since 1985 (see Figure 11). For example, in 1985, 41 percent of all children were infants or toddlers (0-4 years), however, with declining fertility, children in the 0-4 years age group have come to represent a smaller proportion of the child population (28% in 2006). The children in aged 5 to 9 represent 32 percent of the child population in 1985 and 2006. The early adolescents (10-14), represented 40 percent of the child population in 2006 compared with 27 percent in 1985 increasing to 41 percent in 2006.

4.1.2 Population 15-64 years

This group comprises 50 single-year age categories, which makes it the largest age range group which includes youth, young adults and mature adults. This is also the source of most economic capacity of every nation. The population aged 15-64 years numbered 189,443 people and made up 63 percent of the population at the time of the 2006 census. This is an increase of 26.6 percent since the 2000 census, when the working age population was 149,668 and represented 55.4 percent of the total population.

The nation's working age population was very young. There were more people in the younger age brackets of the working age population, and fewer individuals in the older age brackets. Around 22 percent of the working age population consists of young people of ages 15-19 years (see table 5). Only 11.4 percent of the working age population accounted for ages 45-64 years.

The working age group population is increasingly made up of younger people

4.1.3 Population above 65 years

Persons aged 65 and above comprised 5.3 percent of the total population in census 2006. There were a total of 15,729 people in this age group, with 8945 males and 6784 females. A combination of factors, including declines in fertility and mortality has resulted in an increase, albeit modest, in the share of the population aged 65 years and over, from about 2.5 percent in 1985 to 5.3 percent in 2006. The share of the older population in the total population is expected to grow even further with the accelerated declines in fertility and mortality occurring in recent years.

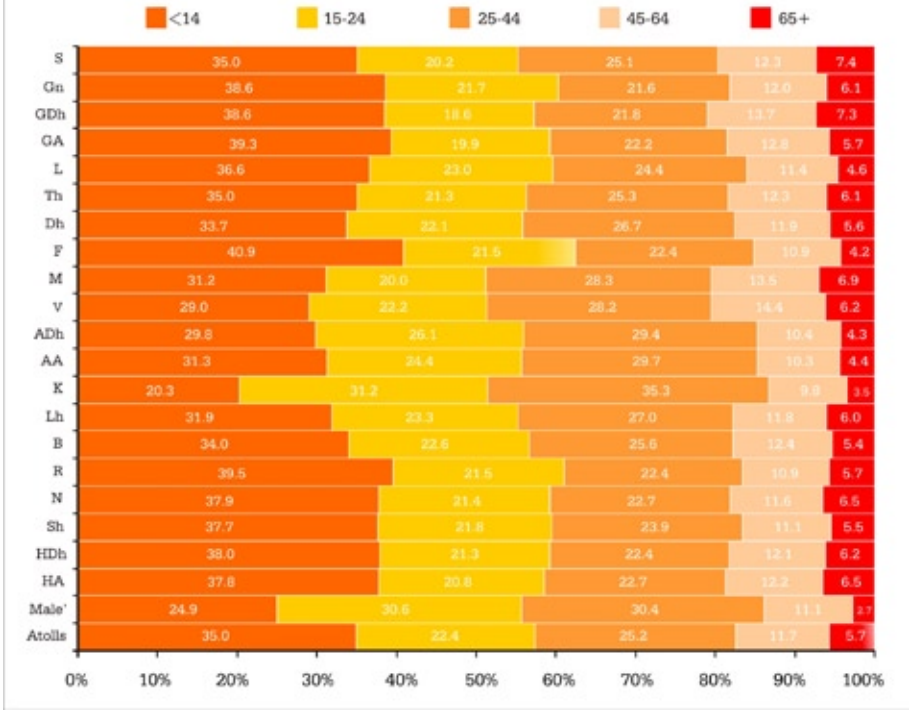
The aging process will start in 2025 when the first of the baby boom cohorts reach age 65, and it will accelerate in 2050, when the large baby cohorts of the 1980s reach the age of 65. After that the proportion of seniors will keep rising, but at a slower pace, reaching 15 to 20% in 2055.

Apart from the financial and institutional burden of supporting an ageing population, population ageing will also result in the reduction in the ratio of the population in working-age group 15-64 years and the population 65 years or older, or the potential support ratio (PSR). Everything else being equal, a lower potential support ratio means that it is much more onerous for the working-age population to support the needs of the older retired population.

4.2 Population of Atolls in broad age category

Kaafu atoll had the largest proportion of people in the age groups 15-44 year olds, while it had the smallest proportion of children under 15 years (20.3 percent). The proportion of people aged 65 and over was the second lowest in Kaafu atoll. Seenu atoll and GDh atoll had the largest proportion of people in aged 65 and over, representing 7.4 and 7.3 percent respectively. Meemu atoll had the smallest proportion of the aged with 2.7 percent of the population representing 65 years and over (see Figure 12).

Figure 12: Population of atolls in broad age category 2006



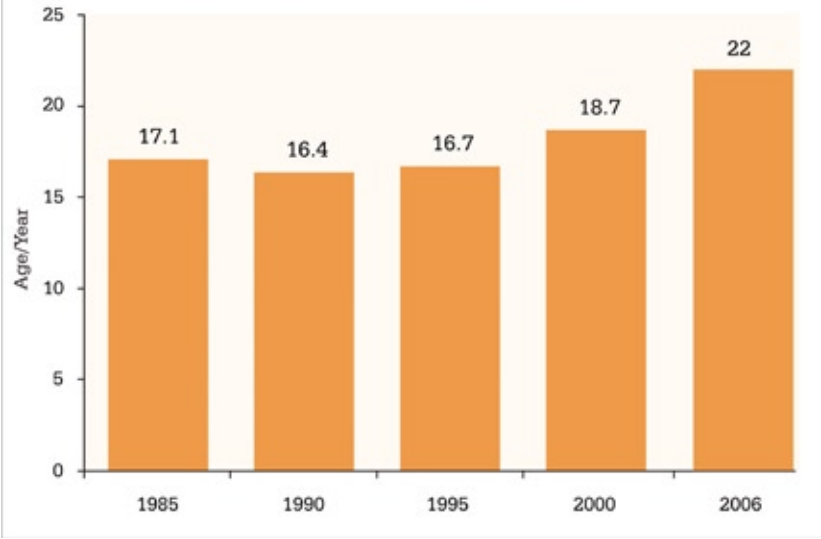
The southern & northern most atolls generally had the youngest regional age structure. The central atolls & male' had the smallest proportion of children under age 15, & people over 65 years

4.3 Median Age

The median age of a population often is used as a single measure to describe a population as "young" or "old." This measure indicates that half the people counted in a census were younger than the median age; the other half were older. Populations with a median age under 20 years may be classified as relatively young, and those with a median age of 30 years or more as relatively old.

Median age reaches all-time high

Figure 13: Median age of population, 1985 - 2006



The Median age of the population was 22 years in 2006 compared with 18.7 years in 2000 (see Figure 13). The population has, therefore, aged by 3 years in the six-year period. It is apparent that the 2006 census likely recorded the "oldest population" with the biggest census-to-census increase in the century.

The most significant cause for this is that the large baby boom generation (babies born between 1980-1990) has entered the 20-24 age, and in the past 20 years has moved from the ages below the median age to ages mostly above the median. Also the decline in the number of births since 1995 is a major factor behind both the record low growth in population between 2000-2006 and the record increase in median age. The process of aging has also been reinforced by the increasing life expectancy for the older persons occurring during the past years. With the prospect of improvements in the births and life expectancy the population will continue aging in the future.

4.4 Age Dependency Ratio

The Age dependency ratio is the ratio of children or elderly to the working age population. Age ratios suggest a country's ability to support the young and old. Generally, the higher the age dependency ratio, the greater the proportion of children and old persons in relation to the working age population, and therefore, the greater the burden that the working age population has to carry. In contrast, lower age dependency ratios usually signify better prospects for rapid socio economic development.

Table 6: Age dependency ratios, 1985 - 2006

Year	Dependency Ratios (per 100 persons ages 15-64)		
	Total	Child (under 15)	Old age (65 & over)
1985	90.9	86.2	4.8
1990	98.8	93.3	5.4
1995	98.4	92.3	6.1
2000	80.6	73.8	6.7
2006	56.9	49.4	7.5

In 2006, the population had a total dependency ratio of 56.8. The child dependency ratio declined while old age dependency continued to rise in 2006. The child dependency ratio was 49.4 percent per hundred persons aged 15-64 years in 2006, down from a high of 93.3 in 1990, as fertility fell and the 1980s' baby boomers moved to the working ages, Old age dependency rose to 7.5 percent per hundred persons aged 15-64 year in 2006 (see Table 6).

Changes in the sizes of the population of the broad age groups are reflected in the age dependency ratios. Total Age Dependency Ratio was declining gradually till 2000, and a significant drop was observed between 2000 and 2006, due to the changes in age structure as a result of the large number of children who moved into ages 15 and above during the period. Between 2000 and 2006

the Total Dependency Ratio declined by 30 percent, the Child Dependency Ratio by 33 percent and the Old Age Dependency Ratio increased by 10.6 percent.

4.4.1 Age Dependency Ratio by Atoll

Table 7: Age dependency ratios by atoll, 2000 - 2006

Atolls	Year	Dependency Ratio			Percentage change in total dependacy ratio 2000-2006
		Child	Old	Total	2000-2006
Male'	2000	44.5	3.6	48.1	25.9
	2006	34.5	3.7	38.2	
Atolls	2000	88.5	8.6	96.8	40.9
	2006	59.0	9.6	68.7	
North Thiladhunmathi (HA)	2000	100.3	9.6	114	43.8
	2006	67.7	11.6	79.3	
South Thiladhunmathi (Hdh)	2000	109.4	9.1	109.4	38.3
	2006	68.0	11.1	79.1	
North Miladhunmadulu (Sh)	2000	104.2	8.2	104.2	36.9
	2006	66.4	9.7	76.1	
South Miladhunmadulu (N)	2000	115.4	9.8	115.4	44.6
	2006	68.1	11.8	79.8	
North Maalhosmadulu ®	2000	110.2	9.1	110.2	33.6
	2006	72.2	10.3	82.5	
South Maalhosmadulu (B)	2000	87.7	7.3	87.7	34.9
	2006	56.1	8.9	65.0	
Faadhippolhu (Lh)	2000	86.4	9.1	86.4	41.6
	2006	51.4	9.7	61.0	
Male' Atoll (K)	2000	45.2	4	45.2	45.3
	2006	26.6	4.6	31.1	
North Ari Atoll (A.A)	2000	93.5	6.7	93.5	68.5
	2006	48.6	6.9	55.5	
South Ari Atoll (Adh)	2000	76.7	5.9	76.7	68.1
	2006	45.3	6.6	51.8	
Felidhu Atoll (V)	2000	71.8	5.9	71.8	32.2
	2006	44.8	9.5	54.3	
Mulakatholhu (M)	2000	88.6	9.6	88.6	43.8
	2006	50.4	11.2	61.6	
North Nilandhe Atoll (F)	2000	109.3	5.6	109.3	32.6
	2006	74.7	7.8	82.4	
South Nilandhe Atoll (Dh)	2000	96.7	8.2	96.7	49.2
	2006	55.6	9.2	64.8	
Kolhumadulu (Th)	2000	99.1	7.9	99.1	42.0
	2006	59.5	10.4	69.8	
Hadhdhunmathi (L)	2000	101.2	6.4	101.2	44.2
	2006	62.3	7.9	70.2	
North Huvadhu Atoll (Gn)	2000	113.4	9.2	113.4	38.5
	2006	71.6	10.3	81.9	
South Huvadhu Atoll (Gdh)	2000	116.4	10.8	116.4	37.3
	2006	71.2	13.5	84.4	
Fuvahmulah (Gn)	2000	112.2	9.3	112.2	38.9
	2006	69.8	11.0	80.8	
Addu Atoll (S)	2000	102.7	11.5	102.7	39.3
	2006	60.8	12.8	73.7	

Age-dependency ratios show considerable variations between Atolls. The Total Dependency Ratio varies from 31.1 in Male' atoll to 84.8 in South Huvadhu atoll; the child Dependency Ratio from 26.6 in Male' atoll to 74.7 in North Nilandhe atoll, and the Old Age Dependency Ratio from 3.7 in Male' to 13.5 in South Huvadhu Atoll (see Table 7).

These variations reflect differences in the age composition between the atolls; the highest Child Dependency Ratios and Total Dependency Ratios are found in atolls with the largest proportion of children, while the highest Old Age Dependency Ratios are found in the atolls with the largest proportion of old persons. These variations can be explained by many factors including differences in fertility and mortality, in the availability of opportunities for education and employment affecting migration, and in the extent of age misreporting.

Age dependancy ratios are declining for all the atolls

5. Sex Ratio

The Sex Ratio is a useful concept to summarize the balance between the male and female populations. A Sex Ratio of 100 indicates a balance between the male and female populations, ratios above 100 indicate a larger male population, and ratios below 100 indicate a larger female population.

The Sex Ratio is determined by the same factors that influence population change – natural increase and net migration. It is mainly the outcome of the interplay of sex differentials in mortality, sex selective migration, sex ratio at birth and at times the sex differential in population enumeration. Changes in sex composition largely reflects the underlying socio-economic and cultural patterns of a society in different ways. Therefore, Sex Ratio is an important social indicator to measure the extent of prevailing equity between males and females in a society at a given point in time.

Table 8 shows that the country as a whole has a sex ratio of 100.3 males per 100 females in 2006, signifying an excess of males in the population. A surplus of men over women is characteristic for all censuses in the Maldives.

5.1 Historical Patterns

Given the fact that there is no immigration or evidence of sex selection at birth in the Maldives, the only explanation for the excess of males lies in the prevalence of high mortality rates for women during the early 20th century and the past decades. The main reasons for this is the large number of deaths of women aged 20-35 due to causes relating to child birth. Given the fact that there were no doctors or mid-wives in any of the islands, women lacked proper care and attention at child birth. The very poor standards of living, influenza, famines and other hardships during the time may also have further contributed to the fateful loss of women in child birth. This loss is still evident today, in the sex ratios for older age groups, 65 and over, who belong to the 1940 and earlier birth cohorts. In 2006, there are still 151 men per 100 women in the ages 75 and over (see Figure 18).

5.2 Changes in the Sex Ratio

The Sex Ratio has been declining since 1920, with minor fluctuations throughout. In 2006 there were three percent (1531) more men than women, compared to 20 percent in 1931. The share of women was highest in 2006 (49.3 percent) and the lowest (45.5 percent) in 1931.

Table 8 shows the trends in the Sex Ratio for the Maldives since 1911. The sex ratio was the highest during 1911 to 1961, and from 1963-1971 remained constant at 114-15. The 1970s was the onset of a rapid decline in Sex Ratios. By 2006 the Sex Ratio had declined to 103 from 114 in 1970.

Men continue to outnumber women in 2006; however, women are gaining ground on men

Table 8: Sex ratio 1911 - 2006

Year	Males	Females	% Males	% Females	Sex Ratio
1911	39,244	32,993	54.33	45.67	119
1921	38,174	32,239	54.21	45.79	118
1931	43,235	36,046	54.53	45.47	120
1946	44,308	37,760	53.99	46.01	117
1953	41,656	35,617	53.91	46.09	117
1957	44,614	38,461	53.70	46.30	116
1958	46,888	40,694	53.54	46.46	115
1959	47,505	41,785	53.20	46.80	114
1960	49,640	42,607	53.81	46.19	117
1961	49,906	42,887	53.78	46.22	116
1962	49,454	43,290	53.32	46.68	114
1963	50,274	44,253	53.18	46.82	114
1964	50,276	43,684	53.51	46.49	115
1965	51,964	45,779	53.16	46.84	114
1966	53,938	46,945	53.47	46.53	115
1967	55,346	48,455	53.32	46.68	114
1968	56,983	49,986	53.27	46.73	114
1969	58,897	51,873	53.17	46.83	114
1970	60,975	53,494	53.27	46.73	114
1971	63,188	55,630	53.18	46.82	114
1972	64,924	57,749	52.92	47.08	112
1974	68,301	60,396	53.07	46.93	113
1977	75,224	67,608	52.67	47.33	111
1985	93,482	86,606	51.84	48.16	108
1990	109,336	103,879	51.28	48.72	105
1995	124,622	120,192	50.90	49.10	104
2000	137,200	132,901	50.80	49.20	103
2006	151,459	147,509	50.66	49.34	103

Due to the past trends of female mortality rate the Maldives continues to have more males than females in its population. Also, a younger population tends to have higher Sex Ratios than older populations and the Maldives still has a very young population.

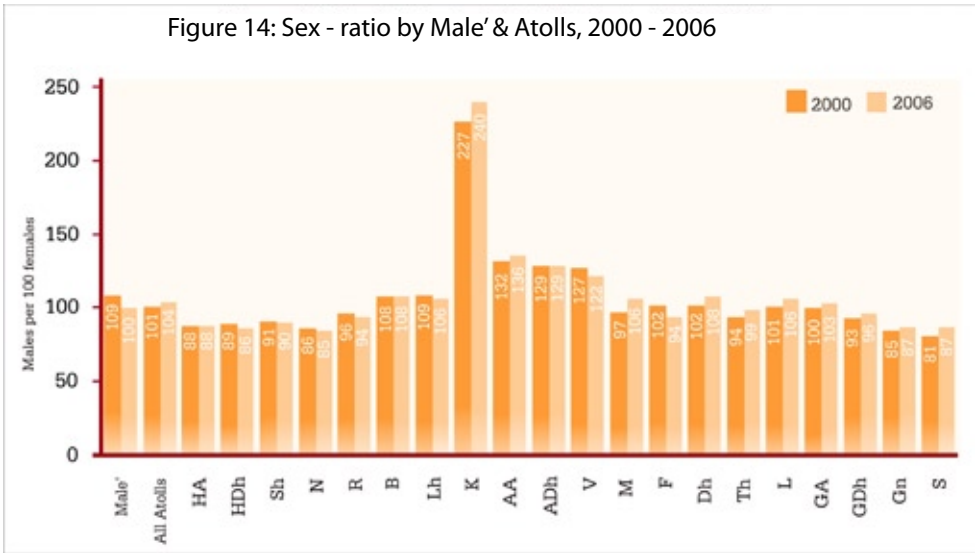
However, with the improvements in the Maternal Mortality Rates (MMR), life expectancy and the situation of women over time, the ratio of men to women is becoming balanced. Today the life expectancy at birth for males and females stands at 71.6 and 72.7 years respectively in 2005. Maternal Mortality has declined from approximately 500 per 100,000 live births in 1990 to 69 per 100,000 live births in 2006.

5.2.1 Sex Ratio by Atoll

Although nationally the 2006 census recorded 103 males per 100 females, there was marked variation by atoll. In 2006 the sex ratios among the atolls varied from a low of 85 to 240. Sex ratios followed distinct patterns in the central, southern and northern atolls. The central atolls, Kaafu, AA, ADh and Vaau, are characterised by an exceptionally large number of males over females, because of the nature of the labour markets and the youthful composition of the population in these regions. In all northern-most atolls except in Baa and Lhaviayni, females outnumber males, whereas males outnumber females in all southern atolls except Faafu, Thaa, GDh, Gn and Seenu.

Men outnumber women in the central atolls; however women outnumber men in the southern & northern most atolls.

Figure 14: Sex - ratio by Male' & Atolls, 2000 - 2006



Throughout the past decades several atolls remained among the highest or lowest ranking in terms of their Sex Ratios. Atolls consistently ranking among the highest include, Kaafu, Adh, AA and Vaavu. Kaafu atoll had the highest Sex Ratio of 240 males per 100 females, followed by AA atoll with 136 males per 100 females. Addu had the lowest sex ratio in every census from 1990 to 2000, however, the atoll with the lowest Sex Ratio changed to Noonu in 2006. The atolls HA, HDh, N, Gn and Seenu have had the lowest Sex Ratios in the range 85-91 during the past 20 years.

Atolls to the south of Kaafu atoll have experienced an increase in the Sex Ratio between 2000 to 2006, except for F which had a decline, and Adh which remained constant. The atolls Meemu, Thaa, Laamu, Ga, GDh and Seenu had a significant increase in the Sex Ratio by two to nine percentage points. Meemu had the largest increase of nine percentage points, from 97 in 2000 to 106 in 2006. The second largest increase was in Seenu and Dhaalu atoll, by six percentage points. Thaa and Laamu atolls saw increases in the Sex Ratio by five percentage points.

On the other hand, the atolls to the North had experienced a decline in sex ratio. Sex ratios for HDh, SH, N and R declined by one percentage points, while Lh declined by three percentage points. The increase in sex ratio for the southern region probably indicates the new developments within the atolls which may have kept some people from migrating. The sex ratio of Addu atoll had the largest increase, from 81 in 2000 to 87 in 2006.

Another point to note is that the sex ratio of Male' had declined significantly from 109 in 2000 to a balance of 100 in 2006. This indicates that the recent influx of people to Male' from the atoll are not only men, but an equal proportion of women are also moving to the capital. This may not necessarily imply that an equal proportion of women are also seeking employment in Male', but rather it seems that more men who are seeking jobs in Male' are moving in with their families. The huge jump in the Male' population during the last 5 years also adds weight to the argument that larger groups are migrating to the capital and the recent availability of more housing units in Male' might have increased the inward pull factor for Male'.

The Sex Ratio of all atolls combined, increased from 101 to 104 between 2000 and 2006. This is close to the national ratio of 103, and is mainly due to the excess of men in the older age groups as explained in the previous topic. A close to balanced Sex Ratio in 2000 may have been due to the larger proportion of men moving out to Male' during the time.

As can be observed from Figure 14, there is an overwhelming imbalance in the Sex Ratios over the atolls. The gap between the highest and lowest atoll Sex Ratios widened during the past 10 years. In 1985 the Sex Ratio ranged from a low of 85 in Seenu atoll to 211 in Kaafu Atoll, while in 2006 the range was from 85 in Noonu atoll to 240 in Kaafu atoll.

These changes are possibly due to differences in socio-economic conditions, and hence, of population movements between the various atolls. The highest Sex Ratios are in the central atolls which includes Kaafu atoll, AA, ADh and Vaavu. This is due to the largest number of tourist resorts within the atolls, providing employment opportunities for men. The number of women working in the resort is very low compared to men. The atolls in the southern- and northern- most region typically have an excess of females over males. This is due to the reason that employment opportunities are by and large centred in the Male' atoll region. There is consequently net out migration from these atolls especially of males, leaving behind an excess of females.

5.2.2 Sex ratio by age groups

Normally in the absence of migration, sex ratios tend to decrease with age due to higher male mortality rate at each age. Higher male mortality decreases the Sex Ratio and the age at which the Sex Ratio drops below 100. Therefore Sex Ratios consistently decreases with age.

The current excess of approximately 105 male births for every 100 female births is a common phenomena among all countries and has remained largely unchanged for the past century. Virtually all countries where complete data is available have Sex Ratios at birth of between 104 and 107.

The universality of the pattern would support the concept that the Sex Ratio at birth is biologically pre-programmed to compensate for higher male mortality at all ages. – nature's way of trying to ensure that a Sex Ratio of 100 males per 100 females is reached during childbearing ages.

Figure 15: Sex - ratios by age group, 2006

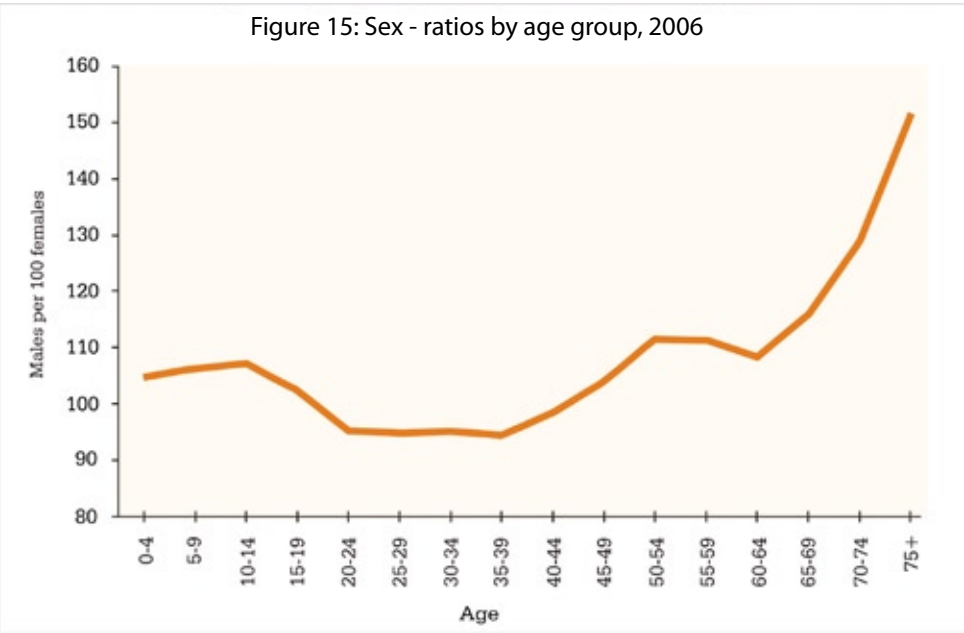


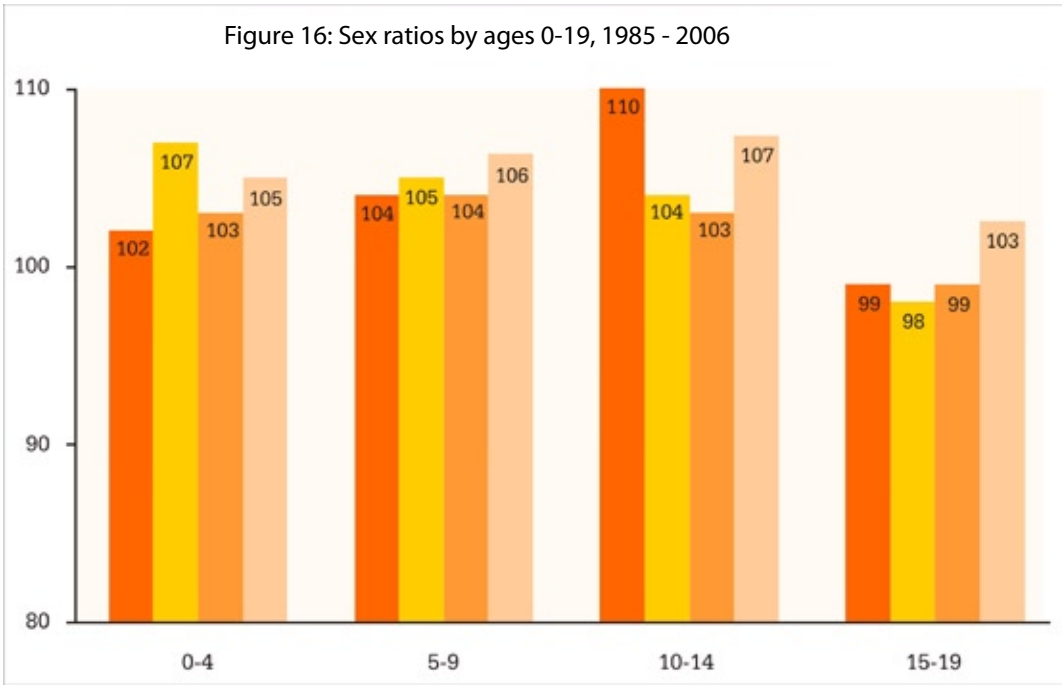
Table 9: Number of Males & Females in each five year age group , 2000 - 2006

Age	2006			2000		
	Both Sexes	Male	Female	Both Sexes	Male	Female
0-4	26,171	13,362	12,809	30,912	15,699	15,213
5-9	29,867	15,352	14,515	37,927	19,336	18,591
10-14	36,999	19,111	17,888	41,089	20,897	20,192
15-19	39,904	20,155	19,749	33,266	16,590	16,676
20-24	34,809	16,933	17,876	23,514	11,620	11,894
25-29	24,581	11,915	12,666	20,090	9,805	10,285
30-34	20,635	10,022	10,613	18,161	8,890	9,271
35-39	18,174	8,780	9,394	15,699	7,828	7,871
40-44	15,871	7,828	8,043	12,402	6,272	6,130
45-49	13,569	6,872	6,697	7,461	3,977	3,484
50-54	7,936	4,147	3,789	5,967	3,051	2,916
55-59	5,859	3,046	2,813	5,996	3,131	2,865
60-64	5,566	2,852	2,714	6,312	3,370	2,942
65-69	5,678	3,014	2,664	4,611	2,650	1,961
70-74	4,186	2,333	1,853	2,873	1,737	1,136
75-79	2,377	1,444	933	1,410	859	551
80-84	1,064	617	447	679	407	272
85-89	396	241	155	284	162	122
90-94	159	89	70	96	59	37
95+	84	52	32	76	31	8
Age not stated	5,083	3,294	1,789	1,276	815	461
Total	**298,968**	**151,459**	**147,509**	**270,101**	**137,186**	**132,878**

The sex ratio in the Maldives by five year age groups largely defer from the typical pattern, where older populations tend to have lower sex ratios than young populations. In general the ratio of the male population to the female population increased starting with ages 40, reflecting the predominantly male population in these ages. At age 50, there were 145 males per 100 females; and by age 75 and over, 142 males per 100 females. The excess of men over women increased with age owing to the cumulative effects of higher death rates of females over time.

At younger ages the Sex Ratio was in the range 103-107, reflecting the fact that more boys than girls are born every year and that boys continue to outnumber girls through childhood and adolescence. The sex ratio of age groups 0-4, 5-9 and 15-19 increased over the period 1985 to 2006 (see Figure 16). The age group 10-14 experienced a decline from 110 to 103 between 1985 to 2000, but increased to 107 in the 2006.

Figure 16: Sex ratios by ages 0-19, 1985 - 2006



As shown by figure 17, from age 20-44 year on women were the majority (see Figure 17). In fact, this is the only age groups with an excess of women. In the 2006 census, for the first time in history, the age group 40-44 years experienced an excess of women over men, with a sex ratio of 99.There was a significant drop in the Sex Ratio of this age group from 110 in 1996 to 102 in 2000 due to the movement of generations with excess males into the older age groups and the entry of large birth cohorts from 1956 to 1960. The age groups 25-29, 30-34 and 30-39 also experienced a decline in Sex Ratios as a result of the entry of large birth cohorts into the age groups during 1995. A further decline in the Sex Ratios for the age groups 20-44 between 2000 and 2006 could partly be due to people in these age groups being under-enumerated due to mobility.

Figure 17: Sex - ratios by ages 20-44, 1985 - 2006

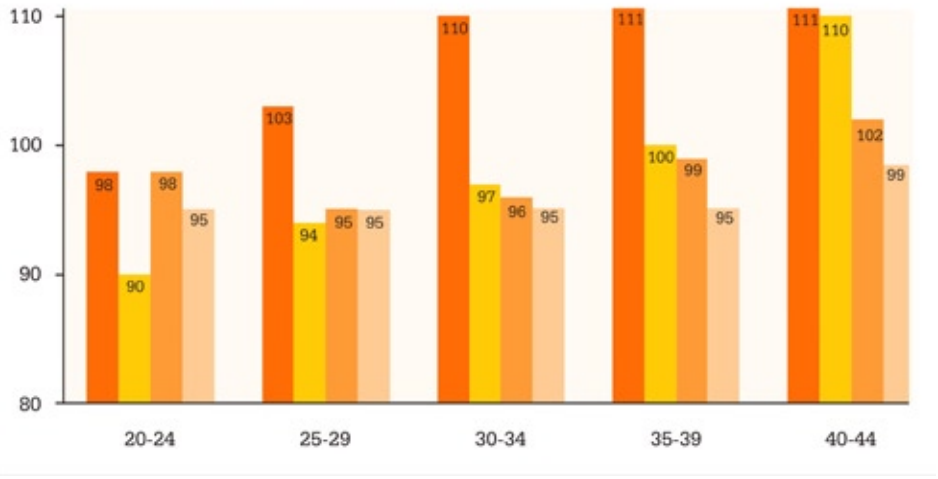
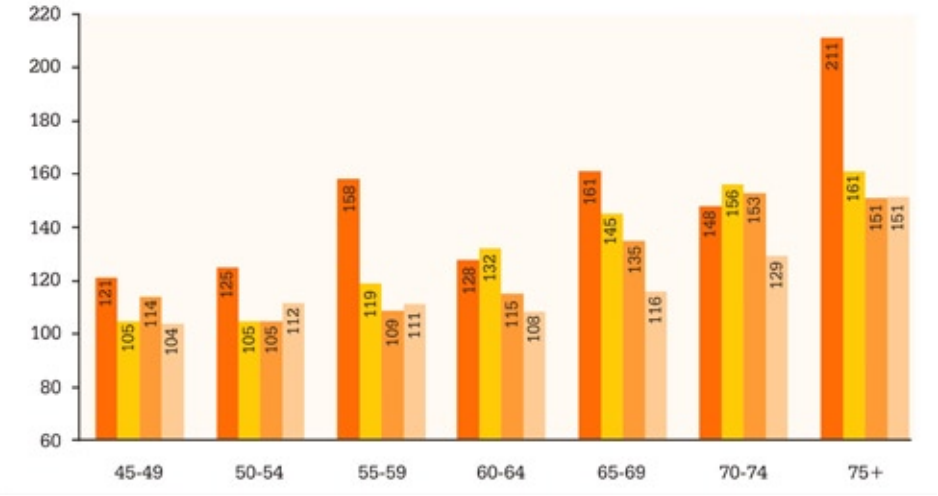


Figure 18: Sex - ratios by ages 45-49, 1985 - 2006



Even though men still continue to outnumber women at ages 45 years and over in 2006, from 1985 to 2006 the Sex Ratios of these age groups had declined significantly (see figure 18). The highest Sex Ratio during the two decades was 211 for the age group 75 and over, in 1985; his had declined to 151 in 2006. However, men still outnumber women in all age groups from 45 to 75 and over. In the ages 75 and over men still outnumber women by 34 percent. Generally, the declining ratios over time have resulted from three main factors: the dying out of generations with excess males; entry of large birth cohorts after the World War II; and greater improvements in female mortality rates during the decades.

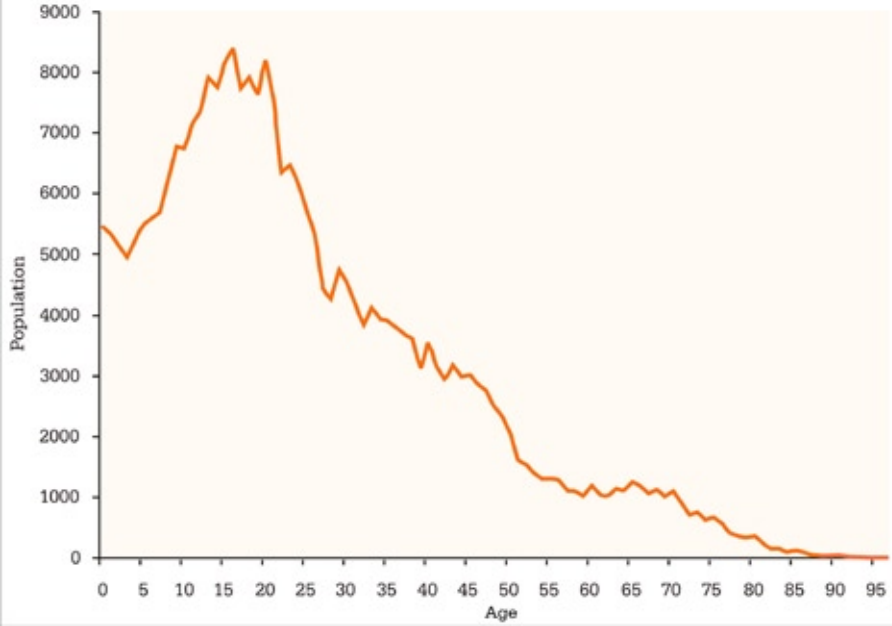
6. Accuracy of Age data

Age is the most important variable in the census data. However it is typically prone to errors of recall, preference of certain digits and over- and under- stating of the correct age. Failure to report age is also another problem with age data. An analysis of the quality of age data is important, as the overall quality of census data is probably indicated by the quality of age reporting.

An overall assessment of the quality of census age-sex data can be done with the use of summary age accuracy indices, including age-sex ratios and age-sex accuracy indices, such as Whipple's Index, Myers' Index, and UN Age-Sex Accuracy Index.

The single year age distribution is shown in Figure 19. The 2006 Census data on age composition for the Maldives shows that only less than two percent of the population were reported as "age not stated." (1.1 percent for males and 0.60 percent for females).

Figure 19: Single year age distribution, 2006 Census



Evidence of distortions in reported census data is clearly shown when single-year age distributions are considered. The single-year age distribution of the Maldives in Figure 19 shows a number of small peaks at the ages ending in 0s, showing a preference for the digit '0'. Heaping of age in certain digits is a very common problem in census and surveys, especially in developing countries. Indexes such as Whipple's index and Myers' Blended Index have been developed to statistically assess the extent of age preference, based on the assumption that the population is rectangular distributed over some age range (Shryock and Siegel 1976).

6.1 Whipple's Index

Whipple's index is a classic measurement for evaluating the age heaping, and it detects a preference for ages ending in '0', '5', or both. Table 10 gives a comparison of Whipple's indexes by sex for the Republic, Male' and the Atolls in the period 1985-2006.

Table 10: Whipple's Index 1985 - 2006

	Republic				Male'		Atolls	
	1985	1995	2000	2006	2000	2006	2000	2006
Both Sexes	176.8	143.1	106.9	103.8	110.9	103.9	105.1	103.7
Male	175.3	149.3	109.5	104.9	111.8	105.5	108.3	104.5
Female	178.4	145.8	104.3	102.7	109.7	102.5	102.1	102.9

The index value ranges from 100 (when no preference or avoidance exists in the data) to 500 (when all people report their age either ending with "0" or "5"). Between these extreme values, the data quality is regarded as highly accurate if Whipple's index is less than 105; fairly accurate if the index lies between 105 and 109.9; approximate if it falls between 110 and 124.9; rough if it is located in the range of 125 to174.9 and, finally, very rough if the index is 175 or more.

In the 2006 Census, the Whipple's index for the Maldives is 103.8, which indicates that data quality can be regarded as highly accurate. Whipple's index for males was 109.5 and for females the index was 104.3, indicating that women reported their ages more accurately than men.

Comparison of Whipple's indexes from census 1985 to 2006 shows improvement in age reporting. The accuracy of age data has moved from very rough in the 1985 Census to highly accurate in 2006.

6.2 Myer's Index, 2000-2006

Myer's Index enables an evaluation of the preference for or avoidance of, each of the ten digits between "0" to "9" while reporting ages. The Index will be zero (in case of no age heaping) and "90" if all ages were reported with ages ending with a single terminal digit.

Though some digit preference occurs (on digit 0), there is no marked digit preference in age reporting in the 2006 Census (see Table11). The quality of age reporting is generally very good with an index of 2.8. A comparison with the digit preference indices computed for the 2000 Census indicates that age reporting was better in the 2006 Census.

The most preferred digits in the 2000 and 2006 censuses is '0'. The preference for digit 5 has also persisted. Preference for digit 0 may be due to the tendency to round off ages to years ending in 0. The most avoided digit has shifted from '1' in 2000 to ' 2' in 2006.

Table 11: Myer's Index 2000 - 2006

	Republic						Male'						Atolls					
	2006			2000			2006			2000			2006			2000		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0	0.6	0.8	0.7	1.1	0.7	0.9	0.6	0.8	0.7	1.7	1.1	1.4	0.4	0.5	0.4	0.8	0.4	0.6
1	0.0	-0.2	-0.1	-0.9	-0.6	-0.7	0.0	-0.2	-0.1	-1.2	-1.5	-1.3	-0.3	-0.4	-0.3	-0.7	-0.2	-0.5
2	-0.7	-0.9	-0.8	-0.3	-0.2	-0.3	-0.7	-0.9	-0.8	-0.7	-0.7	-0.7	-0.6	-0.8	-0.7	-0.1	0.0	-0.1
3	-0.1	0.2	0.1	0.0	0.1	0.0	-0.1	0.2	0.1	-0.8	-0.5	-0.7	0.1	0.5	0.3	0.2	0.3	0.2
4	-0.2	0.0	-0.1	0.3	0.3	0.3	-0.2	0.0	-0.1	-0.1	-0.3	-0.2	-0.1	0.1	0.0	0.5	0.6	0.6
5	0.5	0.2	0.3	0.7	0.3	0.5	0.5	0.2	0.3	0.5	0.4	0.4	0.7	0.6	0.6	0.8	0.3	0.6
6	0.4	0.3	0.4	-0.5	-0.7	-0.6	0.4	0.3	0.4	-0.6	-0.4	-0.5	0.6	0.5	0.5	0.5	-0.8	-0.7
7	-0.4	-0.2	-0.3	-0.3	0.0	-0.1	-0.4	-0.2	-0.3	0.0	0.1	0.0	-0.3	-0.2	-0.3	-0.5	0.0	-0.2
8	-0.1	-0.1	-0.1	0.0	0.2	0.1	-0.1	-0.1	-0.1	0.4	1.0	0.7	-0.1	-0.3	-0.2	-0.2	-0.2	-0.2
9	-0.1	0.0	-0.1	0.1	0.0	0.0	-0.1	0.0	-0.1	0.8	0.8	0.8	-0.3	-0.4	-0.3	-0.3	-0.4	-0.3
Myer's Summary Index	3.1	2.8	2.8	4.4	3.1	3.6	3.1	2.8	2.8	6.7	6.9	6.8	3.6	4.1	3.8	4.7	3.3	4.0

The preference for the digit 0 is much in higher in Male' compared to the Atolls. For the Atoll the digits 5 and 6 were much preferred over the digit 0.

For the 2006 Census, the Myer's Blended Index of digit preference for female age-reporting is 1.4 and that of males is 1.5. There was no marked difference in the level of accuracy in age reporting among males and females. However, in 2000, age seems to have been more accurately reported among females than males.

For Male' the level of accuracy in age reporting among males and females has remained the same. In 2000 the Myer's index for males and females was 3.4. However, for the Atolls, there was a marked difference in age reporting among males and females. In 2006, males seem to have reported their age more accurately than females, while in 2000 females reported their age more accurately than males.

6.3 UN Age-Sex accuracy Index

The United Nations Age-Sex Accuracy index measures the accuracy of the overall age-sex distribution of a census. In defining criteria for data quality, the census data is considered to be "accurate", "inaccurate " or "highly inaccurate" depending on whether the index is under 20, 20 to 40 or over 40 respectively. Table 12 shows the UN Age-Sex Accuracy Index for the 2000 and 2006 Census.

Table 12: UN age - sex accuracy in dex 2000 - 2006

	2006	2000
Age ratio score for males	8.7	7.9
Age ratio score for females	8.5	8.4
Sex ratio score	4.1	6.2
Age-sex accuracy index	29.6	34.7
Corrected for population size	26.7	31.5

Comparison of census data from 1985 to 2006 shows improvement in age reporting in recent censuses. An explanation of the improvement in the age accuracy index values during the recent censuses, is the extra effort to validate age by using the respondent's identification cards or birth certificates wherever possible.

7. Conclusions and Policy Implications

The Maldives had a population close to 300,000 in the 2006 Census, with an average annual growth rate of 1.69 percent. The population growth of the Maldives is declining with each census. These characteristics are a reflection of the narrowing gap between births and deaths. Given the narrowing gap between births and deaths, the pace of population growth may slow down considerably in the future. However, the prospect for slower growth is not definite. Changes in fertility patterns may lead to an abrupt increase in population growth in the future.

Fluctuations in birth and death rates have produced various patterns in population growth and composition over time, such as the baby boom, which can be traced to end of World War II. The decline in the birth rate during the Great Depression caused a small bite in the Maldives pyramid for the group born between 1930 and 1934. Moreover, the lack of proper health care for women in the 1930s has caused a deficit of older women in the Maldives. The impact of various events has emphasized the interrelationships among population change and economic, social, political and health factors.

The on-going and future demands created by the relatively young population of the Maldives, in terms of health, education and employment represent major challenges and responsibilities. The bulge of young people in the workforce presents both a challenge and an opportunity. A large working age population will satisfy the labour requirements and foster economic growth, if jobs can be found for them. However, the challenge is to create a large number of productive employment opportunities for the working-age population to reduce unemployment.

The Maldives still has a relatively young population with 50 percent of its population below the age of 22 years. However, this relatively young population is getting older. Even though the process of ageing has not yet begun for the Maldives, it is expected to age more rapidly in the future as a direct result of the major baby boom generations in the Maldives. A rapid increase in the aged population is expected to occur starting in 2025 and increase rapidly starting in 2050. Similarly, the Age Dependency Ratio will rise as the large baby boom cohorts make the transition from work to retirement. This rapid and sudden increase in aged persons will pose immediate challenges unless the special and growing needs of the ageing population are addressed beforehand.

Due to social and economic reasons, the demographic characteristic of the Atolls and Male' are very different: The population growth, size, age structure, sex ratio, and the dependency ratio for the Atolls and Male' vary significantly: the Atoll populations are much younger than the Male' population. Around 31 to 41 percent of the Atoll population consists of children less than 15 years,

with the exception of Kaafu atoll, with 20 percent of the population consisting children. There are also larger proportions of older people in the Atoll population. Moreover, the excess of females over males in the Atoll population is another salient feature. These imbalances in the age sex structure of the population could create social problems.

The expansion of the Male' population from 74,069 to 103,693 over a period of only six years, stress the need for a pragmatic response: more than one third of the whole population was living in the Male', the only urban area. This is expected to swell in the coming years, as more people migrate to Male' seeking better opportunities and services. The migration of people from the rural atolls to Male' has had a positive impact on the economy and on the people themselves. However, accommodation of people in the already densely populated Male' is not possible, and is bound to lead to a major catastrophe. The population density of Male' is among the highest in the world. Therefore, development of regional urban centres within the Atolls is the only policy option for addressing the current problems and beyond.

The very different demographic characteristics of the Male' and Atoll populations means that the needs of the populations are also different. However, catering for the specific needs of these populations will remain a challenge unless the demographic imbalances between the Atolls and Male' are weighed out by creating equitable social and economic benefits among the populations. Therefore, integration of the population variables into social and economic planning is important. In this light, a sense of urgency has to permeate efforts to address challenges and opportunities presented by the population changes.

1. Introduction

Migration is one of the three factors that affect population change together with fertility and mortality. Migration's role in population change is not limited to increases or decreases of population size, but also includes its impact on spatial distribution of population. This distribution of population through migrations raises, among others, substantial questions of demographic and socio-economic importance. This paper analyses the patterns of internal migration and reasons for migration from the 2006 census data.

2. Migration patterns

2.1: Lifetime Migration

A life-time migrant refers to a person who was enumerated at a place other than their place of birth (UN 1970). When interpreting lifetime migration statistics one needs to be aware of their limitations. Life-time migration taken from census data is only a snapshot of migratory behaviour among the people. It does not reveal, for example, when the migration took place. It also does not take into account people who may have completed migrations during the years preceding the census. Nevertheless, it shows the general level of mobility within the country and is a good measure of the population redistributive function of migration. For the purposes of this analysis, a life-time migrant is defined as one who was born outside their island of usual residence, and had lived in that island for more than one year.

In 1985, over 22 percent of the resident Maldivian population were enumerated outside their island of birth. This figure was slightly lower in 1995, when 19 percent of the people were enumerated outside their island of birth. The 2000 Census indicates that about 18 percent of people were enumerated in an island which was not their island of registration. In 2006 almost 33 percent of the population were enumerated outside their island of birth. These figures show that there has been a significant increase in the number of migrants over the six years since 2000. It is highly likely that the migration levels will be much higher if all moves within a person's lifetime are accounted for by measuring levels of circulation and short term moves.

Table 1 shows gross life-time migration for Male' and other atolls for the census years 1995 and 2006. It shows that the geographical share of migrants in the atolls and Male' have evened out over the last 10 years, and the existence of a significant number of movements within the atolls. In 1995, about 56 percent of all life-time migrants were enumerated in Male' as opposed to 44 percent in the atolls. In 2006, both Male' and the atolls had almost equal number of migrants. Despite the above trends, it should be noted that Male' constitutes just a single island and that almost half of all migrants were resident in Male' in 2006

Table 1: Gross lifetime migrants by region, 1995 & 2006

	Lifetime Migrants			
Locality	1995	Percent	2006	Percent
Male'	23,956	56.48	48,691	49.619
Other atolls	18,456	43.52	49,438	50.381
Total	42,412	100	98,129	100

Table 2 shows total and percentage distribution of lifetime migrants by atoll for 2006. It shows that 33 percent of the Maldivian population were enumerated outside their atoll of birth: of which 50 percent were enumerated in Male'. This means that 33 percent of Maldivians had changed their atoll of residence at least once in their lifetime. According to the 2006 census, nearly half of all residents in Male' and Kaafu atoll were born elsewhere.

Amongst the atolls, Kaafu Atoll (47.2 %) had the largest number of migrants in its population. Alifu Dhaalu (35.71 percent), Raa (33.95 %), Shaviyani (32.40 %) and Baa (30.68 %) also had high percentage of migrants in their populations. Almost half of all migrants were enumerated in Male'(49.62 %), followed by Kaafu atoll (7.51 %) and Raa atoll (5.11 %).

2.2: Life-time Migration at Atoll Level

The number of migrants in Table 1 shows gross migrants enumerated in islands other than their islands of birth and is the total number of lifetime migrants enumerated in 2006 for Maldives. Due to the small size of island populations, the most appropriate level of aggregation for migration data for the Maldives is at atoll level. Table 3 below shows the number of people born and resident in an atoll, and number of out-migrants and in-migrants by atoll for the resident Maldivian population in 2006 . Table 3 also shows corresponding rates for in-migrants and out-migrants.

The out-migration rate (OMR) is computed for out-migrants as a proportion of all those born in an atoll, and the in-migration rate (IMR) is computed for in-migrants as a proportion of those resident in an atoll at census enumeration. The net rate is the difference between IMR and OMR. The table excludes those with unknown birthplaces and Maldivians born abroad.

The migration rate for Maldives in 2006 was 34 (Table 3). The corresponding rate in 1995 was 15. All atolls except Male', Kaafu and Alifu Dhaalu had net migration losses. Almost all of the net migration gains were in Male'. Male's net migration gain was 50,924. The atoll with the highest net loss was Seenu with 8,525 followed by Gaafu Dhaalu with 6,627.

Table 2: Total & percenntage distribution of lifetime migrants by atoll, 2006

Atoll			Percantage	
	Lifetime Migrants	Atoll Pop	Atoll Pop	of total migrants
Haa Alifu	2,436	13,495	18.05	2.48
Haa Dhaalu	2,243	16,237	13.81	2.29
Shaviyani	3,868	11,940	32.40	3.94
Noonu	2,056	10,015	20.53	2.10
Raa	5,010	14,756	33.95	5.11
Baa	2,939	9,578	30.68	3.00
Lhaviyani	2,198	9,190	23.92	2.24
Kaafu	7,368	15,441	47.72	7.51
Alifu Alifu	1,685	5,776	29.17	1.72
Alifu Dhaalu	2,992	8,379	35.71	3.05
Vaavu	584	1,606	36.36	0.60
Meemu	1,341	4,710	28.47	1.37
Faafu	689	3,765	18.30	0.70
Dhaalu	1,365	4,967	27.48	1.39
Thaa	2,248	8,493	26.47	2.29
Laamu	2,446	11,990	20.40	2.49
Gaafu Alifu	1,441	8,262	17.44	1.47
Gaafu Dhaalu	2,136	11,013	19.40	2.18
Gnaviyani	595	7,636	7.79	0.61
Seenu	3,798	18,026	21.07	3.87
Male'	48,691	103,693	46.96	49.62
Total	98,129	298,968	32.82	100.00

Table 3: Total in - migrants, out - migrants & net migrants & corresponding rates by atoll, 2006

Atoll	Resident	Born	Born and Resident	Migrants			Migration Rates		
				Out	In	Net	OMR*	IMR*	Net
Haa Alifu	12,884	17,676	10,800	6,876	2,084	(4,792)	39	16	-23
Haa Dhaalu	15,698	21,653	13,671	7,982	2,027	(5,955)	37	13	-24
Shaviyani	11,501	13,134	7,773	5,361	3,728	(1,633)	41	32	-8
Noonu	9,365	12,281	7,722	4,559	1,643	(2,916)	37	18	-20
Raa	14,308	19,074	9,313	9,761	4,995	(4,766)	51	35	-16
Baa	8,777	10,910	6,388	4,522	2,389	(2,133)	41	27	-14
Lhaviyani	8,535	10,407	6,670	3,737	1,865	(1,872)	36	22	-14
Kaafu	13,394	8,589	6,355	2,234	7,039	4,805	26	53	27
Alifu Alifu	5,121	5,505	3,779	1,726	1,342	(384)	31	26	-5
Alifu Dhaalu	7,533	7,412	5,100	2,312	2,433	121	31	32	1
Vaavu	1,287	1,744	908	836	379	(457)	48	29	-18
Meemu	4,467	6,587	3,207	3,380	1,260	(2,120)	51	28	-23
Faafu	3,496	4,103	2,954	1,149	542	(607)	28	16	-13
Dhaalu	4,613	6,181	3,409	2,772	1,204	(1,568)	45	26	-19
Thaa	7,601	11,980	5,976	6,004	1,625	(4,379)	50	21	-29
Laamu	11,252	13,134	8,973	4,161	2,279	(1,882)	32	20	-11
Gaafu Alifu	7,786	10,799	6,468	4,331	1,318	(3,013)	40	17	-23
Gaafu Dhaalu	10,338	16,965	8,452	8,513	1,886	(6,627)	50	18	-32
Gnaviyani	7,322	9,543	6,856	2,687	466	(2,221)	28	6	-22
Seenu	17,027	25,552	13,522	12,030	3,505	(8,525)	47	21	-26
Male'	93,769	42,845	42,615	230	51,154	50,924	1	55	54
Total	276,769	276,074	180,911	95,163	95,163	0	34	34	0

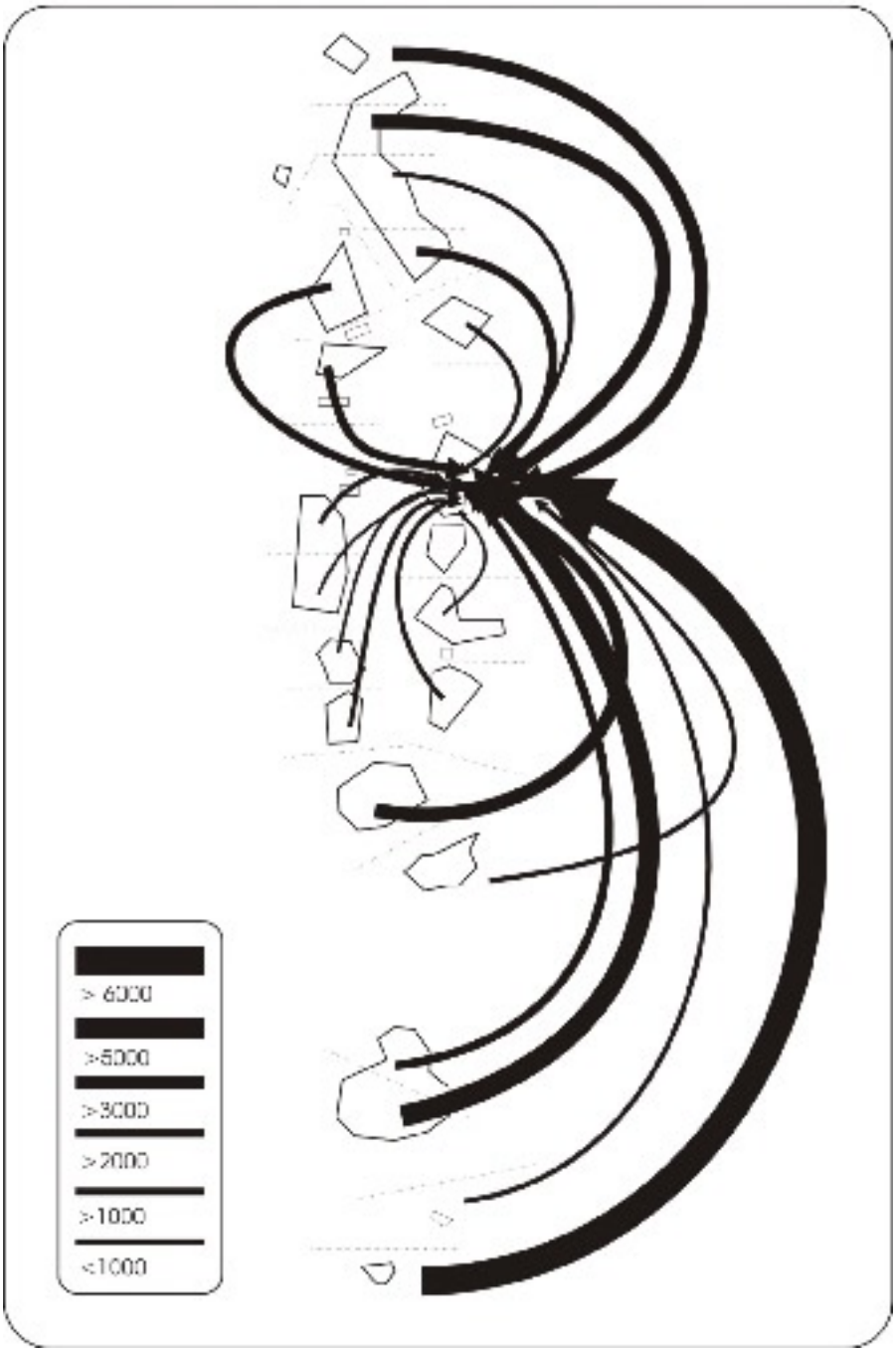
The migration rates reveal the impact of migration on atolls more than the gross and net migration figures as they represent the number of people staying or leaving an atoll as a proportion of the total atoll born population.

The migration rates in Table 3 are calculated per 100 persons. Raa Atoll and Meemu Atoll had the highest OMR of 51. It means that out of every 100 persons born in these atolls, 51 were living elsewhere. Fourteen atolls had OMRs higher than the national average, and only Kaafu atoll and Male' had higher IMRs than the national average.

2.3: Lifetime migration to male'

Male' is the main urban centre in the country and has the largest proportion of lifetime migrants in the country. In 1995, 45 percent of Male' population consisted of migrants. In 2006 the proportion of migrants in the Male' population was 53 percent. Figure 1 shows migrants streams to Male'. In 2006, Seenu Atoll (12 %) and Gaafu Dhaalu Atoll (11 %) had the highest number of lifetime in-migrants in Male', followed by Thaa, Haa Alifu and Haa Dhaalu with eight percent each.

Figure 1: Lifetime migration streams to Male', 2006



3. The Sex and age composition of migration

This section analyses migration composition based on sex and age. Migrants tend to differ from the rest of the population in a number of ways. For example, the majority of migrants may be young and more educated than their counterparts, and the migrant stream may be dominated by males or females. Migration also changes the age and sex structures of both receiving and loosing areas.

3.1 Sex composition of migrants

Sex ratios have been used for the analysis of sex composition of migration. The sex ratio measures the number of males per hundred females in a population. This analysis shows the number of male migrants per 100 female migrants for all regions. A ratio above 100 means an excess of male migrants over female migrants and a ratio below 100 means an excess of female migrants over male migrant.

According to the 2006 census, lifetime migration was significantly gender selective in the Maldives. The ratio of male to female migrants for all lifetime migrants was 118 males per 100 females. In 1995, the figure was 109.

Table 4: Lifetime migrants by sex & sex ratios, 2006

	Life time Migrant	
	Total	Percent
Female	45,035	45.89
Male	53,094	54.11
Total	98,129	100.00
Sex Ratio	118	

The total sex ratios may be disaggregated for each atoll to show the significance of gender selectivity by atolls. Table 5 shows distribution of life time migrants by age and sex for all atolls. The most significant finding was the slightly higher number of women migrants in Male'. One reason for this may be the large number of women who migrate to Male' for family related reasons. About 34 percent of women migrants in Male' had migrated for a combination of family related reasons, including marriage and as a parent or guardian. Another 3 atolls, Haa Dhaalu, Shaviyani and Raa had more female lifetime migrants than male migrants. The average sex ratio for all atolls (144) was much higher than the total ratio for the country, which was 118, suggesting an uneven distribution of males and females through lifetime migration in the atolls. Kaafu atoll had the highest number of male lifetime migrants, not surprising given the large number of male migrants workers in Kaafu atoll resorts. Kaafu atoll was followed by Alifu Alifu and Alifu Dhaalu atoll, both of which have the highest number of resorts after Kaafu atolls.

Table 5: Lifetime migrants by sex ratio by atolls, 2006

Atoll	Male	Female	Ratio
Haa Alifu	1,292	1,144	113
Haa Dhaalu	1,072	1,171	92
Shaviyani	1,894	1,974	96
Noonu	1,026	1,030	100
Raa	2,405	2,605	92
Baa	1,769	1,170	151
Lhaviyani	1,370	828	165
Kaafu	5,993	1,375	436
Alifu Alifu	1,247	438	285
Alifu Dhaalu	2,181	811	269
Vaavu	373	211	177
Meemu	751	590	127
Faafu	394	295	134
Dhaalu	762	603	126
Thaa	1,157	1,091	106
Laamu	1,324	1,122	118
Gaafu Alifu	801	640	125
Gaafu Dhaalu	1,108	1,028	108
Gnaviyani	333	262	127
Seenu	1,896	1,902	100
Atoll Total	29,148	20,290	144
Male'	23,946	24,745	97
Maldives	53,094	45,035	118

3.2 Age selectivity of Lifetime Migrants

Almost half of all migrants in the Maldives in 2006 were in the ages 15 to 35 years, of which 38 percent were in the age group 20 to 39 years. Figure 2 and 3 shows percentage distribution of migrants and proportion of migrants by broad age group.

The age distribution of migrants followed the typical pattern observed in a number of countries with a higher percentage of migrants in the adolescent and youth ages. As shown in Figure 2 the percentage distribution of migrants fell slightly from the youngest age group of 0-4 years to the 5-9 year age group, after which it climbed steeply to reach a high of 15 percent for the 15-19 year age group. The number of migrants declined steadily from the 20-24 year age group to older ages.

Figure 2: Percentage distribution of life-time migrants by broad age group, 2006

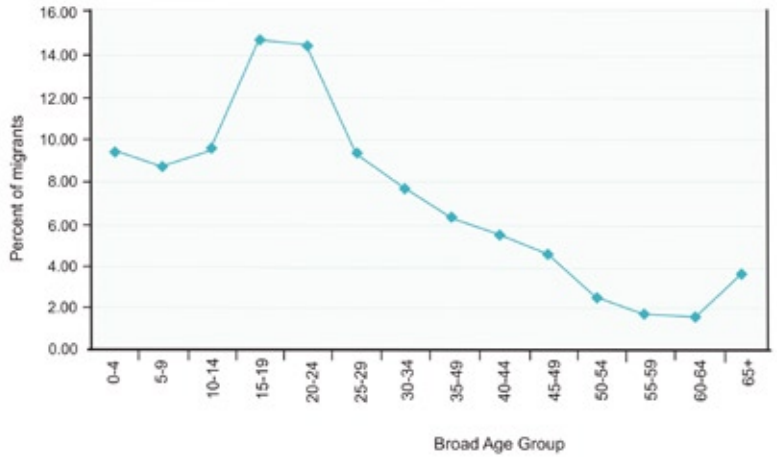
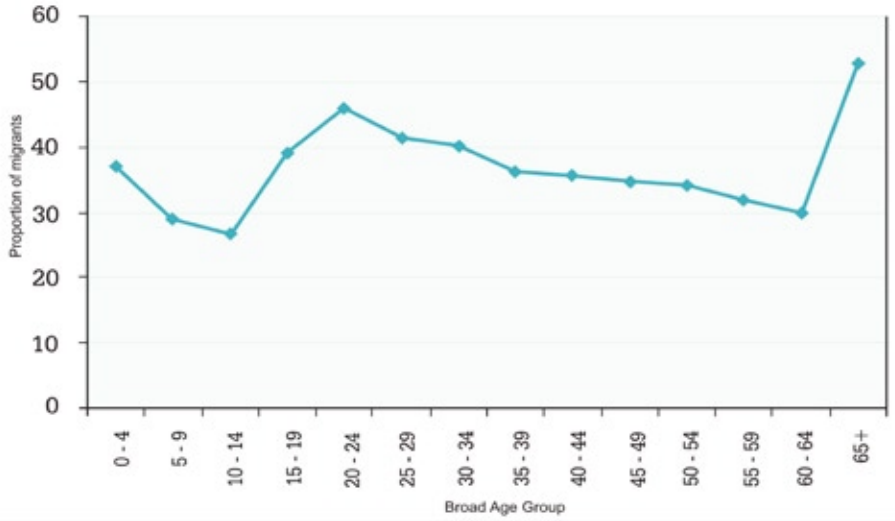


Figure 3: Proportion of lifetime migrants by broad age group,2006

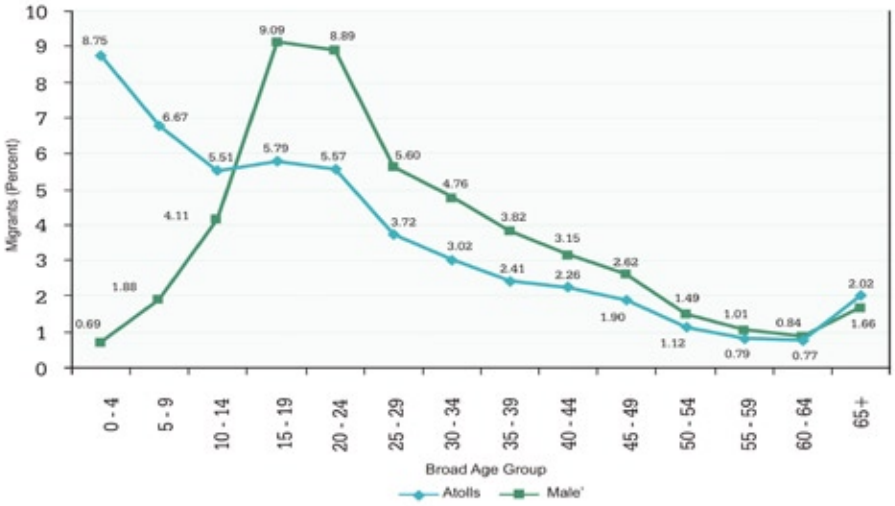


There was a sharp increase in the proportion of migrants from ages 10-14 years, peaking at 46 in the 20-24 age group. In 2006, for every 100 person in the 20-24 age group 46 were migrants. The migration rate shows the impact of historical mobility on the age structure, as the proportion of migrants in young ages is relatively small compared to other ages. The total migration rate by age for Maldives is also heavily influenced by the migration rate of Male' which had the highest level of in-migrants in the country.

Figure 4 shows distribution of lifetime migrants by age for Male' and other atolls. The major difference in the two distributions is that for the atolls the majority of migrants were in the very young ages. Almost 21 percent of all lifetime migrants were in the ages 0-14 years, with the peak gain in the youngest age group of 0-4 years. The corresponding figure for Male'was seven percent. The reason for the high number of migrants in this age group in the atolls may be due to the number of children born in hospitals and health centres in other islands. The 15-29 year age group was the most prominent migration age group for Male' with almost a quarter of all migrants

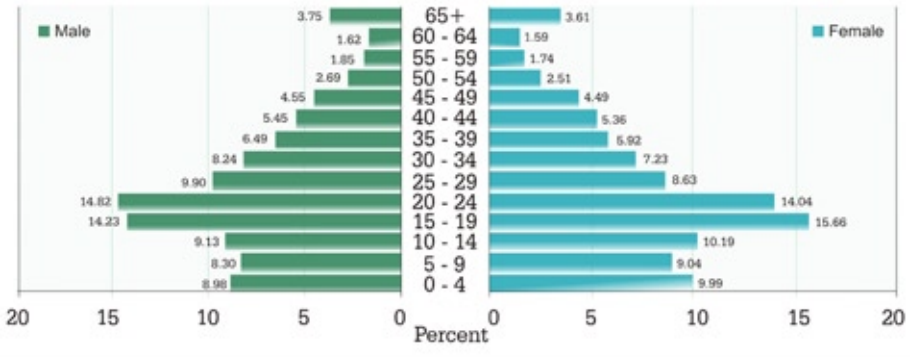
in that age group, with a peak in the age group 15-19 years. The corresponding figure for the atolls was 15 percent. Another interesting observation is the plateau in the ages 15-20 for Male', and the sharp fall in the number of migrants from thereon. There is no inherent peak in the atoll distribution of migrants, but there is a plateau between the ages 10-24 and a steady drop thereafter.

Figure 4: Percentage distribution of lifetime migrants by broad age group for Male' & other atolls, 2006



The age distribution of migrants is affected by the sex distribution of migrants. As seen in Figure 5 there were only slight differences in the distribution of lifetime migrants by age and sex. The peak age for migrant men was the 20-24 age group, while for women it was the 15-19 year age group.

Figure 5: Percentage distribution of lifetime migrants by broad age group by sex, 2006



The observed differences in age and sex of migrants may be further analysed at the atoll level to see how migrant patterns in atolls reflect the overall differences. Figure 6 and 7 below shows significant differences in age-sex patterns when migrants are classified by region. In the atolls there were no major differences in distribution of migrants except for a slightly higher proportion of male migrants in the young and youth ages groups. Female distribution of migrants was more even across the age groups compared to males. In Male' there was a high proportion of men in the 15-24 ages compared to women, and very low number of migrants in the very young ages.

Figure 6: Percentage distribution of rural lifetime migrants by age & sex, 2006

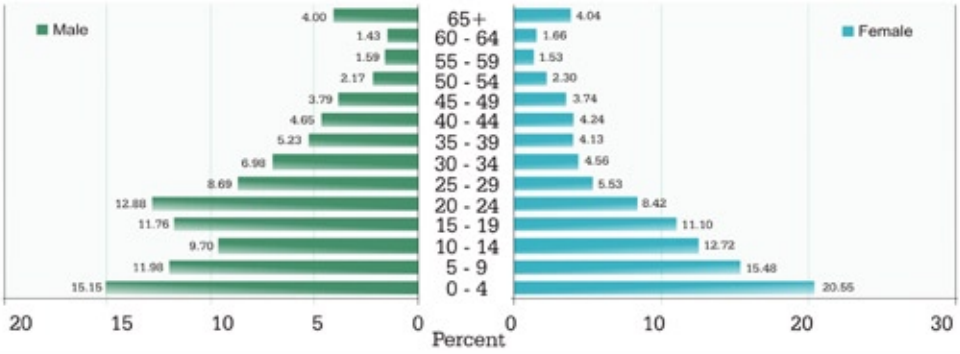
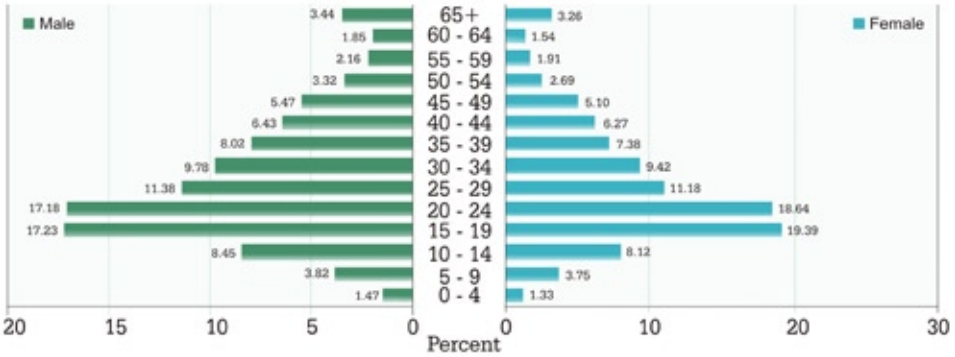


Figure 7: Percentage distribution of urban lifetime migrants by age & sex, 2006



Even though the sex differences are slight within regions, there were major differences in the distribution of migrants between Male' and other atolls. In the atolls the largest proportion of migrants are in the very young ages. In the atolls the distribution of migrants between men and women under age 10 was 27 and 36 percent respectively. For Male' the corresponding figure was five percent for both sexes. Consequently, in Male' the highest percent of migrants are in the ages 15-29 years. The sex distribution of migrants in these age groups were 45 and 49 percent respectively for Male', while the corresponding figure for atolls was 43 and 38 percent. For the old ages, the differences between Male' and atolls were negligible.

Even though the overall distribution of migrants by age were similar, there were some significant differences in the total age-sex migrant rate (Figure 8) The total migrant rate for both sexes was almost the same for age groups under 14, after which the rate for men exceeds all age groups until around ages 60 to 64 years, after which there was a slight increase in the migrant rate for women. Figure 8 therefore shows that even though the distribution of migrants by age were similar for both sexes, the proportion of migrant men to the total population exceeded that of women, revealing the impact of migration of men on the age structure of the population.

Figure 8: Migration rate for lifetime migrants by age & sex, 2006

The distribution and rates for migrants above are for gross migrants and includes all those who were enumerated in an island other than their island of birth in 2006. While this represents the overall age pattern for Maldives, the greatest amount of mobility in the Maldives is between Male' and the atolls and to a lesser extent between atolls. The analysis will therefore be extended to in-migration and out-migration by atoll to highlight compositional differences.

Table 6: Percentage distribution of In/Out & net-lifetime migrants by broad age group for Male' & other atolls, 2006

Broad Age Group	Atolls (Migrants)			Male' (Migrants)		
	In	Out	Net	In	Out	Net
0-4	8.50	3.27	5.22	1.34	29.63	-28.29
5-9	9.34	5.27	4.07	3.75	11.11	-7.36
10-14	5.33	7.46	-2.13	8.26	5.56	2.71
15-19	10.75	16.32	-5.57	18.40	3.70	14.69
20-24	17.21	17.82	-0.60	18.04	12.96	5.08
25-29	11.79	11.44	0.35	11.30	3.70	7.59
30-34	9.51	9.52	-0.01	9.51	3.70	5.81
35-39	7.08	7.52	-0.44	7.68	3.70	3.97
40-44	5.95	6.25	-0.29	6.36	7.41	-1.05
45-49	4.93	5.19	-0.26	5.29	3.70	1.58
50-54	2.42	2.83	-0.42	2.99	5.56	-2.56
55-59	1.80	1.97	-0.18	2.04	0.00	2.04
60-64	1.69	1.70	0.00	1.70	0.00	1.70
65+	3.70	3.44	0.26	3.35	9.26	-5.91
Total	100.00	100.00	0.00	100.00	100.00	0.00

Table 6 shows percentage distribution of in/out and net lifetime migrants by broad age group for Atolls and Male'. The largest percentage of in-migrants for atolls and Male' were concentrated in the ages 15-29 years. About 40 percent of atoll in-migrants and 48 percent of in-migrants to Male' were in those age groups. The highest loss of migrants in Male' were in the very young age 0-9 years and old age group 65 and above. For Male' the biggest gain in migrants was in the working ages between 15 and 39 years of age, with migrants peaking in the age group 15-19 year age group. In the atolls in-migrants peaked in the 20-24 year age group.

Figure 9: Net lifetime migration rate by broad age group for Male' & other atolls, 2006

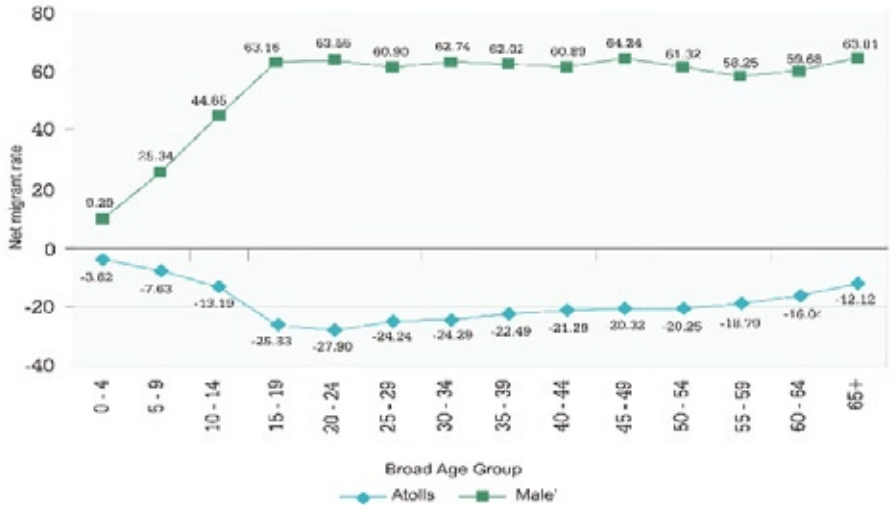


Figure 9 shows net migrant rate by age for Male' and other atolls. It shows the impact of migration on broad age groups. As stated above the atolls had a net gain of migrants only in the very youngest age group and the highest net loss was in the 20-24 year age group. Male's net loss was in the youngest age group only. The highest net gains were in the very old ages of 60-64 years. As the above age distribution of migrants are for age at census enumeration, it does not show the true age at migration which may be the reason for the high level of migrant gains in the older ages for Male', as the figure shows the results of historical patterns of migration.

4. Reasons for Migration

Migration theories are abound with explanations for migration. The reasons for migration may be economic, social, environmental or political. In the 2006 Census, all migrants were asked about their reason for migration. The question was close ended with ten possible responses: for education, for employment, to live on this island, due to marriage, as a parent/guardian, for medical purpose, to live temporarily due to tsunami, to live permanently due to tsunami, due to population consolidation programme and other reasons. Although the question on reasons for migration has been refined from previous years, inclusion of the response, "to live on this island/live with the family" has added a significant distortion to the results derived from the census. More than a quarter of all migrants had stated this as their reason for migration. Table 7 shows frequency distribution of lifetime migrants by reason for migration.

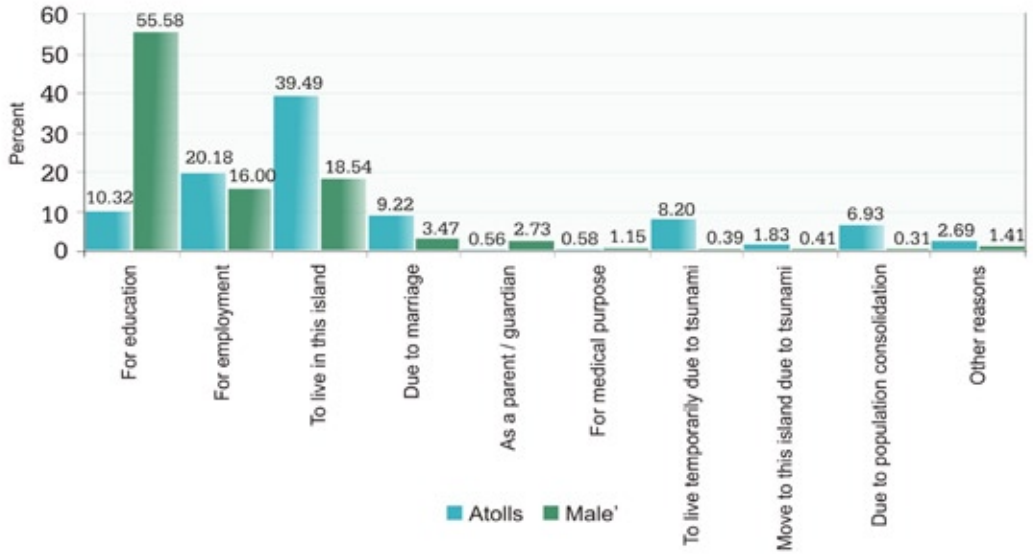
Table 7: Frequency distribution of lifetime migrants by reason for migration, 2006

Reason for Migration	Total	Percent
Education	29,215	33.50
Employment	15,737	18.04
To live in this island/live with family	25,086	28.76
Marriage	5,476	6.28
As a parent/guardian	1,457	1.67
Medical Purpose	761	0.87
Temporarily due to tsunami	3,664	4.20
Permanently due to tsunami	959	1.10
Due to population consolidation program	3,088	3.54
Other reasons	1,774	2.03
Total	87,217	100.00

Over 33 percent of all lifetime migrants enumerated in 2006 reported to have migrated in search of better education opportunities. To live in the island and employment were the other two most often cited reasons for migration.

Figure 10 shows reasons for migration to Male' and to other atolls reported by lifetime migrants. It shows that education was the single most important reason why people migrated to Male'. For other atolls the most important reason for migration was to live on that island and employment. For atoll lifetime migrants, education was the third most important reason for migration.

Figure 10: Percentage of lifetime migrants by reason for migration for male' and other atolls, 2006



4.1 Reasons for Migration by Age

As shown above migration is highly age selective for all migration periods. This section analyses migration reason by age for lifetime migrants to see if there were differences in age selectivity for the reasons cited for migration. The reasons for migration followed the general lifecycle of the population. A higher percent of migrants in the very young and young ages migrated for education purposes, and working age migrants had migrated for employment and business. This broad pattern was shared by both sexes in both regions (Table 8). While the same pattern was seen for Male', the concentration of males and females in the age group 15-19 was significantly high. This may be due to availability of higher education and vocational training opportunities in Male'. To live on this island also an important reason for migration at younger ages which may be cited by children who migrate with parents or family members. As expected, a large proportion of those citing employment as the main reason for migration were in the ages 20 to 30 years. However, in the atolls there were younger women citing employment reasons for migration.

Table 8: Percentage distribution of reasons for migration reported by lifetime migrants by age & sex for other atolls, 2006

	Atolls													
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
For education	6.04	16.50	40.15	36.98	5.18	1.71	1.06	1.42	0.79	0.43	0.34	0.47	0.50	0.38
For employment	0.13	0.47	0.47	13.57	35.04	33.86	31.60	24.59	19.38	15.16	12.64	13.68	12.12	6.73
To live in this land	43.27	38.87	27.42	30.95	40.38	41.57	41.96	44.19	42.52	43.89	42.08	46.04	42.48	43.27
Due to marriage	0.25	0.16	0.09	1.35	8.65	12.36	12.32	12.97	15.03	15.66	15.57	12.17	14.53	13.49
As a parent/guardian	0.38	0.10	0.09	0.10	0.19	0.36	0.62	1.24	1.51	1.40	1.16	1.04	0.80	0.46
For medical purpose	0.13	0.05	0.00	0.14	0.38	0.38	0.72	0.45	0.58	0.47	1.23	1.42	2.30	2.46
Temporarily due to tsunami	35.09	28.71	18.18	8.26	4.76	3.71	4.20	5.07	5.99	7.72	7.58	5.19	5.41	6.26
Permanently due to tsunami	7.30	5.19	3.29	1.85	0.92	1.35	1.16	1.63	1.68	1.55	1.57	1.13	1.00	1.61
Population consolidation pogram	6.54	9.32	9.23	6.00	3.07	3.51	4.81	6.70	8.25	7.91	10.45	11.13	14.33	15.87
Other reasons	0.88	0.63	0.70	0.79	1.42	1.21	1.56	1.75	4.28	5.82	7.38	7.74	6.51	9.45
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Male'													
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
For education	42.44	79.81	90.65	87.18	64.06	50.80	43.00	34.16	24.03	19.43	18.09	14.01	10.73	7.37
For employment	0.84	0.16	0.13	7.20	21.82	21.89	18.29	21.44	21.78	24.14	25.67	22.68	23.85	20.34
To live in this land	45.38	16.31	7.19	4.02	8.65	17.27	24.39	28.31	34.99	35.82	37.68	40.74	41.73	46.76
Due to marriage	0.42	0.05	0.05	0.37	3.46	5.69	5.03	5.59	5.84	6.23	5.29	8.19	4.47	4.08
As a parent/guardian	0.00	0.00	0.03	0.12	0.41	2.25	5.15	6.05	7.43	7.67	6.95	5.46	7.00	4.16
For medical purpose	2.73	0.69	0.39	0.26	0.48	0.66	1.12	1.22	1.59	1.44	2.13	3.21	4.32	9.85
Temporarily due to tsunami	1.47	0.80	0.65	0.33	0.31	0.21	0.18	0.32	0.38	0.22	0.47	0.36	1.19	0.96
Permanently due to tsunami	3.15	1.17	0.68	0.22	0.21	0.25	0.41	0.32	0.45	0.22	0.16	0.36	0.30	1.36
Population consolidation pogram	0.42	0.05	0.05	0.00	0.01	0.06	0.48	0.49	0.55	0.96	1.11	0.95	2.24	1.44
Other reasons	3.15	0.96	0.18	0.31	0.59	0.91	1.96	2.09	2.94	3.88	2.45	4.04	4.17	3.68
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

4.2 Reason for migration sex differentials

Education is the main reason for lifetime migration for both men/boys and women/girls. Almost 37 percent of all migrant women stated education as the reason why they had migrated, while the corresponding figure for men was 31 percent (Table 9). However, employment rank above other factors for men, while for women to live on this island/live with the family and marriage are the next two most important reasons for migration. For women, employment and business are not important motivations for migration. The higher percentage of men who had migrated for employment may be those employed in resorts and the women who cite to live on this island/live with family and marriage as reasons for migration may include some of the women who had migrated with men who take up employment, or who have migrated to accompany school age children.

Table 9: Percentage distribution of lifetime migrants by sex, 2006

	Female	Male
For education	36.73	30.68
For employment	4.28	30.05
To live in this land/live with family	33.17	24.92
Due to marriage	9.43	3.53
As a parent/guardian	2.88	0.61
For medical purpose	1.13	0.64
To live temporarily due to tsunami	4.74	3.73
Move to this island due to tsunami	1.29	0.93
Due to Population consolidation pogram	4.15	3.01
Other reasons	2.19	1.90
Total	100.00	100.00

The differences in migration motivation may be analysed more closely by controlling for sex and region. Table 10 shows migration reason by sex for lifetime migrants for Male' and other atolls.

Table 10: Percentage distribution of lifetime migrants by sex, by region, 2006

	Male'		Atolls	
	Female	Male	Female	Male
Other reasons	1.94	0.87	2.50	2.82
For education	56.18	54.96	12.10	9.02
For employment	5.35	27.02	2.93	32.75
To live in this land/live with family	23.35	13.57	45.61	35.03
Due to marriage	5.91	0.95	13.89	5.83
As a parent/guardian	4.41	0.98	0.95	0.28
For medical purpose	1.66	0.61	0.46	0.67
To live temporarily due to tsunami	0.44	0.34	10.19	6.75
Move to this island due to tsunami	0.46	0.35	2.34	1.45
Due to Population consolidation pogram	0.30	0.33	9.04	5.39
Other reasons	1.94	0.87	2.50	2.82
Total	100.00	100.00	100.00	100.00

Table 10 shows that for lifetime migrants, education was the most important reason for migrating to Male', this is the case with both men and women. More than half of all (55 percent) lifetime migrant men who were enumerated in Male' had migrated for educational purposes.

For women the corresponding figure was 56 percent. For migrant men in Male', employment was the next most important reasons for migration. However, for migrant women in Male', to live on the island/live with family was the next most important reason after education. In the atolls, to live on the island/live with family was the most important reason for both men and women. There were more migrant women who had migrated for education purposes in the atolls. Employment was the single most important reason why men migrated in the atolls. Marriage was also an important reason why women migrate in the atolls. About 14 percent of women had migrated for marriage in the atolls. After, to live on the island/live with family, marriage (35 percent) was the most important reason for migration for females in the atolls.

5. Conclusion

This analysis based on census data has shown that lifetime migration continues to increase with successive censuses. The major migration stream in the Maldives is from the atolls to Male'. In 2006 more than half of all lifetime migrants were enumerated in Male'. The high level of migration to Male' is seen in the composition of its population. More than half the population of Male' were migrants.

The age distribution of migration followed the universal patterns identified in other migration research particularly for developing countries with a high proportion of migrants in the young adult ages. Migration was lower in younger ages, but peaks at ages 15-19 after which it drops significantly towards older ages.

The main reason people changed their place of residence was for educational purposes. About 1/3 of all migrants cited education as their reason for migration. This was the main reason for migration to Male' as well. In the atolls, apart from to live on the island/live with family, employment and education was important factors that prompted people to move to another island.

There are several demographic, economic and social consequences of migration. These arise out of the selectivity of migrants, the direction of migration and composition of migrants. Migration is selective of individuals with certain characteristics and age and sex selectivity contributes most of the demographic impact of migration. For example, the young age structure of migrants contributes to high rates of natural increase in Male', through lower crude death rates and higher crude birth rates. Conversely, out-migration of young adults from atolls leads to an older age structure and high dependency ratios, which slows atoll development. Migration is also one factor which exerts its influence on sex ratios as migration is generally sex selective. Age selectivity of migration and the differences in sex ratios have implications for household structures, fertility and dependency. It is important therefore to undertake a comprehensive analysis of migration data to highlight the consequence of migration on these variables.

1. Introduction

Nuptiality refers to marriage as a demographic phenomenon, including the rate at which it occurs, the characteristics of persons united in marriage, and the dissolution of such unions through separation, divorce, widowhood and annulment (Arthur Haupt and Thomas T. Kane 33). Marriage has been a social institution of extreme importance in Maldives. For individual men and women in the Maldives, marriage means the beginning of formation of a new family and often the extension of an extended family and kinship network. Fresh and new social and economic networks are in turn generated along with families and relatives of brides and grooms, through marriages. In Maldives, the family was the single most important social institution through which individuals secured their fundamental needs. Entry into a family through marriage (and parenthood) was critical for Maldivians survival and esteem; hence, marriage was compulsory for most young people. Whereas this was true for everyone, it was especially true for young women who were the least powerful in terms of social status, control over economic resources and normative expectations in the society. Therefore, the early and universal marriage regime prevailed in the Maldives, with the locus of decision making concerning when and whom to marry being controlled by the family and kinship the majority of time.

These social, economic and cultural importances of marriage have been seen diminishing in the Maldives as well as in Asia after the post war with the timing and magnitude of first marriage (Noriko O. Tsuya 2001). Hence, the very purpose of this chapter is to explore the levels and trend of these marriage, separation or divorce and widowhood of Maldives using the data compiled in the Population and Housing Census of 2006.

The very importance of nuptiality data has been kept in mind in conducting censuses in the Maldives which has gathered information on marital status, number of marriages, number of people married and most importantly age at first marriage. However, population eligible to response the questions on nuptiality has been different in the past censuses undertaken (e.g. 12 and above population was asked the nuptiality questions in 1985 and 1990 censuses and 15 and above population in 2000 and 2006 censuses). The quality of the data presented in the census have been analysed in a previous chapter which can be applied to the quality of nuptiality data as well. The quality of census data on marital status is considered good, although some reporting error cannot be ruled. However, the reporting errors are likely to be more exceptions rather than the rule.

2. Marital Distribution: Situation

Table 1 shows sex ratio of currently married persons in the Maldives from the censuses 1990, 1995, 2000 and 2006. The excess of females over males can be observed in every census. The sex-ratio (i.e., number of males per 1,000 females) among the currently married persons was 937 in 1990, 921 in 1995, 940 in 2000 and 924 in the year 2006. It can be justified in countries which legally allow polygamy.

These findings of excess of females over males among the currently married persons are also observed in some parts of the world where migration especially for employment is an important part of its economic sustainability. In the Maldives the proportion of people working abroad are believed to be significant.

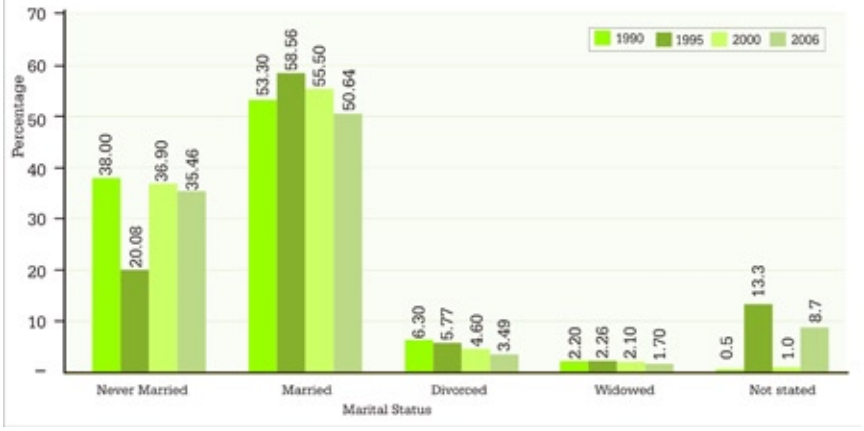
Table 1: Sex ratio among the currently married persons, (15+), Maldives, Census years 1990, 1995, 2000 & 2006

Census Years	Currently Married Males	Currently Married Females	Sex Ratio (per '000 Females)
1990*	35,141	37,493	937.27
1995	38,873	42,218	920.77
2000	45,076	47,936	940.34
2006	52,484	56,792	924.14

**12 + Population*

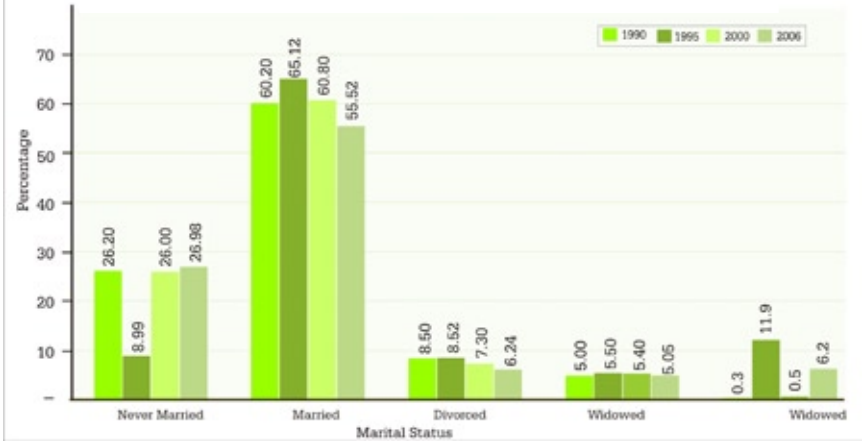
Source: Population & Housing Census 1990, 1995, 2000 & 2006

Figure 1: Percentage distribution of 15+ male population by marital status



Note: The never married proportion of the 1995 census is very low, this is partly due to the large proportion of not stated category creating distortion in the never married category

Figure 2: Percentage distribution of 15+ female population by marital status



Note: The never married proportion of the 1995 census is very low, this is partly due to the large proportion of not stated category creating distortion in the never married category

Data on marital distribution of the population aged 15 years and above by sex for census 1990, 1995, 2000 and 2006 are presented in Figure 1 and 2. The proportion of single, married, divorced and widowed had slightly declined over the censuses for males. The proportion of married, divorced and widowed for females has also declined though the proportion of never married females have increased slightly. However, the increase in the proportion of never married females has not increased the proportion of married, divorced or widowed males or females as expected.

2.1 Married Population

Table presented in annex 1 shows data on the percentage distribution of the married population aged 15 years and above by age and sex for the census 2006. Marriage has been and continues to be universal in the Maldives. In 2006, 84 percent of females were married by age 30-39 years and 89 percent of males were married by age 50-54 years. The table also shows that women tend to marry earlier than men. For example, about one percent of males were currently married in the age group less than 19, as against five percent of females in 2006. The percentage married has declined by one point for males over the intercensal period while the decline for females is by 5 points. It can be observed from table 2 that the majority of women are married at age group 30-39 and majority of men are married at age group 50-54 which can be attributed to the fact men tend to delay their marriage more years than women which is associated with other socio-economic reasons. However, it can also be observed that the proportion of married women is higher than married men in the first three age groups (i.e. <19, 20-29 or 30-34 years) and thereafter, the picture reverses. In other-words, there are more men than women in marital unions at higher ages. This could result from greater chances of re-marriage for men than women, particularly at higher ages.

Permanent celibacy, measured by proportion of men and women in the age-group 40-49 remaining single, is virtually non-existent in the Republic of Maldives. The proportion of single women and men in the age group 40-49 is 1 and 2 percent respectively in the year 2006.

The reductions observed in the proportion of married people from table 2 on the one hand and rise in the proportion of single people on the other, particularly in the younger age-groups, resulted in increasing the mean age at marriage. The mean age at marriage estimated indirectly, using Hajnal Technique[1] , known as Singulate Mean Age at Marriage (SMAM), for census years 2006 by sex are presented in Table 3. This measure is an estimate of the average number of years lived by a cohort of women before their first marriage, giving a good approximation to the age at marriage in a population.

[1]Hajnal, John, 1953., "Age at Marriage and Proportion Marrying", Population Studies, Vol. viii, No. 2, pp. 111-136.

Table 2: Singulate mean ages at marriage by sex, 1990, 2000 & 2006

Census Years	Censuses		
	1990	2000	2006
Male	23.6	25.6	26.5
Female	19.1	21.8	23.1
Difference	4.5	3.8	3.5

Source: Population & Housing Census 1990, 1995, 2000 & 2006

Men tend to delay their age at first marriage for various socio-economic reasons which can be seen from the table 3 indicating male age at marriage of 27 years. Likewise as more females spending more years in education and the increase in female labour force participation rates have increase their age at marriage from 22 years in 2000 to 23 years in 2006. It is worth noting that the male female difference has been declining over the years from 4.5 years in 1990 to 3.5 years in the year 2006.

Figure 3: Age specific proportion of never married persons, 2006

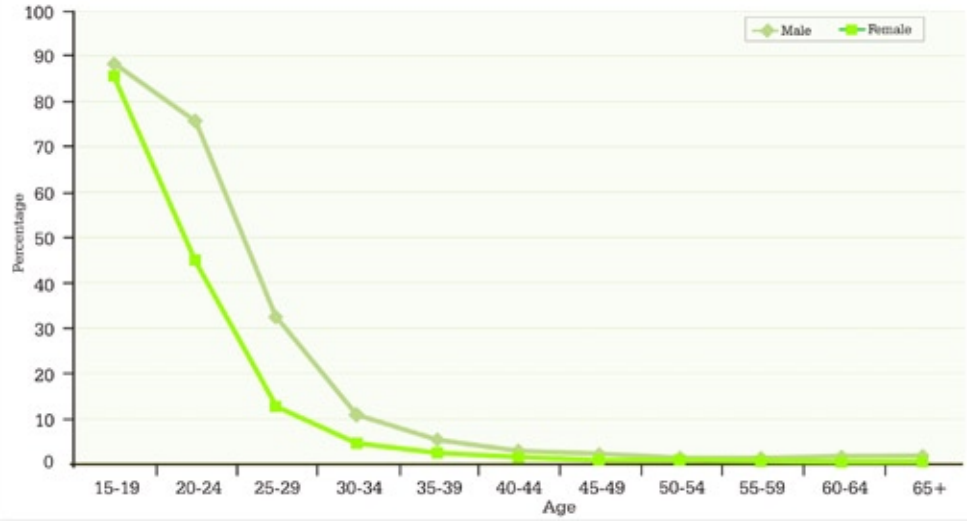
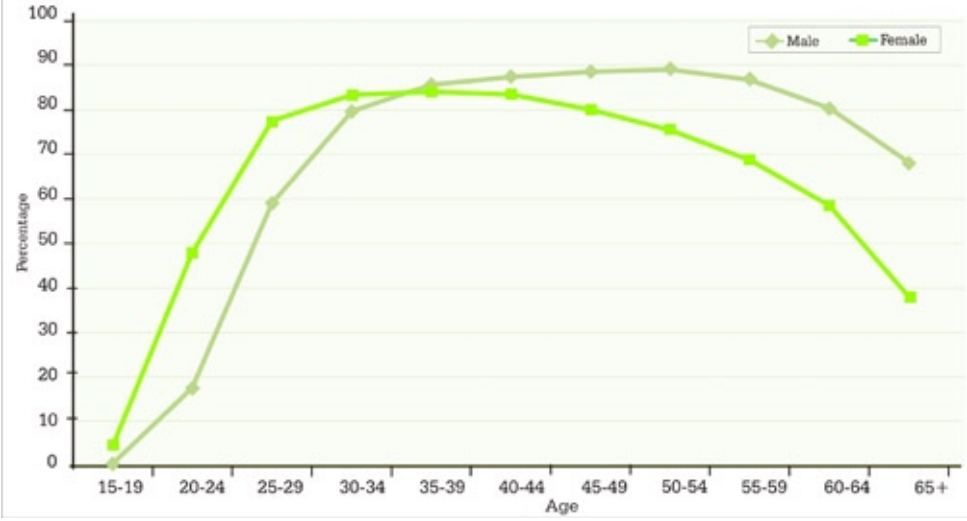


Figure 4: Age-specific proportion of married persons, 2006



2.2 Proportion widowed

The percentage distribution of widowers and widows by five year age-groups for the census 2006 is presented in *Annex 1*. It can be observed from the table that the proportion widows and age have a direct relationships meaning proportion widows tends to increase with age reaching its peak in the highest age group. This can be expected since the survival ratio tends to decrease at higher ages. It is worth pointing out that the proportion of widows exceeds that of widowers in all age-groups and this pattern holds for all censuses. For example, 17 percent of men and 47 percent of women aged 65 years and above widowed in 2006. The corresponding figures for males and females were 14 and 40 percent respectively in 2000. The finding of higher proportion of widows than widowers may be attributed to higher chances of remarriage among men than women and also wives have a higher chance of survival than that of their husbands.

2.3 Proportion Divorced

Percentage distribution of divorced persons by age and sex for the census 2006 is also presented in *Annex 1*. The proportions of the population divorced has been quite a number in the Maldives in past which can be seen from the previous censuses. The proportion 15 years and above population divorced in the census 2006 is 3.49 and 6.24 percent respectively for men and women. The incidence of divorce is higher for women than men and this overall finding is true for all ages in the year 2006. It can be observed from *Annex 1* that divorce is directly associated with age. The higher the age the higher is the proportion of divorce which is associated with diminishing chances of getting remarried which is true as the proportion divorced is higher for women than men. There are 176 divorced women for every 100 divorced men and it is worth noting that this sex ratio of divorce has been increasing from 129 in 1990 to 144 in 1995 and further more to 156 in 2000 which can be attributed to fact of decreasing number of remarriages.

Figure 5: Age-specific proportion of divorced persons, 2006

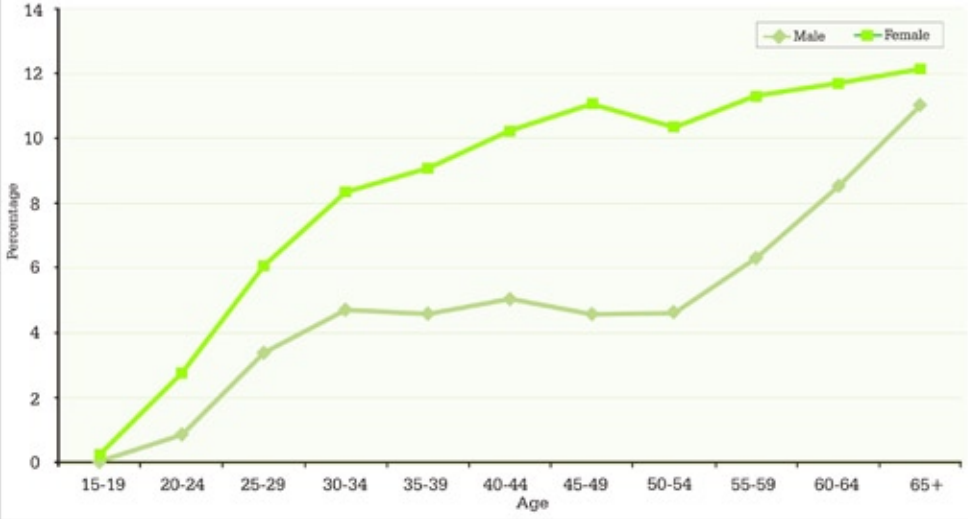


Figure 6: Age-specific proportion of widowed persons, 2006

3. Regional Differences: Male' and Atolls

Regional differences were looked at while dealing with the marital structure and its changes in the census 2006. *Annex 1* also provides percentage distribution of marital structure and its changes for Male' and the Atolls. An examination of the data shows the proportion of those ever married is higher for the Atolls than Male' which is 67 and 52 percent respectively for Atolls and Male'. The same can be observed when data is observed by gender. The proportion ever married is higher for women than men in the Atolls as well as for Male'. Also the proportion single remains higher for Male' which is 35 percent compared to Atoll which is 29 percent. This can be attributed to the fact that those living in Male' have more opportunities for higher education or employment which delays their age at marriage. Other social problems such as high cost of housing and high living standard contributes to the delay of age at first marriage.

4. Age at First Marriage

The mean age at first marriage calculated from the census 2006 is presented in Figure 6 and 7 for female and male respectively. It is observed that most women marry at the age of 18 however, their mean age at first marriage is 19 years. As expected men marry at a later age showing 20 years as most preferred age of first marriage though their mean age at first marriage is observed to be 23 years. These estimates are derived from the exact question on age at first marriage which differs from the calculated Singulate Mean at Marriage (SMAM) presented in Table 3. A difference of approximately 3 years is observed for both men and women which can be attributed to fact of calculating SMAM including 10-14 age group as single. This increases the proportion of people unmarried which pulls mean to a higher age than the SMAM if we remove 10-14 age cohort. SMAM calculated for 1990, 1995, 2000 and 2006 after removing the 10-14 age brackets is presented in Table 4. This decreases the Singulate Mean Ages of Marriage to 18 years for women and 21 years for men in the year 2006 which is a 5 years less than the SMAM obtained when 10-14 age is included in calculating SMAM.

Table 3: Singulate mean ages at marriage (15 years & above) by sex, 1995, 2000, 2006

Year	Females	Males
1995	18.05	19.07
2000	16.85	20.28
2006	18.03	21.44

5. Frequency of Marriage

Traditionally Maldivians tend to marry more than once in their lifetime which recently have seen a decline when compared with the previous census years. Data on frequency of marriage by ever married females are presented in Table 5.

Table 4: Frequency distribution of marriage by age of ever married females, Census 2006

Frequency of marriage	<20	20-29	30-39	40-49	50+	Not stated
1	32.61	85.23	68.53	46.16	29.54	0.28
2	0.43	7.63	18.91	25.18	25.46	0.34
3	0.25	1.13	6.52	14.15	19.13	0.11
>4	0.14	0.17	3.16	12.09	23.24	0.39
Not stated	66.57	5.84	2.88	2.42	2.63	98.88
Total	2,821	20.870	19,282	14,560	15,371	1,789

Table 5 shows that frequency marriage is directly associated with age. The modal frequency of marriage rises from one time among the youngest group of women, aged less than 20 years, to at least 2, 3 and 4 times among women aged 20-29, 30-39 and 40 years and over respectively. The proportion of women marrying 4 times among the youngest group of women, aged less than 20 years has been declined from 2.40 in 1990, (Analytical Report on 1985 and 1990 Population and Housing Census of Maldives) 0.4 in 2000 (Analytical Report, Census 2000) and 0.1 in 2006. It is also evident that the proportion of women marrying 4 times among the oldest group of women (aged 50 and over) has declined from 48.2 in 2000 to 23.2 in 2006. It is worth noting that the percentage not stating the frequency of marriage has more than doubled in all cases and especially for those less than 20 years of age. Though there is no proven justification of this it can be presumed that the enumerator has left the question blank assuming the respondent being so young and would not have married more than once.

6. Number of People Married

It has been identified that Maldivian tend to marry more than once in their lifetime and the usual pattern is that this marriages occur to the same person but it not always the case. Frequency distribution of number of persons married by age of those ever married is presented in Table 6. It can be clearly seen that age and number of persons married has a direct relationship. It is worth noting that 24 percent of women have had married to more than 2 different people by the age 40 and 22 percent of women have had married to 4 or more different people by the age of 50 and above.

Table 5: Frequency distribution of persons married by age of ever married females, Census 2006

No. of persons married	Age group					Not stated
	<20	20-29	30-39	40-49	50+	
1	19.78	83.90	71.87	49.44	31.65	0.22
2	0.29	6.41	17.06	24.88	25.52	0.18
3	0.17	0.87	5.05	12.56	17.78	0.12
>4	0.10	0.14	2.34	9.94	22.22	0.24
Not stated	79.66	8.68	3.69	3.18	2.83	99.25
Total	2,821	20.870	19,282	14,560	15,371	1,789

7. Relationship between Marriage, Education and Employment

7.1 Marriage and Education

Numerous literatures have proven that the odds of being married and having higher educational attainment is less than the odds of being single and having higher educational attainment. Data from the census 2006 on marital status and education has been used to see if the argued statement is valid for Maldives or not. Table 7 show the percentage distribution of population by marital and educational attainment. The table shows that there is a clear distinction as such which would support the above statement. However, the table show that if married they tend to have higher education than those single and other wise. This is valid for both men and women showing more married men having higher educational attainment than women. This could be attributed to the fact that limited access to higher education in the Maldives and most people obtain or get an opportunity only after being employed and have worked for a period of more than a year or more. This in tern makes more people married with the delay of getting the opportunity of obtaining higher education.

Table 6: Percentage distribution of population by marital status & education attainment Census 2006

Marital status	Total	Primary (1-7)	Secondary (8-10)	Higher secondary (11-12)	Diploma	First degree & above	Certificate/ sanadhu	Basic literacy & below
Both sexes								
Total	100.00	32.51	28.78	2.35	2.36	1.34	9.65	23.02
Never married	24.24	4.40	15.34	1.47	0.79	0.34	0.97	0.93
Married	61.06	24.15	11.22	0.73	1.43	0.91	5.28	17.33
Divorced	5.43	2.12	0.74	0.04	0.10	0.06	0.44	1.93
Widowed	3.62	1.04	0.04	0.00	0.01	0.00	0.12	2.41
Not stated	5.65	0.80	1.44	0.12	0.02	0.02	2.83	0.42
Female								
Total	100.00	34.14	28.66	2.09	2.23	0.99	7.87	24.02
Never married	19.10	2.34	13.42	1.25	0.66	0.28	0.55	0.60
Married	63.52	26.62	12.84	0.71	1.42	0.62	4.18	17.12
Divorced	6.98	2.87	0.93	0.04	0.13	0.07	0.55	2.40
Widowed	5.43	1.66	0.06	0.00	0.01	0.00	0.15	3.55
Not stated	4.97	0.65	1.40	0.09	0.02	0.02	2.45	0.36
Male								
Total	100.00	30.86	28.89	2.65	2.48	1.69	11.42	22.00
Never married	28.68	6.47	17.25	0.99	0.92	0.41	1.40	1.25
Married	59.33	21.67	9.60	1.50	1.45	1.20	6.39	17.53
Divorced	3.91	1.36	0.54	0.08	0.07	0.06	0.34	1.46
Widowed	1.82	0.41	0.02	0.01	0.00	0.00	0.09	1.28
Not stated	6.26	0.95	1.48	0.08	0.03	0.02	3.21	0.48

Table 7: Percentage distribution of population by marital status & employment status

Census 2006

Marital status	Total	Employed	Unemployed	Inactive	Not stated
Both sexes					
Total	100.00	53.53	9.03	30.90	6.53
Never married	100.00	45.44	10.69	41.66	2.21
Married	100.00	65.35	9.08	24.30	1.27
Divorced	100.00	57.83	10.56	29.45	2.16
Widowed	100.00	33.62	4.84	59.45	2.09
Not stated	100.00	9.53	2.70	20.90	66.87
Female					
Total	100.00	39.62	12.34	42.03	6.01
Never married	100.00	34.06	12.59	50.58	2.77
Married	100.00	45.46	13.81	38.90	1.83
Divorced	100.00	50.71	13.03	33.45	2.81
Widowed	100.00	30.99	5.47	61.33	2.21
Not stated	100.00	7.45	3.02	25.75	63.78
Male					
Total	100.00	67.26	5.77	19.92	7.05
Never married	100.00	54.00	9.27	34.96	1.78
Married	100.00	86.87	3.96	8.51	0.67
Divorced	100.00	70.37	6.21	22.40	1.02
Widowed	100.00	41.33	2.96	53.95	1.76
Not stated	100.00	10.99	2.47	17.49	69.05

7.2 Marriage and Employment

It can be believed there will be a clear relationship between married and having a job and also between singles and having a job which can be seen from the above cross tabulation of marital status and employment status. Married and having a job account 65 percent and singles having a job account 45 percent. It can also be seen that 87 percent of married men have a job compares to 46 percent women and also 54 percent single men have jobs whereas 34 percent single women have jobs.

It can also be seen from the table 8 that most widowed are the most inactive which is again greater for women accounting 54 and 61 percent respectively. It is surprising to note that most unemployed are either singles or divorces which account 10 percent and also it is worth noting that more divorced women are unemployed than divorced men accounting 13 and 6 percent respectively.

8. Conclusion

The proportion of single, married, divorced and widowed had slightly declined over the censuses for males. The proportion of married, divorced and widowed for females has also declined though the proportion of never married females have increased slightly.

Marriage has been and continues to be universal in the Maldives. In 2006, 84 percent of females were married by age 30-39 years and 89 percent of males were married by age 50-54 years. Permanent celibacy, measured by proportion of men and women in the age-group 40-49 remaining single, is virtually non-existent in the Republic of Maldives. The proportion of single women and men in the age group 40-49 is 1 and 2 percent respectively in the year 2006.

Men tend to delay their age at first marriage for various socio-economic reasons which can be seen from the table 3 indicating male age at marriage of 27 years. Likewise as more females spending more years in education and the increase in female labour force participation rates have increase their age at marriage from 22 years in 2000 to 23 years in 2006.

The proportion 15 year and above population divorced in the census 2006 is 3.49 and 6.24 percent respectively for males and females. The incidence of divorce is higher for females than males and this overall finding is true for all ages in the year 2006.

It is observed that most women marry at the age of 18. However, their mean age at first marriage is 19 years. As expected men marry at a later age showing 20 years as most preferred age of first marriage though their mean age at first marriage is observed to be 23 years.

This decreases the Singulate Mean Ages of Marriage to 18 years for women and 21 years for men in the year 2006 which is a 5 years less than the SMAM we obtained when 10-14 age is included in calculating SMAM.

The proportion of women marrying 4 times among the youngest group of women, aged less than 20 years has been declined from 2.40 in 1990, (Analytical Report on 1985 and 1990 Population and Housing Census of Maldives) 0.4 in 2000 (Analytical Report, Census 2000) and 0.1 in 2006. It is also evident that the proportion of women marrying 4 times among the oldest group of women (aged 50 and over) has declined from 48.2 in 2000 to 23.2 in 2006. It is worth noting that the percentage not stating the frequency of marriage has more than doubled in all cases and especially for those less than 20 years of age.

There is a direct relationship between marriage, educational attainment and employment. Though there is a distinct difference between men and women it can be observed that most single and married men and women are more educated and employed.

9. References

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10. Annex

Table 2: Population 15 years of age & over by marital status, sex & locality

Locality and marital status	15 years and over	Age groups											Not stated
		15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Republic													
Both sexes	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	31.25	87.04	59.99	22.35	7.66	3.90	2.22	1.55	1.10	1.06	1.11	1.31	0.00
Married	53.06	2.60	33.01	68.47	81.56	84.91	85.46	84.30	82.57	78.24	69.69	54.74	0.14
Divorced	4.86	0.13	1.84	4.76	6.57	6.90	7.66	7.77	7.35	8.70	10.06	11.51	0.04
Widowed	3.36	0.01	0.05	0.11	0.25	0.60	1.21	3.06	5.96	8.89	16.21	30.03	0.57
Not stated	7.47	10.24	5.11	4.30	3.97	3.69	3.45	3.33	3.02	3.11	2.93	2.41	99.25
Male	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	35.46	88.33	75.76	32.52	10.90	5.38	2.98	2.17	1.35	1.38	1.72	1.90	0.00
Married	50.64	0.56	17.44	59.02	79.69	85.67	87.51	88.58	89.08	86.93	80.36	68.02	0.21
Divorced	3.49	0.02	0.86	3.39	4.71	4.58	5.03	4.57	4.61	6.30	8.52	11.01	0.03
Widowed	1.70	0.00	0.04	0.07	0.06	0.18	0.28	0.89	1.54	2.10	6.21	17.01	0.30
Not stated	8.71	11.09	5.91	5.00	4.64	4.19	4.20	3.80	3.42	3.28	3.19	2.05	99.45
Female	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	26.98	85.72	45.05	12.78	4.60	2.52	1.48	0.91	0.82	0.71	0.48	0.57	0.00
Married	55.52	4.67	47.77	77.36	83.31	84.19	83.46	79.90	75.46	68.82	58.47	37.93	0.00
Divorced	6.24	0.23	2.76	6.05	8.33	9.07	10.22	11.05	10.35	11.30	11.68	12.14	0.06
Widowed	5.05	0.01	0.07	0.16	0.42	0.99	2.11	5.29	10.79	16.25	26.71	46.51	1.06
Not stated	6.21	9.37	4.35	3.65	3.34	3.23	2.72	2.85	2.59	2.92	2.65	2.86	98.88
Male'													
Both sexes	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	35.01	84.68	65.38	26.80	9.35	4.90	2.64	1.82	1.46	1.29	1.25	1.00	0.00
Married	45.08	1.85	25.25	61.10	76.42	80.20	80.48	79.04	77.24	71.71	61.91	47.63	0.03
Divorced	5.01	0.09	1.57	4.86	7.66	7.92	9.57	9.90	9.61	11.70	12.63	15.05	0.03
Widowed	2.16	0.01	0.05	0.13	0.20	0.54	0.96	2.87	5.04	9.29	18.36	30.90	0.13
Not stated	12.74	13.38	7.74	7.10	6.38	6.44	6.35	6.37	6.65	6.01	5.86	5.41	99.82
Male	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	37.81	85.34	76.99	35.89	12.94	6.33	3.37	2.45	1.63	1.42	1.99	1.54	0.00
Married	44.16	0.47	13.90	53.68	75.15	82.55	83.89	84.69	84.59	84.40	76.99	67.74	0.04
Divorced	3.08	0.01	0.61	2.99	5.06	4.50	5.68	5.21	5.87	6.89	9.31	11.98	0.00
Widowed	0.79	0.00	0.04	0.06	0.07	0.15	0.18	0.86	1.06	1.32	5.32	14.77	0.08
Not stated	14.16	14.17	8.46	7.38	6.77	6.48	6.88	6.80	6.86	5.98	6.38	3.97	99.88
Female	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	32.23	84.07	54.82	17.83	5.73	3.40	1.93	1.19	1.26	1.14	0.52	0.49	0.00
Married	46.00	3.10	35.58	68.43	77.69	77.74	77.16	73.34	68.47	57.42	47.14	28.48	0.00
Divorced	6.93	0.16	2.45	6.72	10.28	11.50	13.37	14.63	14.08	17.12	15.89	17.98	0.07
Widowed	3.53	0.01	0.06	0.20	0.32	0.96	1.72	4.89	9.78	18.26	31.12	46.26	0.20
Not stated	11.32	12.66	7.09	6.83	5.98	6.40	5.83	5.94	6.41	6.05	5.34	6.79	99.73
Atolls													
Both sexes	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	28.92	90.44	69.89	55.88	52.29	51.37	50.97	50.82	50.54	50.67	50.72	50.76	66.37
Married	58.00	2.57	26.65	40.23	43.35	44.07	44.08	43.31	42.51	40.48	36.17	28.22	0.17
Divorced	4.76	0.12	1.39	2.56	2.99	3.18	3.32	3.37	3.12	3.64	4.53	5.30	0.03
Widowed	4.11	0.00	0.04	0.06	0.14	0.32	0.67	1.57	3.20	4.34	7.67	14.88	0.69
Not stated	4.21	6.86	2.02	1.27	1.23	1.07	0.95	0.94	0.63	0.87	0.91	0.83	32.74
Male	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	34.03	91.68	80.48	59.61	53.27	51.90	51.38	51.10	50.71	50.84	50.91	50.91	66.48
Married	54.59	0.52	15.63	36.34	42.76	44.26	44.72	45.13	45.60	43.94	40.70	34.10	0.23
Divorced	3.74	0.02	0.82	2.13	2.31	2.34	2.34	2.13	1.97	3.00	4.11	5.41	0.04
Widowed	2.25	0.00	0.02	0.04	0.03	0.10	0.17	0.45	0.89	1.23	3.25	8.76	0.30
Not stated	5.38	7.78	3.04	1.88	1.64	1.39	1.38	1.19	0.82	0.99	1.02	0.83	32.95
Female	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Never married	23.69	89.08	61.79	52.82	51.42	50.91	50.58	50.53	50.36	50.50	50.51	50.56	66.04
Married	61.50	4.82	35.08	43.42	43.87	43.90	43.45	41.42	39.27	36.81	31.30	20.28	0.00
Divorced	5.80	0.24	1.83	2.91	3.60	3.91	4.27	4.64	4.32	4.32	4.98	5.16	0.00
Widowed	6.01	0.01	0.05	0.07	0.25	0.50	1.16	2.73	5.62	7.63	12.42	23.17	1.87
Not stated	3.00	5.85	1.24	0.77	0.86	0.78	0.53	0.67	0.42	0.74	0.79	0.83	32.08

Source: Population and Housing Census 2006.

1. Introduction

The study of fertility has long provoked the interest of demographers and other social scientists, due to its central role in shaping the current and future growth of populations. As today's fertility presents a reasonably accurate picture of the future needs of a population, measures of current fertility provide a basis for policy makers to assess the future socio-economic needs of the population. Thus, fertility indicators become the most urgently needed indicators from a census or a population survey. For this reason, analysis of fertility levels and trends remain one of the most important components of a census analytical report.

To formulate or evaluate policies concerning population growth, information is needed not only on the number of births, but also on trends of birth rates and other measures of fertility over time and, equally importantly, on the age-structural distribution and changes over time, of the population.

Data on both current and retrospective fertility has been routinely collected in all censuses of Maldives since modern census-taking in the country began in 1977. In the Census of 2006, fertility data was collected from all women aged 15 years and above. On current fertility, the respondents were asked whether she had delivered a live birth in the year preceding the Census. On retrospective fertility, women were asked to report the number of live births they delivered throughout their reproductive life. All fertility information collected in the census was gender disaggregated.

Data on both current and retrospective fertility collected in a census is subject to certain types of errors. The most common type of error occurs due to misplacement of events i.e., reporting events of one year ascribed to another year. For example, births which took place in the year 2005 being mistakenly reported to have occurred in 2006; particularly those which occurred towards the end of the year might be reported to have occurred in the following year. Data on retrospective fertility are often underreported due to recall lapse. Children born alive and died soon after the birth are often omitted in the reported number of births due to lapse in recalling such events. This effect tends to increase with the age of the mother. These possible errors should be kept in mind while interpreting the various measures of fertility discussed in this chapter.

2. Reported Fertility

The following measures were obtained using the data on the number of live births during the one year preceding the census:

2.1 Crude Birth Rate (CBR)

Crude birth rate is the number of births in a given year per thousand of the population in the same year. The denominator is usually the mid-year population. It is a crude measure because not all persons in the population are at the risk of giving birth. More refined measures of fertility are given below

2.2 General Fertility Rate (GFR)

GFR is the total number of live births occurring per thousand women in the reproductive period (15-49 years) in a given year. This is a slightly refined measure compared to the Crude Birth Rate, which is the number of live births in a given year per thousand of the population, irrespective of the likelihood of exposure to childbearing

2.3 Age-specific Fertility Rate (ASFR)

ASFR is the number of live births occurring in women of a given age group (usually five-year age groups) per woman or per thousand women at mid-year in a given year. It is usually calculated for women in five-year age groups for ages 15 to 49 years. Age-specific fertility rates follow a fairly standard pattern among women in all populations, with rates starting from zero at very young ages, rising to a peak sometimes in the twenties and then gradually declining until it reaches zero again at around age 50. Slight variations in the pattern occur, depending on differences in age at first marriage, level of contraceptive prevalence, desired family size, status of women in society, level of participation of women in out-of-home employment, and many other factors that influence child-bearing in a society.

2.4 Total Fertility Rate (TFR)

TFR is a summary measure independent of the age and sex composition of the population. It represents the average number of children a group of women would have at the end of their reproductive years if they had children according to a set of age-specific fertility rates pertaining to a particular year.

2.5 Gross Reproduction Rate (GRR)

GRR is a refined version of the TFR in that GRR refers to the number of daughters a woman is likely to produce by the end of her reproductive period, given the current age schedule of fertility rates

2.6 Summary Measures of Fertility

Data on current fertility was used to compute selected summary measures of fertility. These measures are presented by Republic, Male' and Atolls using data on births in the year preceding the census as reported by women, and the number of women enumerated in the 2006 Census of Maldives. Comparison is made with estimates from the 1990 and 2000 Censuses presented in the Analytical Report of the 2000 Census. Comparisons between the three censuses are given in Table 1.

Table 1: Summary measures of fertility based on reported birth data from Census, Maldives, 1990, 2000 and 2006

Fertility Index	Year of Census		
	1990	2000	2006
General Fertility Rate(GFR)			
Republic	202.68	86.08	66.81
Male'	121.11	46.18	46.02
Atolls	235.02	103.66	80.74
Totall Fertility Rate(TFR)			
Republic	6.40	2.84	2.15
Male'	3.88	1.58	1.47
Atolls	7.40	3.37	2.60
Gross Reproduction Rate(GRR)			
Republic	3.16	1.40	1.05
Male'	1.98	0.80	0.71
Atolls	3.63	1.65	1.28

Comparing the trends it can be observed that fertility in the Maldives declined rapidly between 1990 and 2006. The GFR declined by two thirds during this period (1990-2006). Similarly, it can also be seen that in both census years fertility levels were, as expected, much lower in Male' than the atolls. In fact, according to current fertility data collected in the Census, fertility in Male' sank below one at GRR = 0.80 in 2000 and continued to decline, reaching 0.71 by 2006, while in the atolls, it hovered above one at GRR = 1.65 in 2000 but has almost reached replacement level by 2006 at 1.28. However, it can also be seen that the gap in the levels of fertility between Male' and the atolls has declined significantly during the period.

The acceleration of fertility decline in the Maldives in the recent past can also be seen from the pace of decline in the TFR. In 1990 the TFR for the whole country was as high as 6.4, with the rural population contributing to this high national TFR. By 2006 the national TFR has declined to 2.15. The TFR for the atoll population was 7.4 in 1990, declining to 2.6 in 2006. The corresponding TFR for Male' was 3.9 in 1990, coming down to 1.5 in 2006.

3. Age-Specific Fertility Rates

Direct estimates of ASFRs by region are presented in Figure 1 and Figure 2. These figures show significant differences in the levels and age pattern of fertility between Male' and the atolls. While the level of fertility at all ages is relatively higher in the atolls compared to Male', the fertility pattern in the atolls also shows an early child-bearing pattern in 2000, with the peak age of childbearing being 20 to 24. In the case of Male' the ASFR peaks at the age group 25 to 29. This shows the effects of delayed marriage and childbearing in Male' where the effects of modernization are stronger than in the atolls. As with all other aspects of development in the particular context of the Maldives, the urban trends in delayed fertility are quickly replicated in the atolls. As can be seen from the figures, there has been a shift in the peak childbearing age of women in the atolls from the 20-24 age group to the 25-29 age group between 2000 and 2006. Similarly, it also appears that more and more women in Male' are continuing to delay their fertility well into their thirties, thereby having a significant effect on their completed lifetime fertility.

Figure 1: Age- Specific fertility rates, 2000

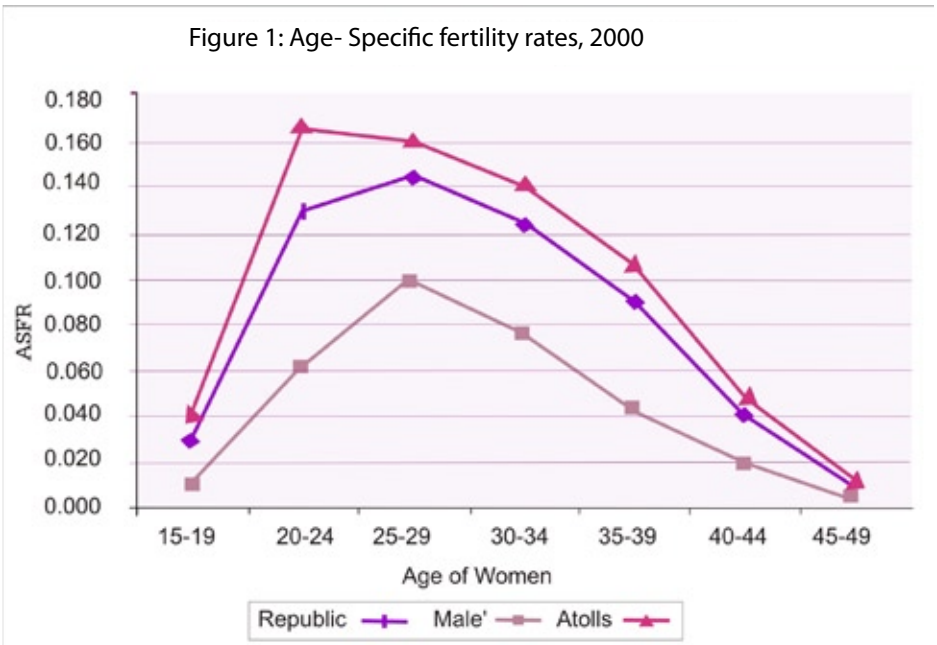
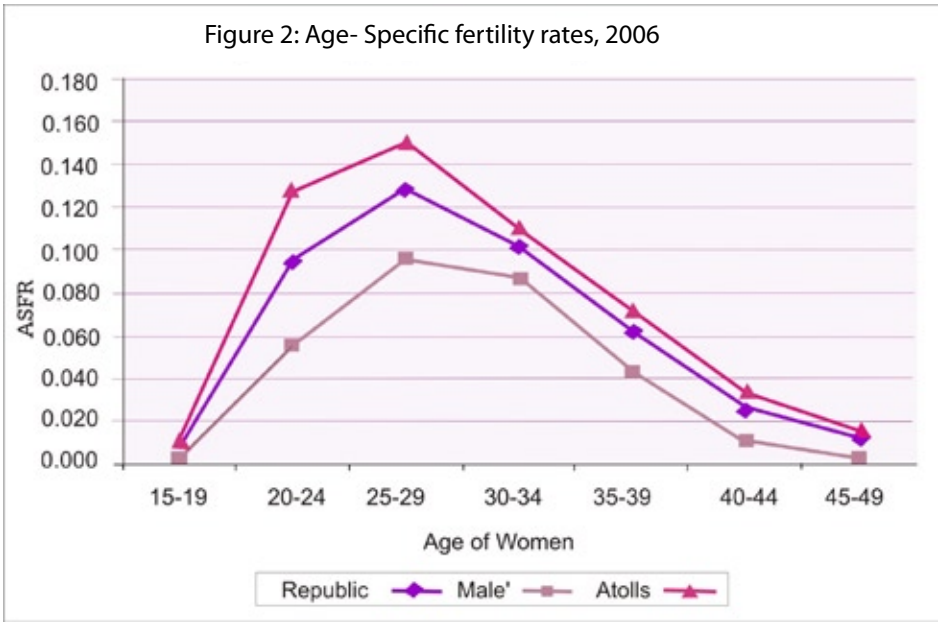


Figure 2: Age- Specific fertility rates, 2006



4. Cumulative or Completed Fertility

Data on the number of children ever born by age group of women is used to analyze the levels and trends of fertility. Mean children ever born by age of mother is described in the literature in different ways: life time fertility, parity, cumulative fertility and completed fertility. Cumulative fertility by age of women, as reported in the censuses of 1990, 2000 and 2006 are given in Table 2.

Table 2: Reported cumulative fertility by age group of women and year of census, major regions, Maldives

Age Group of Women	Republic			Male'			Atolls		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
15-19	0.284	0.067	0.154	0.127	0.026	0.054	0.360	0.093	0.263
20-24	1.817	0.800	1.086	1.206	0.393	0.771	2.053	1.033	1.261
25-29	3.533	2.150	1.799	2.665	1.355	1.386	3.877	2.511	2.022
30-34	5.039	3.629	2.811	3.991	2.532	2.081	5.418	4.081	3.228
35-39	6.412	5.116	3.928	5.088	3.803	2.915	6.896	5.656	4.524
40-44	7.257	6.271	5.232	6.336	4.812	3.966	7.581	6.811	5.894
45-49	7.290	7.198	6.328	6.458	6.003	4.974	7.534	7.671	6.975

Source: Figures for 1990 obtained from Ministry of Planning, Human Resources & Environment, 1996 (unpublished,

The following observations can be made from the above table. i) expected, the mean number of children ever born increases monotonically with the age of women, reaching its peak in the highest age group observed i.e., 45 to 49 years. This observation generally holds true for 1990, 2000 and 2006. ii) for all except the youngest two age groups of women, the average parity has declined significantly from one census to the other. Despite the significant decline in average parities, the completed fertility, as observed from the cumulative fertility of women aged 45 to 49 years, remains one of the highest in the SAARC region. This is due to the prevalence of high parities in the recent past. iii) While completed fertility of Maldivian women remains high, it has declined significantly over the past 16 years, leading to a rapid decline in current fertility in the Maldives. iv) Women living in the atolls have significantly more children in all age groups than women of the same age groups living in Male'.

5. Indirect Estimates of Fertility

Data on retrospective fertility can be used to derive estimates of recent fertility by using certain indirect estimation techniques. Based on an original proposition by Brass (1964), for adjusting reported data on births in the past year by comparing this data with the lifetime fertility of a woman (children ever born), several methods of estimating fertility using information on children ever born have been developed. He argues that even if the estimate of fertility rate derived from data on recent fertility could not be accepted due to the likelihood of errors in accurately reporting events corresponding to the period of reference, the age pattern of fertility provided by such data could be accepted, since the proportionate error might be more or less constant with mother's age. Similarly, the likelihood of younger women, having experienced fertility more recently, to report their lifetime fertility more accurately than older women makes their lifetime fertility more reliable. Brass proposes the use of the two most reliable parts of this information to scale the age pattern of fertility from the reported births in the past year to match the level of fertility observed from the lifetime fertility of younger women.

Arriaga (1994) proposes a method based on the original Brass methods. The underlying assumptions of Arriaga's technique are as follows: the completeness of reporting of births used to estimate the age-specific fertility rates is the same for all age groups of women; reporting of the average number of children ever born per woman is complete (at least for women under 30 years or 35 years of age); changes in fertility produce a linear change in the average number of children ever born per woman at each particular age of women (mainly at ages 15 to 35 years) between the two dates; and fertility occurs only between exact ages 15 and 50 years. Judging from the age pattern of mean parities and current fertility rates in Figures 1 and 2 and Table 2, these assumptions appear to be justified for the population of Maldives.

Estimates of fertility obtained by using Arriaga's method are subject to two sources of errors: errors in the data on children ever born and errors in the age-specific fertility rates. These factors should be kept in mind when interpreting the estimates of fertility derived from such indirect techniques of estimation.

Table 3 shows estimates of TFR by the Arriaga method from data on reported age-specific fertility, adjusted on the basis of children ever born, by age of mother, from the Censuses of 2000 and 2006. It can be observed that the estimates of Total Fertility Rates by the indirect method are lower for the Republic and for the Atolls but slightly higher for Male' compared to the direct estimates in Table 1 for the 2006 Census, but higher for the 2000 Census. The slight upward adjustment for the 2000 Census estimates and the slight downward adjustment for the estimates from the 2006 Census can be partly explained by the half-year correction made in the calculation of the estimates by the indirect method presented here. The most important point here is that both direct and indirect estimates of fertility for the Maldives show that fertility levels have declined to very low levels by 2006 and that the decline has been very rapid. While the level of fertility is much lower in Male' compared to the atolls, the pace of fertility decline in the atolls has been instrumental in the overall fertility decline in the Maldives during the past decade or so.

Table 3: Indirect estimates of fertility by the arriaga method (ASFRs Adjusted on the Basis of Adjustment Factors for Age Groups 20-29), Censuses of 2000 and 2006

Region	TFR/Year	
	2000*	2005*
Republic	2.36	1.91
Male'	2.59	1.72
Atolls	3.83	2.04

* Adjusted to september of given year.

6. Fertility Differentials

The urban-rural differences in the levels and trends in fertility discussed above prompt us to examine these differentials more closely for more focused policy interventions. It is therefore important to analyze fertility levels by geographic divisions, educational levels and labour force participation. Due to the smallness of the population and the relatively small numbers of events (births) occurring in a given year in the country, estimates of fertility using direct methods may not be the most appropriate to study differentials by small groups of the population. However, the level of data dissaggregation at the time of this analysis does not provide the kinds of inputs required for indirect estimation of fertility by geographic and socio-economic characteristics; these estimates will be provided by the direct method based on reported births in the year preceding the census by age of women.

7. Geographical Differentials

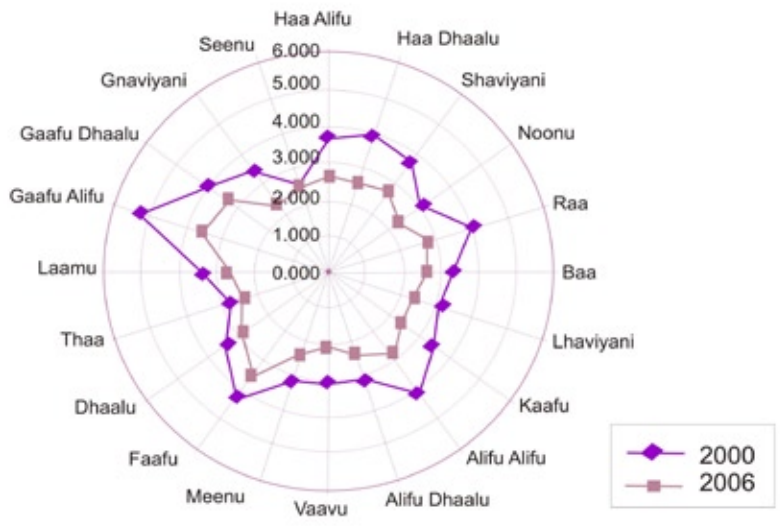
Table 4: Total fertility rate (TFR) by administrative atoll, 2000 and 2006 Censuses

Administrative Atoll	2000	2006
North Thiladhunmathi (Haa alifu)	3.667	2.641
South Thiladhunmathi (Haa Dhaalu)	3.889	2.585
North Miladhunmadhulu (Shaviyani)	3.602	2.725
South Miladhunmadulu(Noonu)	3.089	2.282
North Maalhosmadulu (Raa)	3.958	2.762
South Maalhosmadulu (Baa)	3.283	2.479
Faadhippolhu (Lhaviyani)	3.085	2.267
Male' Atholhu (Kaafu)	3.324	2.499
North Ari (Alifu Alifu)	4.064	2.779
South Ari (Alifu Dhaalu)	3.058	2.277
Felhidu Atholhu (Vaavu)	3.029	1.980
Mulakatholhu (Meemu)	3.088	2.312
North Nilandhe (Faafu)	4.189	3.466
South Nilandhe (Dhaalu)	3.272	2.761
Kolhumadulu (Thaa)	2.676	2.311
Hadhdhummathi (Laamu)	3.333	2.695
North Huvadhu (Gaafu Alifu)	5.202	3.459
South Huvadhu (Gaafu Dhaalu)	3.976	3.268
Fuvammulaku (Gnaviyani)	3.394	2.261
Addu (Seenu)	2.442	2.446

It can be seen from Table 4 and Figure 1 that fertility has declined significantly throughout the Maldives. Comparing all atolls, the lowest TFR in 2000 was observed in Addu (2.442) while the highest was in Gaafu Alifu (5.202). In 2000, three Atolls had TFRs above 4, these being Alifu Alifu, Faafu, and Gaafu Alifu. However, 15 Atolls had TFRs between 3 and 4. By 2006, the geographical pattern of fertility has changed significantly. TFRs lower than Addu's was observed in seven Atolls, while TFR in Addu remained almost stagnant, and three Atolls had TFRs of three or higher. The lowest TFR in 2006 was observed in Vaavu (1.980) and the highest in Faafu (3.466). The small size of the population in Vaavu (1502) and the small number of annual births reported by all women (26) in the 2006 Census is likely to influence the low fertility observed for Vaavu.

Figure 3 shows the geographical pattern of fertility in the Maldives very clearly. It shows that the pattern of fertility distribution has changed and that fertility levels have declined, although some of the atolls that experienced higher levels of fertility in 2000 continue to experience comparatively higher levels of fertility in relation to the rest of the atolls.

Figure 3: TFR by administrative atoll, Censuses of 2000 and 2006, direct estimates



8. Educational Differentials

It is well known that the fertility of a woman is negatively associated with her level of education. Education exposes women to information, empowers them, makes them more likely to be employed outside their home environment and makes them more aware of their own health and the health of their children – all of which are negatively associated with the number children she will have during her reproductive life.

Table 5: Total fertility rate by level of mothers education, direct estimates, Maldives

Education Level	Total Fertility Rate	
	2000	2006
Primary (Grades 1-5)	3.04	2.68
Middle (Grades 6-7)	2.68	2.59
Secondary (Grades 8-10)	2.23	1.93
Tertiary (Above Grade 12)	1.35	-

It can be seen from Table 5 that as the level of mother's education increases, the level of fertility as indicated by the Total Fertility Rate declines significantly. It can also be observed that fertility has declined significantly for each educational category of women during the intercensal period. It should, however, be noted here that there was a large category of women that did not report their level of education and hence were not included in the analysis. The fertility level of those who did not report their educational level was calculated as 1.07. For 2006 as well, it was not possible to compute the fertility level for 'tertiary and above'.

9. Fertility Differentials By Status In Employment

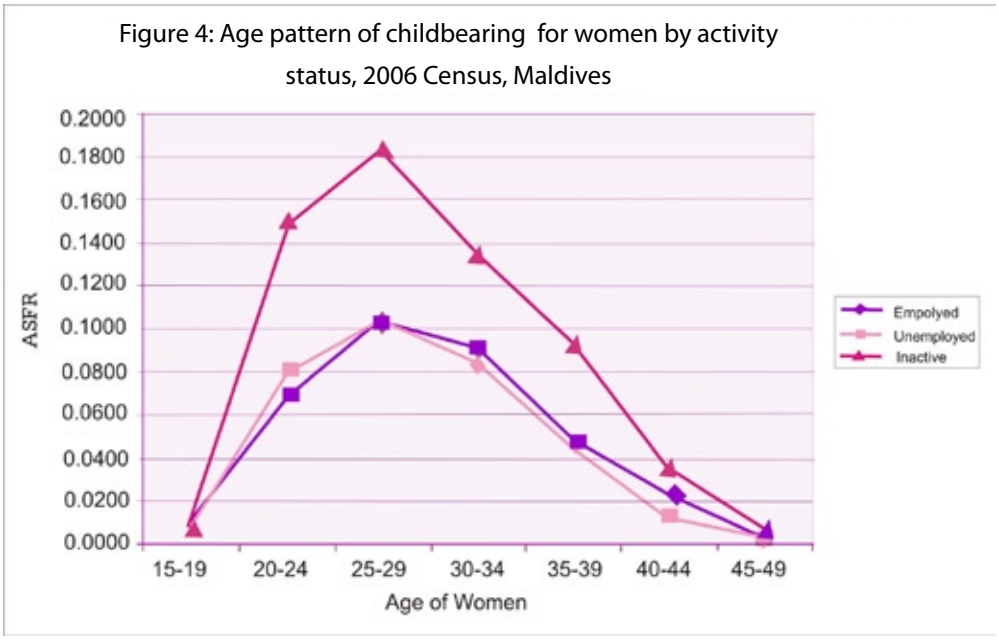
Educational level and employment status are positively correlated variables and hence display a similar type of association with fertility. Economically active women are more likely to experience lower fertility than those who are not economically active. This is because such women are more likely to be educated and therefore more involved in making decisions on family size, more likely to delay their first birth and more likely to limit their family size through child-spacing and by desired family size. Economically inactive women are more likely to marry early and start early child-bearing and are less likely to be involved in making decisions about their family size. Table 6 shows that there is a significant difference between the levels of fertility of economically active women (employed women and unemployed women) and those who are not economically active.

Table 6: Fertility by activity status of women, 2006 Census

Activity status	TFR
Employed	1.71
Unemployed	1.65
Not Economically Active	3.04

Figure 4 further illustrates the differences in the levels of fertility between the two groups of women. While the peak age of childbearing remains the same for both categories, economically inactive women have a much higher level of fertility at all age groups compared to the economically active group of women. Furthermore, the age pattern of fertility for economically active women is shifting towards the older age groups with the levels of fertility of women in the age group 25-29 leveling out with the next age group of women.

Figure 4: Age pattern of childbearing for women by activity status, 2006 Census, Maldives



10. Conclusion

This preliminary analysis of fertility shows that with the socio-economic developments that have occurred in the country during the past decades, fertility levels continue to fall steadily in the Maldives. The fertility experience of the Maldives complies with the contemporary theoretical arguments and empirical knowledge of the fertility of human populations. The rapidity of change of fertility in the Maldives can be compared with fertility experiences of other small island countries which have gone through rapid fertility declines in the recent years.

In order to devise effective and sustainable policies for the social and economic development of the Maldives, it is imperative to gain a thorough understanding of the dynamics of fertility in the Maldives and the implications of rapid fertility decline. This can be achieved through a more detailed and in-depth analysis of the existing individual level data from the censuses and various surveys, supported by micro-level inquiries of a qualitative nature. It is recommended that such detailed research be conducted at the earliest opportunity, as the country is now at a crucial moment in its demographic and age-structural transition. Current policy decisions regarding the population, particularly those that have an impact on fertility levels, will have serious and long-lasting implications on the sustainability of the socio-economic development of the nation.

1. Introduction

The level of socio-economic development in a country and quality of life is depicted by the mortality trends of that particular country. Mortality indicators are useful in measuring the overall health status of populations. It provides an important evidence for planning of health services and the development of country specific health profiles as well as providing an insight into the disaggregated health situation of population sub groups. Mortality statistics of a country has a direct impact upon the developmental policies and service planning. These rates are also important for the monitoring of progress towards the United Nation Millennium Development Goals (MDGs) and for other such international comparisons.

Mortality statistics act as an indirect measure of morbidity in the absence of proper disease surveillance and data recording of morbidity. For instance, in the Maldives where there is no proper cancer registry, cancer mortality can be used as an indirect proxy to estimate the extent of the problem. One major advantage of mortality statistics in Maldives is the accuracy of reporting that has resulted from the establishment of a systematic vital registration system from 1998 onwards and the subsequent efforts to strengthen the vital registration system. These efforts have resulted in increased number of births and deaths being registered. The existing vital registration system have the potential of full coverage with consistency and accuracy particular to a small population such as the Maldives.

In the Maldives, mortality statistics are routinely collected and reported to the Ministry of Health through the Vital Registration System (VRS). In addition, every five years, The Population and Housing Census conducted by the Ministry of Planning and National Development determine the mortality estimates. These two methods of assessment provide opportunity for comparison and also address any issues of discrepancy that may exist between the two methods.

Irrespective of the method of assessment, the Maldives have gained considerable achievements in reducing mortality and increasing life expectancy. Furthermore, the difference between the mortality data through the Vital Registration System and the Census has narrowed down indicating the accuracy of both systems of measurement and improved level of reporting and capturing of vital events.

Based on the Census 2006, this chapter will describe the levels, patterns and differentials of mortality in the Maldives. Mortality levels and patterns will be considered based on the Crude Death Rates Age Specific Mortality Rates. Estimates will be made using the census data to obtain the Life Expectancy at Birth and Infant Mortality Rates. In addition, mortality differentials will be considered by locality and age.

2. Reported mortality levels

The data for mortality estimates for the Census 2006 were collected in the birth history section of the Maldives Housing & Population Census 2006 questionnaire. In the Census 2006, females aged 15 and over were asked for details of history of births including the number of live births and number of children living at the time of Census. It has to be noted that this method of collecting information retrospectively from birth histories is very much dependent upon the accuracy of reporting and recording. Estimated levels of mortality by employing retrospective methods have the tendency to have sampling and non sampling errors. In the case of Census, non sampling errors such as under reporting of early childhood deaths may lead to under estimates of mortality. Moreover, incorrect reporting of the age at death or date of birth may distort the age specific mortality

2.1: Crude death rate

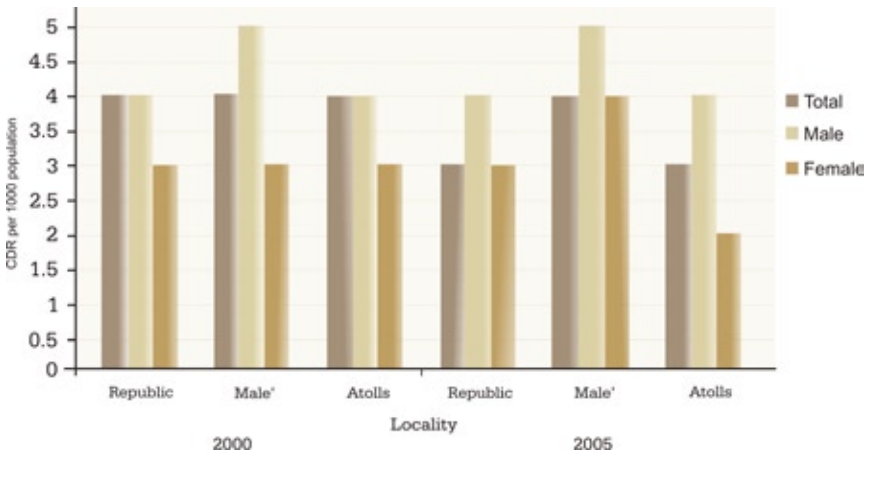
The Crude Death Rate can be defined as the number of deaths during a specified period per resident population during the midpoint of the time period. The Crude Death Rates for the year 2000 and 2005 are presented in Tables 1. The data for these are taken from the Vital Registration System (Ministry of Health) as the relevant data is unavailable from Census.

Table 1: Crude Death Rate per 1000 population by gender and locality 2000-2005

Locality	CDR/ '000 population-YEAR 2000			CDR/ '000 population-YEAR 2005		
	Total	Male	Female	Total	Male	Female
Republic	4	4	3	3	4	3
Male'	4	5	3	4	5	4
Atolls	4	4	3	3	4	2

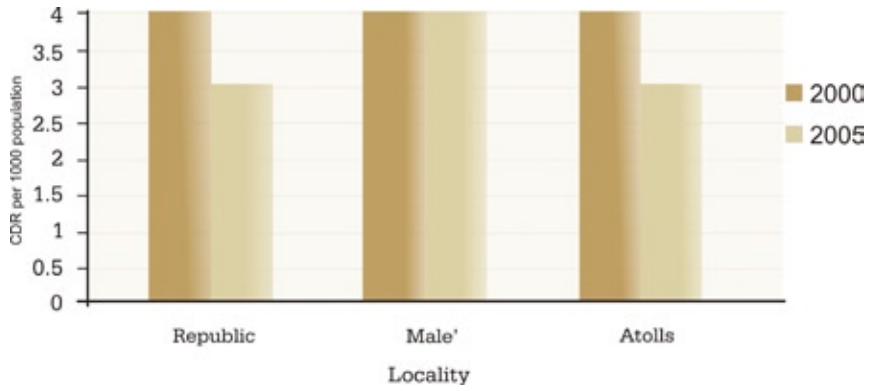
Source: Vital Registration System, Ministry of Health 2007

Figure 1: Crude Death Rate per 1000 population by gender and locality 2000-2005



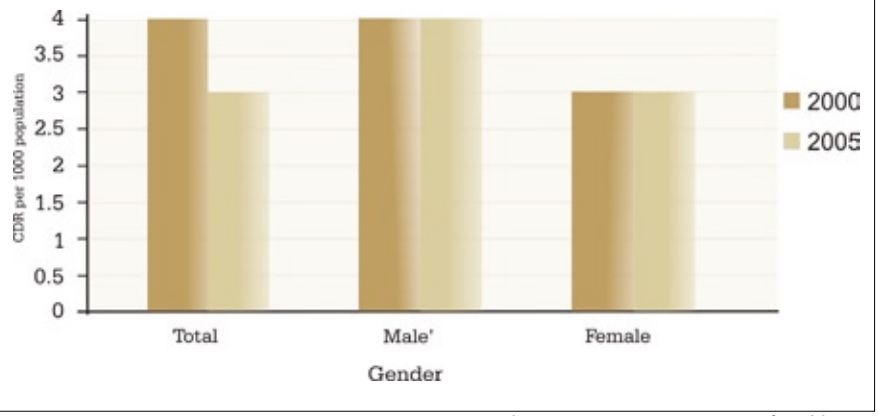
Source: Vital Registration System, Ministry of Health 2007

Figure 2: Comparison of crude death rate per 1000 population by locality 2000-2005



Source: Vital Registration System, Ministry of Health 2007

Figure 3: Comparison of crude death rate per 1000 population by gender 2000-2005



Source: Vital Registration System, Ministry of Health 2007

As illustrated from the above graphs, there is a decline in the overall crude death rate from the year 2000 to 2005. In the year 2005 the CDR for the atolls is lower (CDR=3) than in the year 2000 (CDR=4). The decline in the mortality rates could be due the improved access of health care across the Maldives and better diagnostic facilities. When comparing the male and female death rates, it is observed that CDR of females is lower in both the year 2000 and 2005.

Table 2: Comparison of Crude Death Rate per 1000 population for SAARC region - 2005

Country	Crude death rate (per 1'000)
Bangladesh	7.4
Bhutan	8.2
India	8.5
Maldives	5.7
Nepal	8.7
Pakistan	7.2
Sri Lanka	6.1

Source: United Nations, ESCAP 2006 Population Datasheet

When making a comparison betweeen the South Asian SAARC countries, as can be observed from the above table, Maldives has the lowest CDR. However, these results should be interpreted with caution as there is very little evidence to suggest that Maldives has a better health care system than the other SAARC countries. Moreover, the CDR calculated by the UN ESCAP 2006 population datasheet is 5.7 per 1000 population by using estimations, the accuracy of which will depend on the model applied for the estimation. It is imperative that the model used for such estimations fit the Maldivian context and take into account the unique socio-economic and geographical nature of Maldives.

2.2: Age specific mortality rate

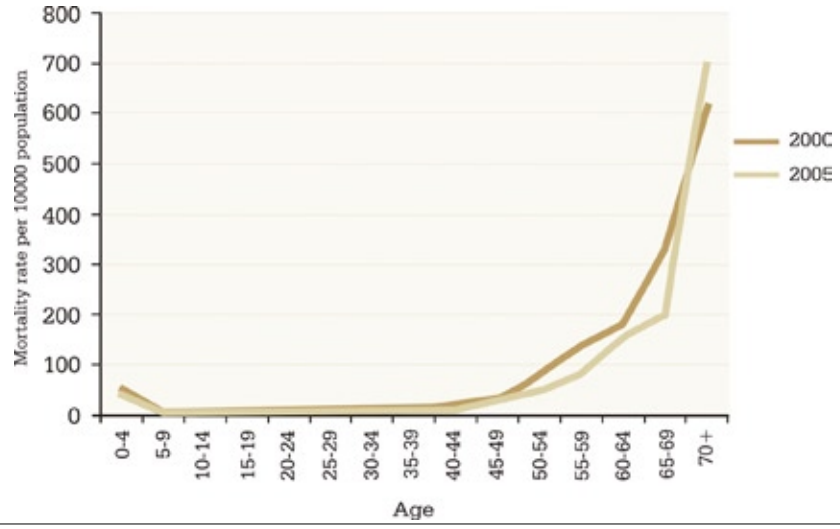
Age specific death rate is the number of deaths registered (or occurred) during a year at a specified age per 100,000 of the estimated resident population of the same age at mid-point of the year. The age specific mortality rates per 10,000 live births for the year 2000 and 2005 are presented in Table 3 and illustrated in the graphs below.

Table 3: Age specific mortality rate per 1000 population by gender 2000-2005

Age	ASMR per 10,000 population- YEAR 2000			ASMR per 10,000 population- YEAR 2005		
	Total	Male	Female	Total	Male	Female
0-4	51	54	49	39	45	33
5-9	4	4	4	5	6	3
10-14	4	4	3	4	4	4
15-19	3	3	3	4	4	4
20-24	6	8	4	6	10	2
25-29	6	7	5	6	9	3
30-34	6	9	2	6	8	4
35-39	11	11	11	5	8	3
40-44	19	14	24	10	15	5
45-49	31	43	17	32	35	29
50-54	80	72	89	50	59	41
55-59	140	166	112	83	88	77
60-64	182	172	194	154	176	131
65-69	327	374	265	200	221	177
70+	613	658	544	695	714	669

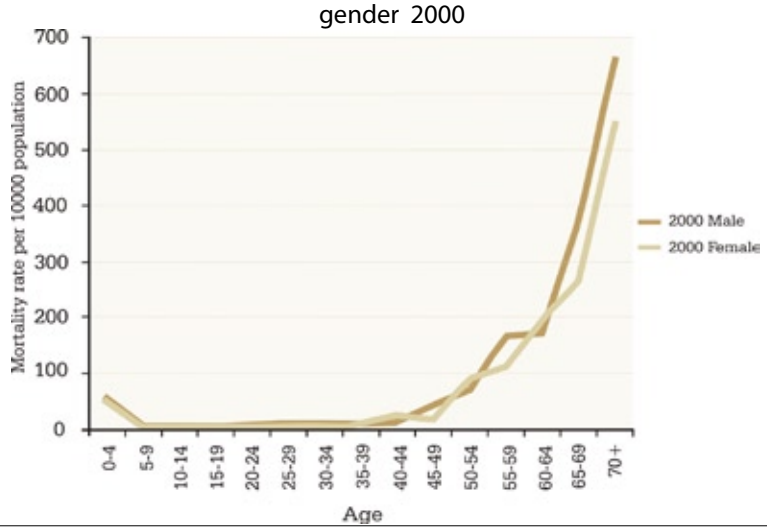
Source: Maldives Health Report 2001, & Vital Registration System, Ministry of Health 2007

Figure 4: Age specific mortality rate per 10,000 population 2000-2005



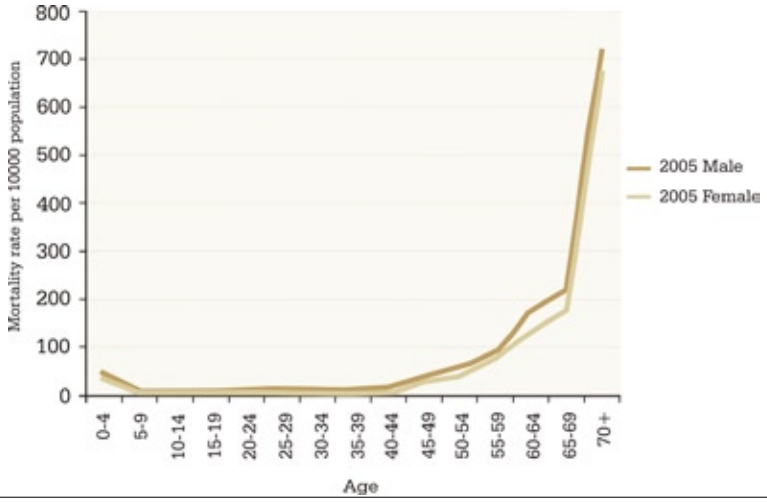
Source: Maldives Health Report 2001 & Vital Registration System, Ministry of Health 2007

Figure 5: Age specific mortality rate per 10,000 population by gender 2000



Source: Maldives Health Report 2001 & Vital Registration System, Ministry of Health 2007

Figure 6: Age specific mortality rate per 10,000 population by gender 2005



Source: Maldives Health Report 2001 & Vital Registration System, Ministry of Health 2007

As evident from the above figures, the characteristic U-shape mortality pattern is shown for the Maldives, similar to the pattern of other countries. Mortality rates are high during infancy up to the age of five. It then stabilises and again increases very steeply after the age of 50. Infant mortality contributes highest to under five mortality. Detailed breakdown of infant mortality to Early Neonatal Deaths, Late Neonatal Deaths and Post neonatal Deaths is useful and presented in the table below.

Table 4: Neonatal Death Rate per 1000 live births 1992-2006

Year	Early Neonatal Death Rate (0-6 days)			Late Neonatal Death Rate (7-27 days)			Post Neonatal Death Rate (28-364 days)		
	Total	Male'	Atolls	Total	Male'	Atolls	Total	Male'	Atolls
2000	12	13	12	2	1	3	7	3	8
2005	7	8	7	1	0.4	2	4	4	4

Source: Vital Registration System, Ministry of Health 2007

It can be seen that early neonatal death rate is highest. The first week of life presents itself with risks which maybe associated with deaths. For example a newborn may need stabilization after a traumatic delivery or may not be adjusting well to the new environment.

Another important consideration is that, unlike years ago there is an increased number of premature babies being born, who will have higher risk of dying than the full term babies. Decades ago there were a lesser number of premature babies and a higher number of stillborns due to the limitation of health facilities and resources. It can be said that better advancements in health including diagnostic facilities allow early detection of a distressed foetus which may lead to surgical delivery before term hence contributing to increased number of premature babies.

In addition to this factor we do have to consider that the increased early neonatal death rate could also be due to lack of adequate health care being provided during the first week of life. However, much evidence needs to be gathered to actually find out the major contributing factors to neonatal death in order to arrive at a plausible explanation. Late neonatal death rate is lesser than the early neonatal death as the risk to life decreased as the infant grows. It can be seen that the neonatal death rates has significantly reduced from the year 2000 to 2005.

Mortality pattern of children below the age five has declined from 51 per 10,000 population to 39 per 10,000 population in 2000 and 2005 respectively. This decline in mortality pattern can be reflected to the improvements in health care delivery and accessibility to health services during the period.

As can be seen from the graphs, there is a general decline in the mortality from ages 5 to50 years from the year 2000 to 2005. The mortality rate for persons aged 65-69 has declined from 327 per 10, 000 population in 2000 to 200 per 10,000 population in 2005. However, the mortality rate for persons above 70 years have increased from 613 per 10, 000 population in 2000 to 695 per 10,000 population in 2005.

When comparing the mortality pattern of males and females, as can be seen from the graphs, the mortality rate for females are lower than that of males. This is more evident in the year 2000 than in the year 2005. It is also noted that in the year 2000, for females age between 60-64 years there is an elevation in mortality pattern. In order to analyze the age specific mortality trends comprehensively it is imperative that cause specific mortality is known for deriving plausible explanations.

3. Mortality estimates

3.1: Life expectancy at birth

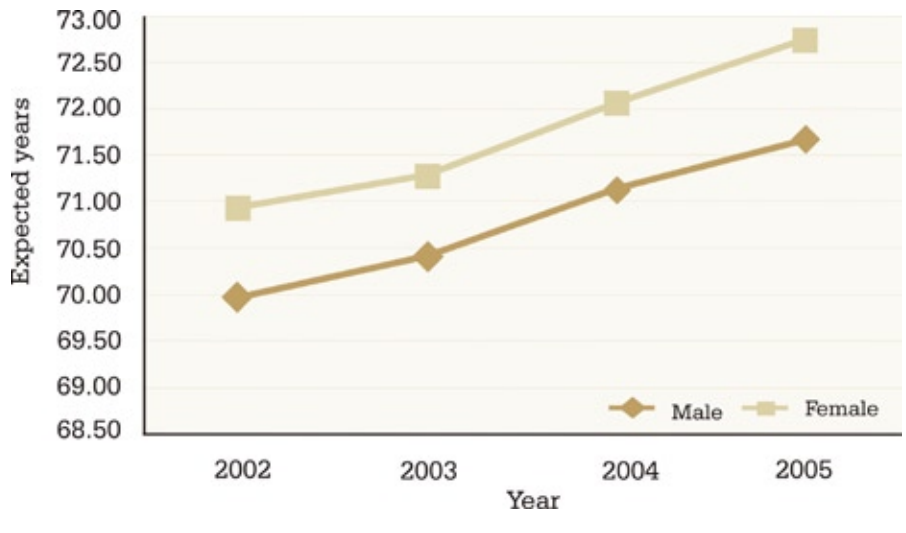
The average life span of a person from birth is a frequently used demographic measure to assess the overall health of a country. Better health and welfare increases life expectancy while incidences such as war, famine and deteriorating health situation can rapidly decrease the life expectancy. Fortunately in the Maldives, improvements in health and welfare as well as the unprecedented growth in the economy over the last few decades have lead to a rapid increase in life expectancy. Furthermore, decline in child mortality rates as reported in the proceeding parts of this chapter, has lead to increased child survival hence leading to higher longevity in life. The graph below shows the increase in life expectancy from 2002 to 2005.

Table 5: Life expectancy at birth 2002-2005

	2002	2003	2004	2005
Male	69.96	70.40	71.13	71.66
Female	70.93	71.29	72.07	72.74

Source: Ministry of Planning and National Development 2007

Figure 7: Life expectancy at birth 2002-2005



Source: Ministry of Planning and National Development 2007

Similar to other countries, life expectancy at birth for females (72.74)is higher than for males (71.66). There is a marked improvement in life expectancy from the year 2002 to 2005. In the year 2005 the life expectancy at birth for males was 69.96 and for females, 70.93. This figure has increased in 2005 to 71.66 and 72.74 for males and females respectively. The socio economic changes including developments to health infrastructure and service delivery over the past decade can be concluded to contribute to the increase in life expectancy.

3.2: Infant mortality rate

Infant Mortality Rate (IMR) refers to number of deaths of children under one year occurring per 1000 live births in a given year.

The mortality indicators from the census can be derived through direct or indirect estimates. The indirect estimates of IMR using the census data can be derived based on the information on children surviving among children ever born.

This indirect method of estimation of Infant Mortality Rate was developed by Brass (1966) and modified later by Sullivan (1972) and Trussell (1975). This method involves calculating the proportion of dead children among children ever born by age group of women (ie: for age range 15-19, 20-24, 25-29, 30-34 etc) and converting the proportion of children dead (ie: D1, D2, D3, D4.. etc) into probabilities of dying between ages 1, 2, 3, 4, 5 etc… (ie q1, q2, q3, q4 …etc). This indirect method, with the application of United Nation's South Asian model Palloni-Heligman equations, has indicated overestimation of mortality levels which is not consistent with the other health indicators and life expectancy of the Maldivian population. The reliability of this indirect method of estimation is very much dependent on the quality of census data, particularly the number of children ever born, children surviving and age group of women.

Therefore for the analysis of Census 2006 data, a direct estimate of infant mortality has been made from the available data. The following table shows the Infant Mortality Rates per 1000 live births for the year preceding the census.

Table 6: Infant mortality rate per 1000 live birth - 2005

Locality and age of mother	Number of children		Number of infant deaths	Infant Mortality Rate per 1000 live births
	Born alive last year	Surviving among born alive last year		
Republic	**5,344**	**5,247**	**97**	**18.15**
15-19	149	145	4	26.85
20-24	1,685	1,655	30	17.80
25-29	1,619	1,588	31	19.15
30-34	1,081	1,064	17	15.73
35-39	580	573	7	12.07
40-44	202	196	6	29.70
45-49	28	26	2	71.43
Male'	**1,476**	**1,455**	**21**	**14.23**
15-19	19	19	0	0.00
20-24	449	445	4	8.91
25-29	486	477	9	18.52
30-34	355	350	5	14.08
35-39	135	134	1	7.41
40-44	28	26	2	71.43
45-49	4	4	0	0.00
Atolls	**3,868**	**3,792**	**76**	**19.65**
15-19	130	126	4	30.77
20-24	1,236	1,210	26	21.04
25-29	1,133	1,111	22	19.42
30-34	726	714	12	16.53
35-39	445	439	6	13.48
40-44	174	170	4	22.99
45-49	24	22	2	83.33

As mentioned previously, the data for mortality estimates for the Census 2006 were collected in the birth history section of the Maldives Housing & Population Census 2006 questionnaire. In the Census 2006, details of history of births including the number of live births and number of children living at the time of census were asked from females aged 15 and over. Based on this information the numbers of infant deaths were calculated. Infant Mortality Rates per 1000 live births were then calculated to arrive at the direct estimate of infant mortality levels in the Maldives as detailed in Table 6.

The Infant Mortality Rate for the year preceding the census stood at 18.15 per 1000 live births. The IMR for Male' is 14.23 per 1000 live births and for the atolls, IMR is 19.65 per 1000 live births. The IMR generated from the Census is relatively closer to the IMR generated by the Vital Registration System of the country which stands at 16 per 1000 live births.

4. Mortality differentials

There are several differentials that contribute to the variation in mortality levels, namely demographic, socio-economic, cultural and locality factors. In order to analyse these differentials information on these factors need to have been collected during the Census 2006. The data constraints of Census 2006 permit examination of limited number of mortality differentials, hence mortality levels has been considered by locality and age as discussed below.

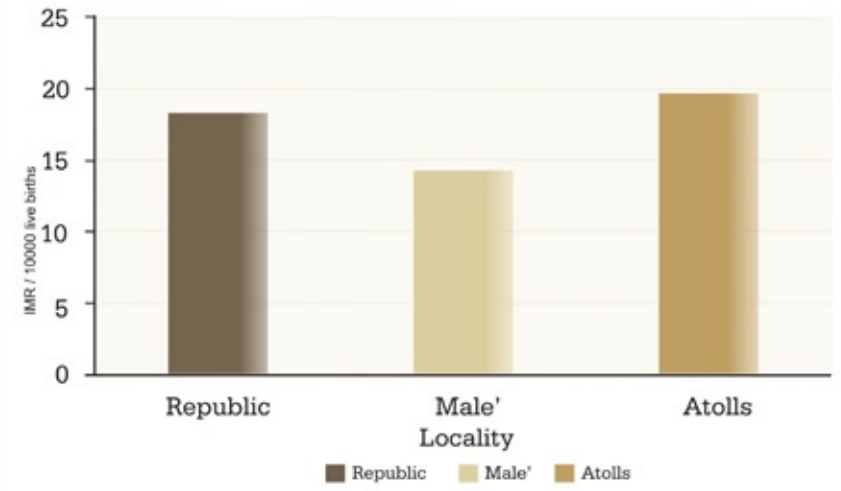
4.1: Locality

Due to the unique geographical nature and the spread of the islands in Maldives there are variations observed for the mortality levels in the country for Atolls and Male'. Male' is the capital island city of the Maldives and its characteristics differs considerably from the atolls. Male' is densely populated with 34.6 percent of the country's population residing in Male' (Ministry of Planning and National Development, 2006). Male' is considered to be an urban setting and there are more health facilities and tertiary health care is available in Male'.

The atolls are sub-divided into regions namely, north, north central, central, south central and south region. The number of health facilities has increased considerably over the past few years and at present there is a hospital in each atoll in addition to the regional hospitals. Additionally there are Health Centres, Health Posts and Family Health Sections spread throughout the country.

Over the past decade, there is a gradual decline in Infant Mortality Rate both in Male' and in atolls. The graph below shows the direct estimate of IMR per 1000 live births by locality. In Male' the IMR stands at 14.23 per 1000 live births and for the atolls, IMR stands at 19.65 per 1000 live births.

Figure 8: Direct estimates of infant mortality rate per 1000 live births by locality 2005

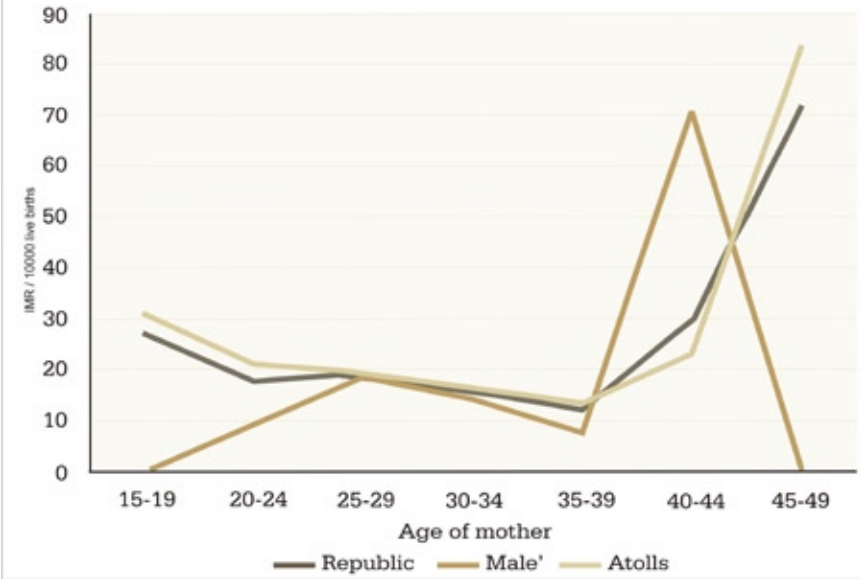


The lower IMR in Male' could be attributed among other factors to the improved quality and accessibility of care than in the atolls. Moreover the skilled birth attendance rate is above 90 percent in Maldives (Ministry of Health, 2007) which contributes to reducing the maternal and child mortality in the country. The gap between Male' and atolls have narrowed down considerably over the years, and needs to be further bridged by improved quality of care in the atolls.

4.2: Age

As the age specific mortality has been discussed in section 2.2, this section will focus on the correlation between infant mortality rate and age of the mother. The graph below shows the relationship between IMR per 1000 live births and age of the mother.

Figure 9: Direct estimates of infant mortality rate per 1000 live birth by age 2005



As can be expected the characteristic U-shape pattern is illustrated in the graph. As a whole for the Maldives, the IMR rate is higher for teenage mothers and then stabilizes before the IMR increases sharply from age 40 onwards. This is to be expected as the risk of infants dying to mothers who are aged 40 or above increases considerably with age.

When considering the Infant Mortality Rates for Male' the pattern is a bit different as there are no infant deaths for mothers in age group 15-19. The sharp peak at age group 40-44 indicates high mortality rate which is more noticeable as the next age group has no reported infant deaths. These should be interpreted with caution as the accuracy of information is very much dependent on the responses given by mother's particularly their responses in categorizing infant deaths and child deaths which may be subjected to recall bias. In addition slight variation in the number of deaths may contribute to a larger difference which results from the small population of the country hence these should be interpreted carefully. Nevertheless it can be said that Maldives has gained considerable progress in reducing the mortality levels of the country including a reduction in infant mortality rate.

5. Conclusion

As compared to previous censuses, the basic health indicators such as the crude death rate, life expectancy at birth, age specific mortality rate and infant mortality rate has shown marked improvement which reflects to the progress in health and well-being of the Maldivian population for the past decade. Although the method of comparison of Infant mortality Rate is different from previous censuses, based on the other indicators and information derived from the Vital Registration system, it can be concluded that there is a vast improvement which can be explained by the development of health care facilities and accessibility of services in the atolls. Public health measures such as almost universal immunization rate, more than 90 percent of births being conducted in health facilities rather than in home and increased awareness in public has also attributed to better health outcomes for the infants and mothers. The development of health infrastructure has lend a hand in reducing the overall mortality levels of the country. In addition the increased number of health professionals in service has played a major role in improving the efficacy of the health system of the country. These factors among others have led to significant reduction in mortality levels in the Maldives.

1. Introduction

Education contributes to the economic stability of the nation by increasing the knowledge and skills of the people, leading to increases in income. In addition to economic stability, education promotes civil and international peace as well as cultural tolerance and understanding. It has multiple effects, empowering people to bring about informed and necessary changes in their lives. Thus, not only does education benefit the person learning, but also the community in which they live.

Maldivians attach great importance to education. As such, approximately 15 percent of our total government expenditure is spent on education in 2006. Maldives also receives aid from international donor agencies and countries.

The Maldives has had a long history of semi-formal religious-based education for the masses and this is still practised today. The traditional system consisted of children gathering in homes called 'edhuruge' to learn Dhivehi language and the Arabic script and to learn to recite the Holy Quran. In addition, there were special classes for navigation, languages, and for Muslim theology. Although educational attainment in the traditional system is low in terms of performance in formal examinations, the system has contributed towards achieving many educational objectives – the most important of which is the relatively high rate of literacy and the preservation of national culture and tradition.

The initial challenge to this traditional system occurred in 1927 with the establishment of the first government school in Male'. This school was first limited to the education of boys but later in 1944 a section was opened for girls and young women. Instruction in this school covered Dhivehi language, Islam, Arabic and Arithmetic. By 1945 each inhabited island had a traditional school (maktab) providing instruction at the lower primary level.

Rapid changes followed. In the 1950s the education system was remodelled to meet the requirements for trained people in a growing economy. In 1960 a dramatic change in the education system occurred with the introduction of two English medium schools in Male' as part of a conscious effort to prepare its citizens to meet the increasing development needs of the nation. However, this resulted in two distinct forms of education systems existing side by side. Nevertheless, until recently government schooling has been concentrated mainly in Male'.

The most recent historic development in education in the Maldives occurred in 1978, with the decision to move to a unified national system of education and to promote a more equitable distribution of facilities and resources. The policy focus was on providing Universal Primary Education for All and thus the strategies involved the formulation of a unified curriculum for Grades 1-7, improvement of teacher training and the establishment and upgrading of new schools in the atolls. Two government schools (one Atoll Education Centre (AEC) and one Atoll School (AS)) were established in each atoll and today these schools represent the availability of high quality basic education for the children in their locales.

Recent educational development of the country is characterized by a very rapid increase in student

enrolment and the number of educational institutions. During this period, the provision of basic education remained the main priority of the sector for a number of years. Many schools have been constructed, a national curriculum was introduced and later revisions were carried out, and local textbooks and teacher guides have been developed for all the primary education grades (grades 1-7).

School enrolment has risen rapidly (from 15,000 in 1978 to 102,073 in 2005) and the education sector's share of total Government expenditure in the last 5 years (up to 2006) has been an annual average of 15.8 percent. Access to primary education (grades 1-7) has been provided through out the country, while secondary and higher secondary education is being expanded. In addition, programmes to support tertiary education locally and overseas have been initiated by government and private sector.

Present plans for education emphasise access to 10 years of universal basic education by the year 2010; expanding and improving early childhood care and education; inclusive education especially for children with special needs, continuing education for all; equitable access to appropriate learning and life skills, increasing curricular relevance; expanding national capacity for secondary teacher education and post- secondary education; strengthening of partnerships with parents and the community to support educational expansion and development; and enhancing the quality of education.

The impact of the 2004 tsunami had an unexpected effect on the Maldivian economy and destroyed or damaged the educational infrastructure in some islands. However, with the help of donor agencies and countries, the Maldivian government started to accelerate and minimize the setbacks occurred in the disaster.

The purpose of this chapter is to give an analysis of education data collected during the 2006 Census. The chapter began with an introduction to the educational development of the Maldives. What follows is an overview of the education system in the Maldives. The rest of the chapter is structured to provide the analysis of the Census 2006 data, with respect to educational characteristics and trends in Male' and the atolls and finally, concluding remarks and recommendations are presented.

2.Overview of the education system

The Maldivian population consists of a high proportion of children, with nine percent of its population under 5 years, and 31 percent below 15 years. Provision of education to over one-third of its population is by no means a minor challenge for a developing country like the Maldives. Despite this, all children in the Maldives have access to the first seven years of formal schooling.

Since the re-conceptualisation of educational policy in 1978, remarkable progress has been made in the sector. Early Childhood Care and Education has been expanded, primary education has been universalised, secondary education has seen marked growth, illiteracy has been nearly eliminated, and higher secondary opportunities have been expanded by establishing higher secondary schools regionally. Government policies to encourage girls' schooling, mothers' education, and changes in societal perception have contributed to the Maldives achieving gender parity in education enrolment.

The primary education system is a 7-year cycle where children are expected to begin at age 6. This primary school cycle is preceded by a 3 year cycle of pre-primary education (nursery, lower kindergarten and upper kindergarten years). Thus the formal grade cycle of 1-7 (primary level) makes up what the Ministry of Education (MoE) calls the basic education cycle. Secondary education in the Maldives consists of Grades 8-10 (lower secondary) and 11-12 (higher secondary).

Schooling is provided by the government, the community and the private sector. In 1998, community schools provided 43 percent of student enrolment in the nation as a whole but most of this provision is at the primary level. The government supports community and private schools by providing a certain percentage of teachers depending on school size, and by providing infrastructure, facility support and financial subsidies. In order to minimize the differences in giving provisions to schools, 135 community schools in the atolls were converted to government schools in 2005.

Universal primary education for the Maldives has now been achieved. Net enrolment in Grades 1-5 is over 100 percent. Secondary school provision is being expanded at a very fast rate in the atolls. In 2005, 25 new schools introduced grade 8, and 24 new schools did the same in 2006. As of 2006, secondary school education is not available in 42 islands. In these 42 islands the secondary school enrolment is below 100, with total enrolment at just about 200 or less. Higher secondary schooling has also been extended into the atolls with 24 schools registered at this level in 2007. With these developments underway, the challenge now for the school system is to provide consistent high quality schooling throughout the country.

One of the significant achievements in education has been, nearly eliminating illiteracy in the Maldives. Non-formal education has played a major role in establishing the literacy rate of the country at below 95 percent. In addition, this programme has achieved considerable success in providing basic education for youth and adults who have missed the opportunity to complete basic education.

3. Education data in the 2006 Census

There are two main sources for collecting information on educational developments: the censuses and the annual statistics collected by the Ministry of Education. In the 2006 population census conducted during 21 – 28 March 2006, questions on education obtained information on literacy, number and level of school attendance, highest level of educational attainment and information on

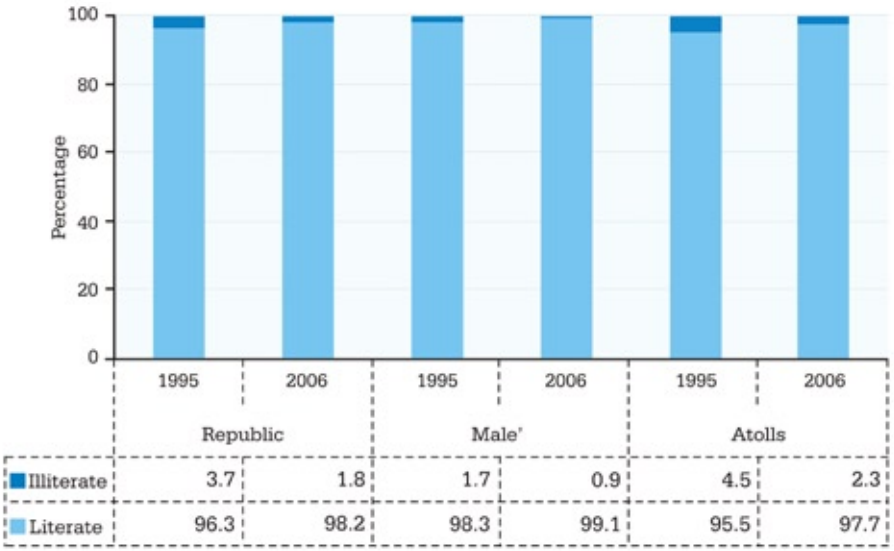
vocational training. These questions were asked of those who were 6 years and over.

4. Literacy

The United Nations (UN) defines a literate person as someone who can both read and write, with understanding, a short simple statement (in any language) on his/her everyday life. A person who cannot read or write is illiterate. The literacy rate is a useful tool to determine the extent of interventions needed in the education sector in terms of literacy programs and quality education at the lower levels. A literate person can harness his or her potential for intellectual growth and thus contribute positively to the economic, social and cultural development of society. Thus, data on literacy provides a meaningful indicator for measuring the progress in the achievement of the goal towards education for all.

To determine literacy, the question asked in the 2006 Census, probed for the person's ability to read and write, with understanding, the local language Dhivehi. Figure 1 shows the result.

Figure 1: Inter-censal variation in literacy rates



	Republic		Male'		Atolls	
	1995	2006	1995	2006	1995	2006
Illiterate	3.7	1.8	1.7	0.9	4.5	2.3
Literate	96.3	98.2	98.3	99.1	95.5	97.7

Note: These rates exclude not stated. Percentage not stated for Male' was quite high at about 9% distorting the overall literacy rates.

Figure 1 shows, in the year 2006 the overall literacy rate for the country is 98.2 percent. Literacy rate for Male' is slightly higher at 99.1 percent compared to 97.7 percent in the atolls. In 1995 this rate was lower to that of 2006, and therefore it illustrates an increasing trend in the literacy rates of the country both in Male' as well as in the Atolls. There is no significant difference between female and male literacy rates in the country. In fact female literacy rate is slightly higher than the male literacy rate. This has been observed since 1960's.

It is remarkable that in the list of seven South and West Asian countries, Maldives is at the top of adult literacy. That is 96.3 percent, including 96.2 percent men and 96.4 percent women. (EFA global monitoring report 2006, UNESCO).

One of the reasons for higher literacy rates is achievement of universal primary education in the country. In 2006 almost all children complete primary education (7 years of basic education), and it is assumed that any person who complete grade 7 will be literate. In the 1995 census primary level was up to grade 5 instead of grade 7 and hence the literacy question was asked from everyone who had not completed primary education.

From 1995, to 2006, the overall literarcy rate for the country has improved by about two percent. This trend is true when the figure for atolls and Male' are considered as well. The increase in literacy rates for Male' is one percent and for the atolls it shows about two percent from 1995 to 2006.

5. Current Attendence to Educational Institution

In the 2006 Census, the question on attendance to any educational institution was asked for all persons aged 6-64 years attend school during the reference week, which was 21- 28 March 2006.

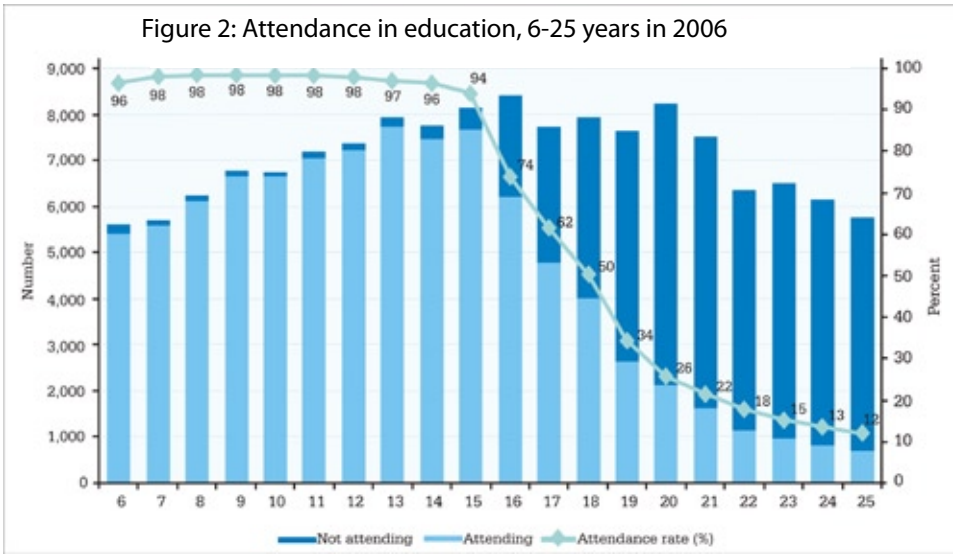
The current school attendance of the population is based on whether or not an individual is attending formal school in the age group 6-25 years.

5.1: School attendance, for the Republic

The primary schooling in the country starts from grade 1 at the age of 6 years, lower secondary (grade 8-10) at the age of 13 and higher secondary (grade 11-12) at the age of 16 years. Higher secondary schooling is completed at the age of 18 years. However the census data on school attendance reveals the presence of over-age students in the school system even at the age of 25 years as seen in figure 1. This is due to the differences in the quality of education among the islands. Hence often times those who complete primary education in their own islands have to complete the last year of primary education again in the island where they go for secondary education. Similarly the same situation arises in the entrance to higher secondary especially in Male'.

[1]Here formal schools are counted as schools that follow the national syllabus for respective grades and that require students to wear a uniform.

Figure 2: Attendance in education, 6-25 years in 2006



The current attendance rate stays high in the ages 6-15, then decreases sharply. This is mainly due to the fact that all islands have schools that teach up to primary level and many of the islands have lower secondary schools. The decrease in current attendance rate from 94 percent at age 15 years to 74 percent at age 16 years seen from figure 2 is mainly due to this reason. Further more the atoll education centres and some atoll schools provide an opportunity to attend lower secondary schooling within the atolls. However, higher secondary schooling is available only in a few islands apart from Male'.

The decrease in current attendace rate in the age 15 to 16 years is a little under 20 percent, indicating that 20 percent of secondary school leavers do not continue to higher secondary schooling. From this age onwards attendance rapidly declines. At the age of 18, when a student will normally start tertiary education, almost half are enrolled (50.3 percent). However, this percentage, in part, reflects attendance in secondary education, not tertiary education.

Here it is assumed that the a student might stay in school till 19 years of age, to allow room for students who join school late, and for students who come to Male' to join school.

Figure 3: Attendance, 6-19 years, for the Republic 2006

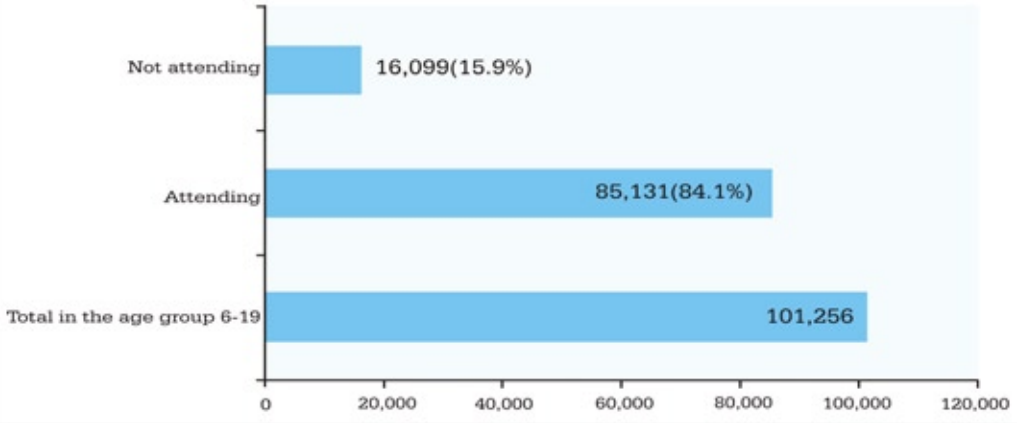


Figure 3 shows that, of the total population in the age group 6-19 years, 84.1 percent attended school in the reference period of 21-28 March 2006 while 15.9 percent did not attend school. Inevitably there are going to be a certain percentage of children in this age group who do not attend school up to the completion of higher secondary schooling.

The percentage of students not attending in this age group (6-19 years) is inflated mainly due to the fact that after finishing lower secondary school, many students do not have the opportunity to continue to higher secondary level, leading to a large drop-out from the formal school system.

This can also be seen from Table 1. The breakdown of percentages for the age groups 6-16 years and 17-19 years gives a different outlook.

Table 1: Difference in attendance between 6-16 years & 17-19 years age groups, for the Republic, 2006

Age group	Attending	Not attending	Not stated
6 - 19	84.1	15.9	0.0
6 - 16	92.4	5.4	2.3
17 - 19	46.4	51.6	2.4

The attendance rate within the age group 6-19 years stays at 84 percent. However, when the age groups are further broken down to 6-16 years and the age group 17-19 (the years in lower secondary school and higher secondary school) is taken separately, the percentage of students who attended increases to 92 percent for 6-16 years while it decrease to 46 percent for 17-19 years. It is noteworthy that a remarkably high percentage of children attend primary and lower secondary level. On the other hand it is very important to highlight that half the higher secondary level attending age group (17-19 years) do not proceed after the lower secondary level.

This is due to various reasons including limited availability of higher secondary schools in the islands and limited seats in the existing higher secondary schools in the capital Male' where 1/3 of the population resides. Also a high proportion of students completing lower secondary education and following the 'O' level examination do not attain adequate level of passes required for entry to the higher secondary level. Other reasons include parents' reluctance to send their children to other islands for schooling, difficulties in finding reasonable accommodation, difficulties for parents to leave young ones and family home in the island to go and stay with them. Another reason is the census time falls between the termination of lower secondary classes and commencement of higher secondary classes for new entrants to higher secondary schools in 2006. Thus the actual percentage of those not attending higher secondary schooling may not be as large as shown in Table 1.

However it is important to note that even after students drop out of the formal school system, some of them continue to study through the informal education.

Figure 4: Number of students attending informal secondary education by age, 2006

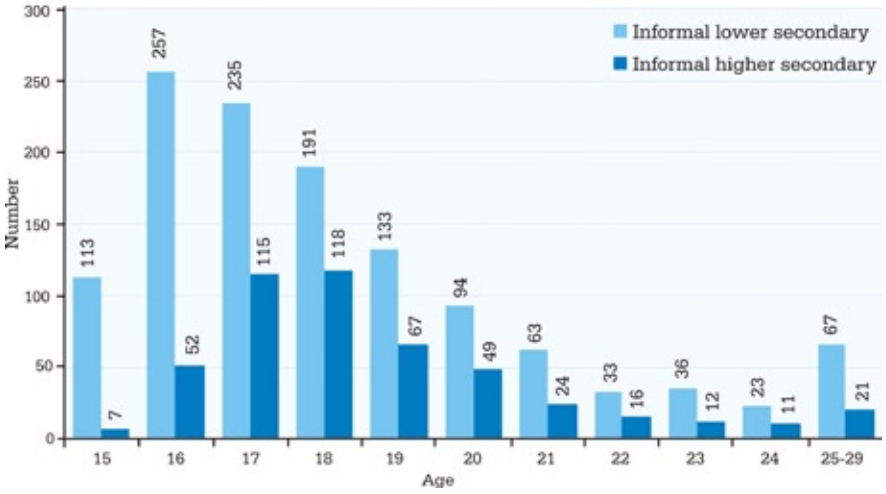


Figure 4 gives a breakdown of the number of students who attend informal secondary classes. About six percent of the age group 15-29 years attend informal O' Level and A'Level classes operated by private teaching institutions.

The proportion attending informal lower secondary classes (O'level classes) remains high at ages 15 to 19 years with the highest number at age 16. The presence of lower secondary level age students beyond that of lower secondary education completion age could be an indication that those who do not get adequate number of passes in the O' level continue there studies through informal education and resits exams for better results. The proportion attending informal higher secondary is also high for 17 to 18 years mainly due to the fact there are limited number of seats in the higher secondary schools.

5.2: Attendance upto lower secondary school, Male' vs atolls

Table 2: Attendance by locality, 6-16 years, and 2006

Age	Percent attending			Percent not attending		
	Republic	Male'	Atolls	Republic	Male'	Atolls
6	96.2	97.3	95.9	3.7	2.7	4.1
7	98.0	98.3	97.9	2.0	1.7	2.1
8	98.2	98.5	98.0	1.8	1.4	1.9
9	98.2	97.8	98.3	1.8	2.2	1.7
10	98.4	98.5	98.4	1.6	1.5	1.6
11	98.2	98.3	98.1	1.8	1.7	1.8
12	98.0	98.6	97.8	2.0	1.3	2.2
13	97.2	98.4	96.7	2.8	1.6	3.3
14	96.2	97.2	95.8	3.7	2.7	4.2
15	93.9	95.1	93.3	6.1	4.9	6.7
16	73.6	72.3	74.4	26.3	27.6	25.6

There is no significant difference in the attendance rates between Male' and the atolls, as seen in table 2. But a significant decrease can be observed in the age 16 years which is more for Male' than the atolls. There is also a noticeable drop at the age of 14 to 15 years from 97.2 percent to 95.1 percent in Male' and from 95.8 percent to 93.3 percent in the atolls. The drop in percentage students attending school after the age of 15 is significant. In Male' 72.3 percent of the 16 year age group attends school while 74.4 percent of the same age attends school in the atolls. Age 15 is a landmark age in schooling and most students finish Grade 10 at the age of 15 or 16. However due to the limited opportunities within the island, students who complete Grade 10 may decide whether they would continue for higher secondary schooling in another island.

5.3: Attendance up to higher secondary education , Male' vs atolls

Figure 5: Attendance in any educational institution, Male' & Atolls, 2006

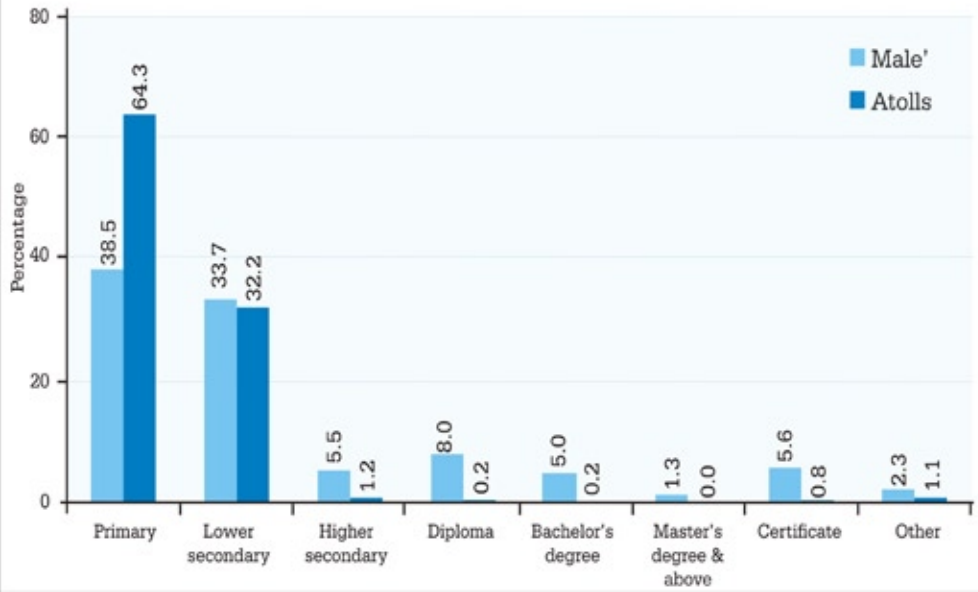


Figure 5 shows that attendance rate of primary level in the atolls is predominant due to the higher proportion of primary school age children in the atolls. Accessibility in lower secondary schools in the islands have made the rates equivalent to that of Male'. But the rate decreases for the atolls for the higher education levels. This is to be expected since in the atolls there are very limited opportunities to pursue education after secondary schooling is completed. Hence, the rate is much lower when it comes for the tertiary levels, where the percentage attending is less than one percent in the atolls.

6. Inter-censal variations

Trends in attendance over the decade are analysed for the age groups 6-16 years, because higher secondary schooling was not introduced at a wider level in the atolls before the year 2000.

6.1: Inter-censal variations for the Republic

Figure 6: Attendance, 6-16 years for the Republic, inter-censal variation

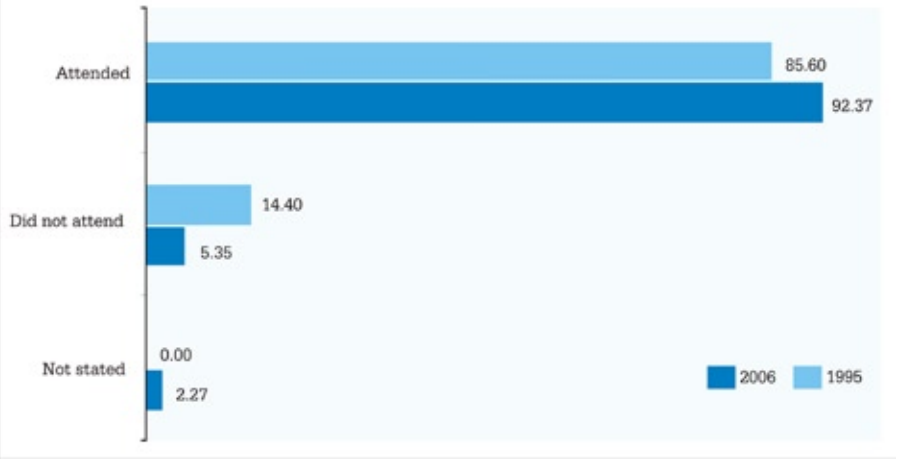


Figure 6 shows that from 1995 to 2006 there has been an increase in attendance, from 85.6 percent to 92.4 percent. A closer look at data in Table 3 reveals that the increase in attendance is in fact a decrease in non-attendance in the ages 6 years and 7 years. In 1995, a total of 3368 in the age 6 years and a total of 1191 in the age 7 years did not attend school.

Table 3: Inter-censal variation in attendance, 6-16 years, for the Republic

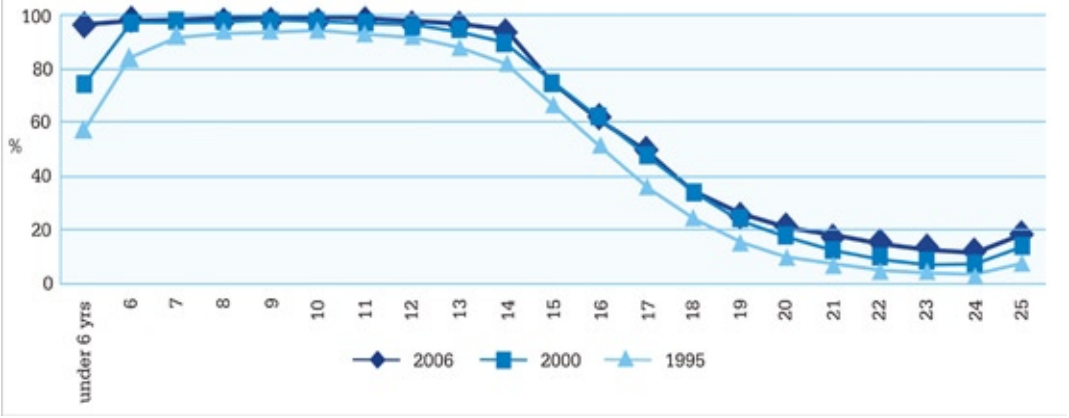
Age	Total		Attended		Did not attend	
	2006	1995	2006	1995	2006	1995
6	5,612	7,635	5,002	4,267	210	3,368
7	5,703	7,704	5,460	6,513	112	1,191
8	6,245	8,461	6,022	7,720	112	741
9	6,793	8,334	6,539	7,716	122	618
10	6,759	8,088	6,517	7,611	106	477
11	7,180	6,990	6,918	6,588	129	402
12	7,367	7,381	7,078	6,873	145	508
13	7,943	6,839	7,577	6,283	224	556
14	7,750	6,572	7,320	5,799	290	773
15	8,160	4,592	7,511	4,489	501	103
16	8,428	4,866	6,053	3,222	2,219	1,644

Note: Total includes not stated which is not shown separately in the table.

The decrease in the student numbers who did not attend school in the year 2006 reflects the expansion of government schools in most of the islands and also an awareness in the general public of the importance of sending children to school in early age.

Figure 7 clearly shows that the same variation is evident over the entire decade in the primary school ages, attendance remains high and tapers off once the secondary school ages are reached.

Figure 7: Inter-censal variation in attendance, for the Republic



7. Educational Attainment

An analysis of the educational attainment of the population is a key factor in measuring the human capacity, progress, and development of a nation. Two questions on educational attainment were included in the Census 2006. These include highest grade completed at school and highest educational certificate achieved.

7.1: Educational attainment for the Republic, 2006

Table 4 shows the composition of the population 6 years and over by level of highest educational attainment as of March 2006.

Table 4: Highest educational attainment by locality, 2006

	Republic	Male'	Atolls	Percentage (%)		
Total	258,745	90,436	168,309	Republic	Male'	Atolls
No standard passed	45,595	9,415	36,180	17.6	10.4	21.5
Basic literacy certificate	5,832	1,019	4,813	2.3	1.1	2.9
Literate	35,248	7,334	27,914	13.6	8.1	16.6
No grade 1	4,515	1,062	3,453	1.7	1.2	2.1
Primary school	113,529	28,363	85,166	43.9	31.4	50.6
Grade 1	7,488	1,673	5,815	2.9	1.8	3.5
Grade 2	8,956	2,067	6,889	3.5	2.3	4.1
Grade 3	14,553	2,945	11,608	5.6	3.3	6.9
Grade 4	11,306	2,849	8,457	4.4	3.2	5.0
Grade 5	19,658	4,918	14,740	7.6	5.4	8.8
Grade 6	17,155	4,177	12,978	6.6	4.6	7.7
Grade 7	34,413	9,743	24,679	13.3	10.8	14.7
Secondary school	68,506	33,319	35,187	26.5	36.8	20.9
Grade 8	15,879	6,327	9,552	6.1	7.0	5.7
Grade 9	10,915	5,017	5,898	4.2	5.5	3.5
Grade 10	4,274	2,677	1,597	1.7	3.0	0.9
O' Level	37,438	19,298	18,140	14.5	21.3	10.8
Higer secondary	4,926	3,899	1,027	1.9	4.3	0.6
Grade 11	806	559	247	0.3	0.6	0.1
Grade 12	211	169	42	0.1	0.2	0.0
A' Level	3,909	3,171	738	1.5	3.5	0.4
Diploma	4,174	3,193	981	1.6	3.5	0.6
Certificate / Sanadhu	19,643	10,157	9,486	7.6	11.2	5.6
University level	2,372	2,090	282	0.9	2.3	0.2
First degree	1,546	1,342	204	0.6	1.5	0.1
Masters degree & above	826	748	78	0.3	0.8	0.0

Note: About 13% have not stated their level of education; therefore the percentages are based on excluding the category "Not stated".

The overall educational status of the population is not high. By March 2006, about 15 percent and two percent of the population have completed O' Level and A' Level, respectively in the country. In addition, only about 12 percent have reached secondary level (grade 8-10) education and only one percent has attained university level education.

Figure 8: Highest educational attainment,by locality, 2006

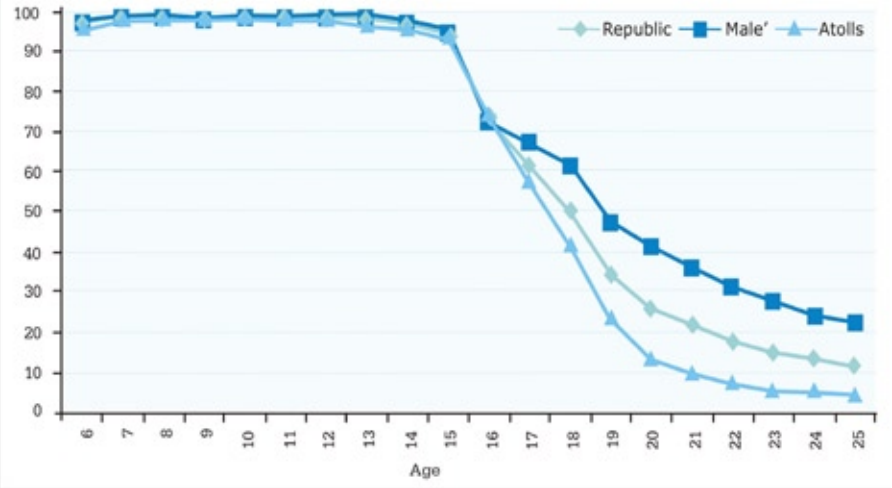


Table 5 shows the highest educational attainment by broad age groups. Educational attainment over broad age groups gives some information about the long term improvements in access to education, and higher educational attainments of younger groups reflect a sustained effort in the improvements.

Table 5: Highest educational attainment, by five year age groups, for the Republic, 2006

Level	6 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 44	45 - 59	60+
No standard passed	19.4	0.4	1.5	2.7	5.2	25.0	47.9	64.4
Primary	73.3	88.8	22.4	21.2	36.6	43.0	36.0	28.1
Lower secondary level	-	8.6	69.8	57.6	37.4	13.8	3.5	1.1
Higher secondary level	-	-	2.8	7.4	2.8	0.9	0.2	0.1
Diploma	-	-	0.3	3.4	4.7	2.7	0.8	0.1
Certificate / Sanadhu	7.3	2.2	3.2	6.9	10.7	12.4	10.6	6.1
Bachelors degree	-	-	-	0.8	2.0	1.2	0.5	0.1
Masters degree & above	-	-	-	0.1	0.6	0.9	0.5	0.1

In 2006, 19.4 percent of the age group 6-9 years are reported as having not passed any standard at all. This is because children attending 1st grade are counted as having not passed any standard as of 2006. However, the proportion of the population who have completed relevant age-specific schooling is very high about 73.3 percent of the age group 6-9 years and 88.8 percent of the age group 10-14 years have attained primary education. Students are expected to complete primary education by the age of 14 years. A small proportion 8.5 percent of this age group has reached secondary school as well.

For the 15-19 years age group, 69.8 percent have attained lower secondary education. This percentage is noteworthy because a student is expected to complete secondary education by the age of 17 years. A very small proportion 2.8 percent of this age group has reached higher secondary level.

In terms of the highest educational attainment, the best educated population is found in the age group 25-29 years. In this age group, 4.7 percent have attained a diploma, two percent have a bachelor's degree, and 0.6 percent have a masters and above.

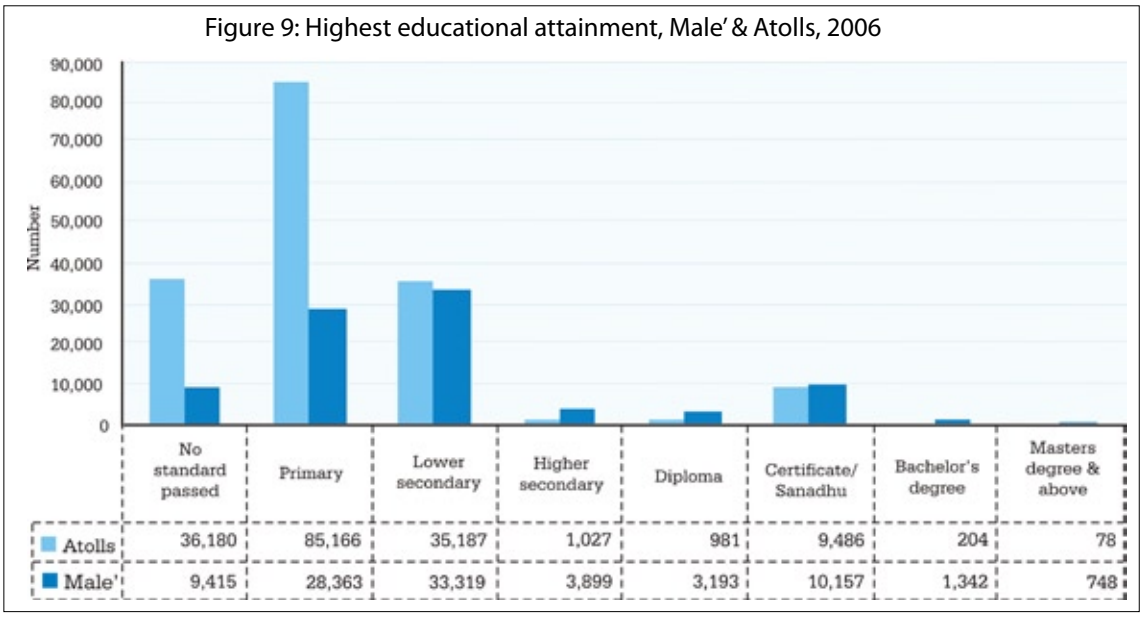
For most education levels the percentage of persons who had attained age specific education shows that, over the years, access to these education levels has increased. For instance, secondary level education shows an increase for the relevant age groups. Likewise, both for bachelors degree and masters and above, the trend is the same.

7.2: Educational attainment, Male' vs Atolls

The disproportionate growth of Male', the capital, relative to the other atolls is an issue of major concern. Between 1974 and 2006, the share of Male' population increased from 13 to 35 percent due to internal migration, one of the main reasons is for education. Relatively better employment and health care facilities available in Male' are the other major reasons for this drift to Male'. According to 2005 educational statistics, 29.5 percent of all school enrolments were in Male'. Nevertheless, access to primary education is provided in all the islands, and secondary education is being expanded in the atolls at a very fast rate as evident from the data from the 1995 Census and the 2006 Census as shown in Table 7. The causes and impacts of this disproportionate division of educational opportunities extend beyond the education sector and relate to other economic and social problems.

Figure 9 and in Table 4 show a comparison of the highest educational attainment between Male' and the atolls for the year 2006 .

Figure 9: Highest educational attainment, Male' & Atolls, 2006



	No standard passed	Primary	Lower secondary	Higher secondary	Diploma	Certificate/ Sanadhu	Bachelor's degree	Masters degree & above
Atolls	36,180	85,166	35,187	1,027	981	9,486	204	78
Male'	9,415	28,363	33,319	3,899	3,193	10,157	1,342	748

The data shows that educational attainment in Male' is comparitively more in higher secondary and tertiary level (Diploma, Bachelors degree, Masters degree and above) education than in the Atolls. There is a significant proportion of people in the No standard passed in the atolls which is of a concern. This may be also be due to the fact that a significant number of students six years old have not completed grade 1 falls to this category.

8. Inter-censal variation for the Republic - from1995-2006

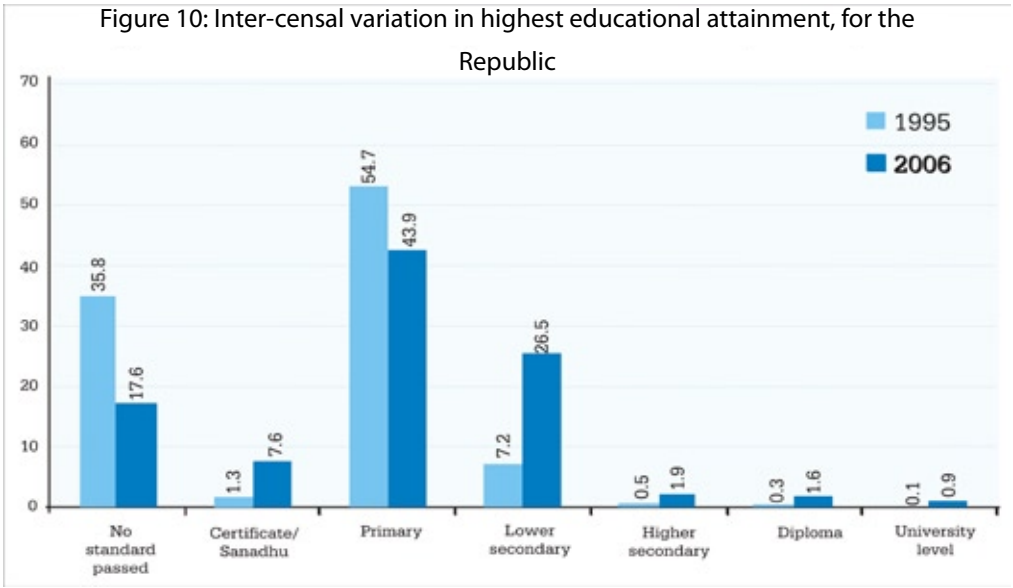
Some levels in the educational system have been changed and therefore the data has been modified to make them comparable across censuses. Table 6 and Figure 10 show a comparison of the highest educational attainment over the decade.

Table 6: Trends in educational attainment, for the Republic

	2006		2000		1995	
Total population 6 years & above	267,283	%	232,075	%	199,217	%
Grade 5 & above	170,947	64.0	123,418	53.2	67,909	34.1
Grade 7 & above	134,134	50.2	77,886	33.6	33,419	16.8
Grade 10 & above	72,827	27.2	21,349	9.2	9,941	5.0

In 2006 for grade 5 and above about 64.0 percent had attained an educational level when compared to 1995 and 2000 this was 34.1 percent and 53.2 percent respectively. Similarly the same pattern has been seen for the above two levels (Grade 7 and above and grade 10 and above) where an increasing trend can be noticed. The greatest increase between 2000 and 2006 is in those who had achieved a minimum of at least Grade 10 level which has increased from 9.2 percent in 2000 to 27.2 percent in 2006.

Figure 10: Inter-censal variation in highest educational attainment, for the Republic



Overall, the trend is that educational attainment of the population is improving. However, there is a decrease in the percentage of those who do not have any standard pass in the year 2006 from the year 1995, reflecting an increasing enrollement in formal schools. There is also a decline in the proportion of students who have not gone beyond primary schooling and an increasing proportion reaching lower secondary and higher secondary levels of schooling.

Figure 10 also shows that there is a dramatic increase in diploma education, from 1.3 percent in the year 1995 to 7.6 percent in the year 2006. It is important to note that the attainment of higher secondary level is still in focus, which is only 1.6 percent in the year 2006. The higher secondary level percentages increased from 0.3 to 1.6 percent in the year 1995 to 2006 repectively.

8.1: Inter-censal variation Male' vs Atolls, 1995 & 2006

Table 7 shows inter-censal variations in educational attainment between Male' and Atolls.

Table 7: Inter-censal variation in educational attainment, Male' vs atolls

	Atolls		Male'	
Level	2006	1995	2006	1995
No standard passed	21.5	39.4	10.4	26.0
Primary	50.6	56.6	31.4	49.5
Lower secondary level	20.9	2.6	36.8	19.4
Higher secondary level	0.6	0.1	4.3	1.8
Diploma	0.6	0.2	3.5	0.8
Certificate / Sanadhu	5.6	1.1	11.2	2.0
University level	0.2	0.0	2.3	0.4

There are significant differences between Male' and Atolls when compared to the educational categories. Both in Male' and in the Atolls the proportion of the population whose highest educational attainment is 'no standard passed' and 'primary level', has declined over the years.

However, both Male' in and the atolls, except for the 'lower secondary level', the proportion of the population whose highest educational attainment is in the higher levels have increased over the decade. This is a clear sign of progress in the education system as well as an indication of the improvement in access to higher levels of education.

9. Conclusion

The data of the 2006 Census shows that literacy rates have increased. However literacy rates are lower in the in atolls compared to Male'.

All islands have schools that teach up to primary level and many of the islands have lower secondary schools as-well where the current attendance rate stays high in the ages 6-15 years, then decreases sharply from 94 percent at age 15 years to 74 percent at age 16 years.

The lower secondary school leavers do not continue higher secondary schooling, due to limited higher secondary schools in the islands and limited seats in the existing higher secondary school in the capital Male'. The rate is much lower when it comes for the tertiary levels which is less than one percent in the atolls.

Students finishing lower secondary school from the islands do not have the opportunity to continue to higher secondary level leading a large drop-out from the formal school system. Some of them continue to study through the informal education. In addition about six percent of the age group 15-29 years attend informal O' Level and A'Level classes operated by private teaching institutions.

The overall educational status of the population is not high. By March 2006, about 15 percent completed O' Level, two percent completed A' Level, about 12 percent, have reached secondary level (grade 8-10) education and only one percent has attained university level education.

A large proportion in the population of the country has obtained primary level education. When attainment is compared between Male' and the atolls, the data reveals that most of the population in Male' have attained higher levels of education than in 2000. The trend in educational attainment over the decade shows that highest educational attainment is moving towards the higher levels of education. The same is true for when Male' and the rest of the country are considered separately.

Overall, the trend is that educational attainment of the population is improving. However, both Male' and in the atolls, except for the 'higher secondary level', the proportion of the population whose highest educational attainment have increased over the decade. This is an indication of progress in the education system and an improvement in access to higher levels of education.

10. Recomendations

10.1: For further analysis and/or research:

10.1.1 Further analysis and research on literacy rates to see in fact, whether literacy rates obtained by the Censuses are correct;

10.1.2 Further analysis on inter-censal variation in highest educational attainment between Male' and the atolls;

10.1.3 Further analysis on inter-censal variation in highest educational attainment in broad age groups; and

10.1.4 Atoll level analysis to find out the access to formal education up to higher secondary level;

10.2: For policy changes:

10.2.1 Since a large percentage of secondary students attend informal classes, it is recommended that the government takes steps to increase opportunity in the formal system for these students, especially at the higher secondary level;
level;

10.2.2 Although highest educational attainment is on the increase towards higher levels, the government needs to increase opportunities for students to undertake tertiary education in and out of the country; and

10.2.3 The proportion of atoll population whose highest educational attainment in the higher levels is much lower than in Male'. Therefore, the government needs to take affirmative steps to rectify this.

1. Introduction

Maldives is faced with a major challenge of creating employment opportunities for the increasing number of new labour market entrants and more specifically in creating jobs in the outer islands of the country. The geography of the country, with many sparsely populated small islands scattered across a vast area in the sea, results in high costs of providing infrastructure, social services as well as job opportunities to all the 194 inhabited islands of the country.

Maldives have managed to do well in providing good basic health care within the country and primary education enrollment rates remain universal. Currently, the focus is geared towards improving the quality of education and health care services.

The absence of university level education in the country and higher secondary schools in most of the islands, coupled with the young age-structure of the population and the rapid increase of the working age population has been a major bottleneck in creating the necessary human resources. The education system in the country has not been geared to provide the kind of knowledge and practical skills required for the labour market.

These drawbacks has led to increasing numbers of school leavers trying to enter the labour market, without the adequate level of education and the necessary skill requirement for the job market. Local population, especially the young school leavers do not go for jobs such as labourers, house-maids, construction workers due to the perceptions about these jobs and also the low salaries and working arrangements. In order to cater for the skill mismatch, increasing numbers of expatriate workers are being employed both at the elementary level as well as higher skilled occupations.

Population census is the main source of labour force statistics available in the country. Apart from the five yearly censuses, a rich source of employment data has also been collected in Vulnerability and Poverty Surveys of 1997/98 and 2004, conducted on every inhabited island. Similarly, Household Income and Expenditure Survey 2002/03 also collected employment statistics. However differences in the definitions applied in these various statistics has lead to different levels of unemployment rates, whereby data users need to use and compare these figures from various sources with caution and after considering the underlying definitions. These differences have been pointed out in this chapter.

Special attempt was given on engendering the census 2006, whereby capturing economic activities carried out on small scale and in an informal nature, especially those carried out by women, were given special emphasis. The resulting improvements in the employment data are discussed in this chapter.

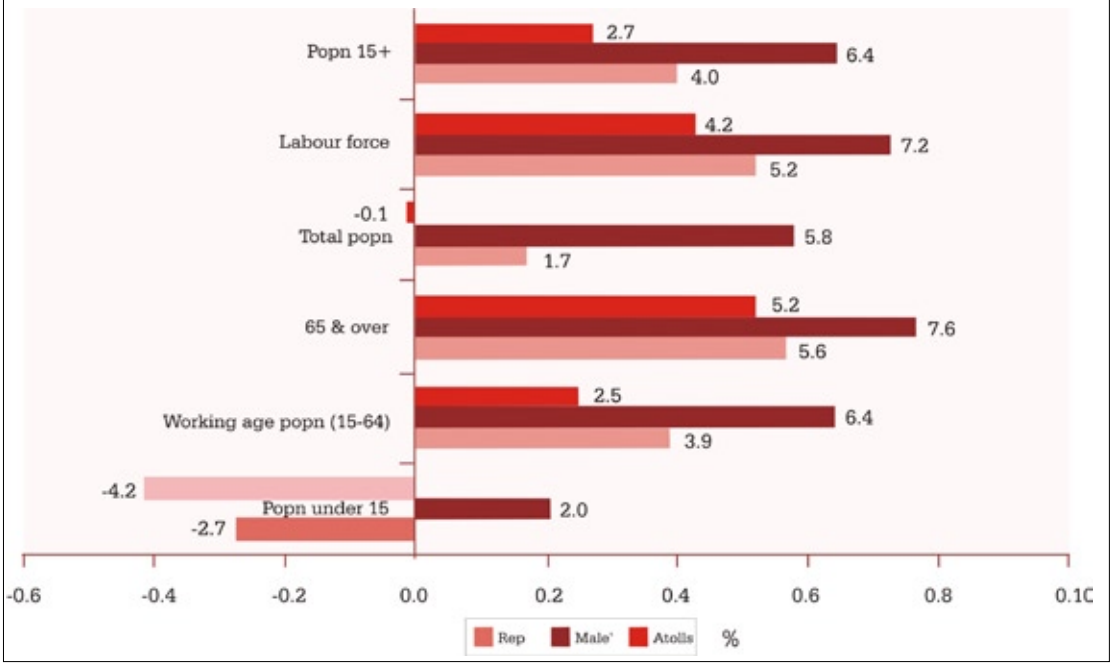
Population census 2006 enumerated only the local population and hence the census data provides only the local labour force. In order to get a full picture of the labour market situation, expatriate employment statistics collected and compiled regularly by the Ministry of Higher Education, Employment and Social Security has also been used in some parts in this analysis.

This chapter attempts at providing an analysis of data on economic activities collected from census 2006. Comparison is also made with the 2000 population census as much as possible. The chapter is divided into six main sections. Section 1; highlights the trends and patterns in labour force and labour force participation, Section 2; focuses on unemployment Section 3; focuses on the characteristics of the employed population in terms of industry, occupation, status in employment, types of establishment and also employed population including the expatriates. Section 4; looks at the not economically active population, while section 5; reviews under-employment, time-use and economic dependency. Section 6; attempts to make some projections of the labour force and employment. The quality of data on economic activity in the census is also reviewed. Before concluding the chapter, some recommendations and policy guidelines are also provided.

2. Labour force

The labour force consists of people aged 15 years and over who are either employed or who wish to work and hence are unemployed. Due to the declining trends in fertility and mortality experienced by the country in the recent past, the population below 15 years of age is currently on the decline. Population below 15 years of age declined at an average annual rate of 2.7 percent during census 2000 and 2006. During this period the largest age cohort of the population in 2000 (10 to 14 years) gradually moved into the working age, resulting in a huge expansion of the working population from 55% in 2000 to 63% in 2006. The working age population increased at an average annual rate of 3.9 percent during the period. The growth rate of population above 15 years is much higher in Male' compared to the Atolls, as seen from figure 1.

Figure 1: Average annual inter-censal growth rates of labour force & related population groups, census 2000 & 2006

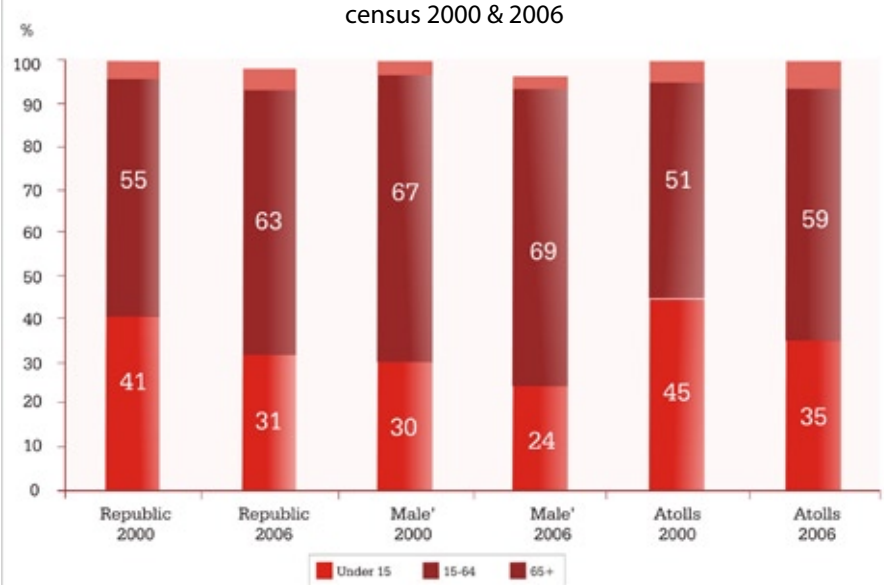


The capital Male' is increasingly becoming the major business centre of the country attracting a lot of migrants from the other islands. This trend has exacerbated during the 2000 and 2006 inter-censal period. While the total population of the country grew at 1.7 percent annually, the high level of migration of the island population to Male' has resulted in a first time ever decline in the atoll population in 2006. The atoll population declined at a rate of -0.1 percent, while population of Male' grew rapidly at an average annual rate of 5.8 percent. This has resulted in the proportion of population living in Male' to increase from 27 to 35 percent during 2000 and 2006.

One of the underlying factors for this increased migration to Male' is the destruction of the housing and livelihoods of a large portion of atoll population in the 2004 tsunami. At the time of the population census many people were still hosted in temporary shelters, under quite inconvenient conditions, increasing the tendency for those who have other options, to migrate in search of better conditions.

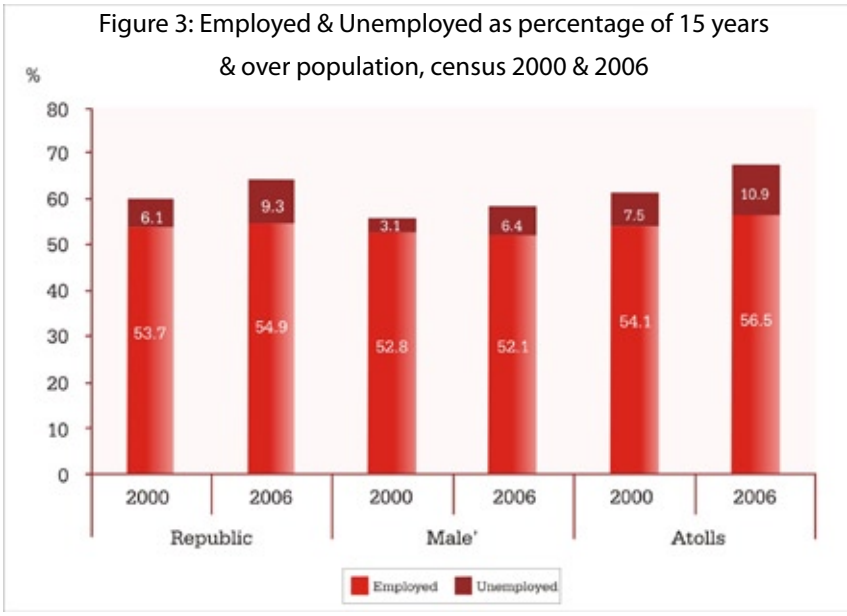
Composition of population by broad age-groups shows the proportion of working-age population in the country has increased from 55% to 65% during 2000 to 2006. During the period, working age population increased in both Male' as well as the Atolls. However, due to the existing trends in migration of working age population to Male' the proportion of working age population stood higher at 69% in case of Male' as compared to 59% in the Atolls in 2006, as seen from figure 2.

Figure 2: Composition of population by broad age-groups, census 2000 & 2006



Around 65 percent of the population 15 years and above were in the labour force in 2006 as seen from figure 3. Higher proportions of persons aged 15 years and over are in the labour force in 2006 when compared to the year 2000. During the period, participation rates in Male' improved slightly from 56.8 to 58.5 while in the atolls it improved substantially from 61.7 to 67.5 percent during 2000 and 2006. Owing to this slower improvement in Male', the labour force participation rate of the country as a whole improved from 59.8 to 64.1 percent during the period. A closer look reveals that the higher proportion among the labour force in the atolls in 2006 comprised of the unemployed persons.

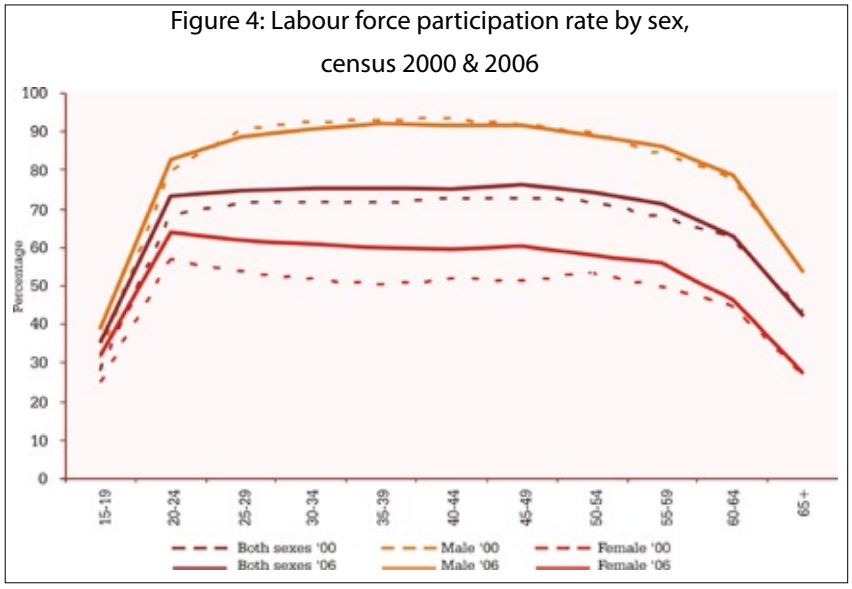
Figure 3: Employed & Unemployed as percentage of 15 years & over population, census 2000 & 2006



Labour force participation also varies by age and sex as is evident from figure 4. The age-specific labour force participation rates show that both men and women get economically active in early twenties. It is highest in the 30 to 50 age groups, and lower among younger people 15 to 19 years of age who are attending full-time education and among older people 60 years of age and over due to ageing and related illness. The same age pattern is evident for both sexes, though at a lower level for women.

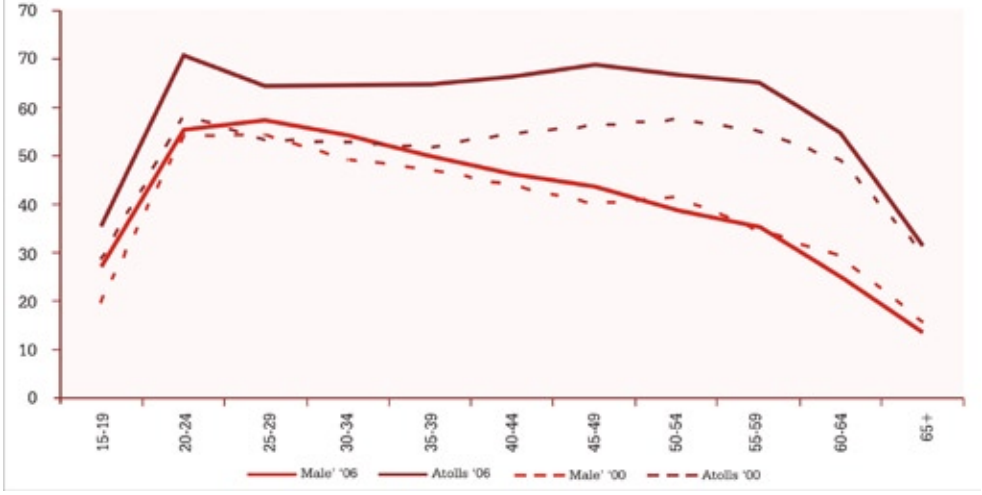
Although participation rates tend to be much higher for males than females, both in 2000 and 2006, a marked improvement in female labour force participation is evident in 2006, owing to the huge improvement in the female participation rates in the atolls. Labour force participation for women increased from 45.3% in 2000 to 52.9% in 2006. In case of males the participation rates increased from 74% to 75.4% during the period. The lower level of women's participation is partly a reflection of the traditional sex division of labour which allocates household responsibilities primarily to women and which, along with the responsibilities of motherhood, keeps many women occupied with activities that are defined as outside the scope of the production boundary and hence considered as non-economic.

Figure 4: Labour force participation rate by sex, census 2000 & 2006



The improvement in participation rate is much higher in case of women in the Atolls and also the pattern is quite different with that in Male', as seen from figure 5.

Figure 5: Labour force participation rate of females in Male' & Atolls, census 2000 & 2006

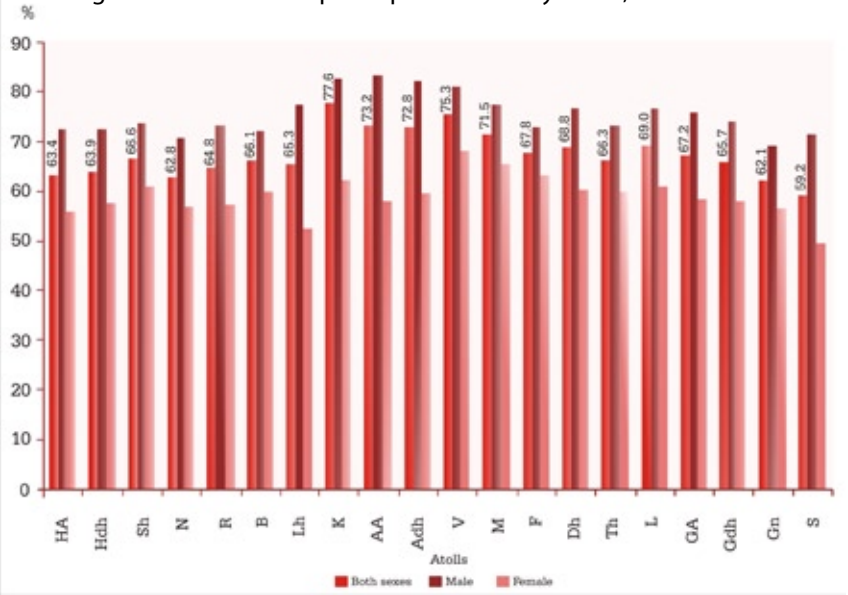


This increase in female labour force participation rate could partly be attributed to better coverage of women's economic activities in census 2006. Under the census engendering exercise special efforts were made to capture activities of a more informal nature, which sometimes even the person who carries out the activity do not consider as economic. Additional probing questions with elaborated examples and the special focus on gender issues during training of the enumerators, publicity led to increased awareness and hence proper reporting and recording.

The differences in the pattern of labour force participation during the life-span of women living in differing geographic locations such as Male' and the Atolls are likely to be the differing life styles of women and the society. In case of Male', women's participation starts to decline from mid-thirties onwards, as seen from figure 5. Difficulties in balancing work and personal life when they have children, poses a challenge for women who have formal jobs and work away from home. In case of Atolls, women's participation drops somewhat at around 20 to 29 and again starts increasing from mid 30's years onwards till it starts to decline at older ages of late fifties onwards. Women in the atolls tend to get married earlier and have the kids at earlier ages making it easier to get back into the labour force. Furthermore, getting engaged in self employed economic activity of an informal nature in the islands is likely to be easier in the atolls. Another contributing factor would be the more affluent society in Male' compared to Atolls.

Labour force participation varies in different Atolls, as seen from figure 6. Kaafu Atoll (K), has the highest labourforce participation rate of 77.6 percent, while Seenu Atoll (S) has the lowest in at 59.2 percent. Similarly it varies by sex with females having lower rates in all the Atolls, especially lower in case of females in Seenu (S) and Lhaviyani (Lh) Atolls with 42.8 and 52.3 percent respectively.

Figure 6: Labour force participation rates by Atolls, census 2006



As part of the engendering exercise carried out in census 2006, information were collected on subsistence economic activities (producing commodities for your own use such as agricultural crops, fish and fish products for consumption within the household and products like making clothes worn by own household members). Out of the 12,624 females classified as unemployed 2,717 or 22% were engaged in subsistence economic activities for 1 hour or more while of the 42,994 females classified as NEA, 4,210 or 10% were engaged in subsistence work during the census reference week. Hence, when these women engaged in subsistence work were included in the labour force, the LFPR of females increased by 4% from 52% to 56%, and female unemployment rate reduced from 21% to 17%. In the System of National Accounts (SNA, 1993) subsistence production of good are included in the production boundary. However, for comparability with previous censuses and also considering the nature of these activities it is kept separately. It enables analysis of the developments with and without subsistence workers easily.

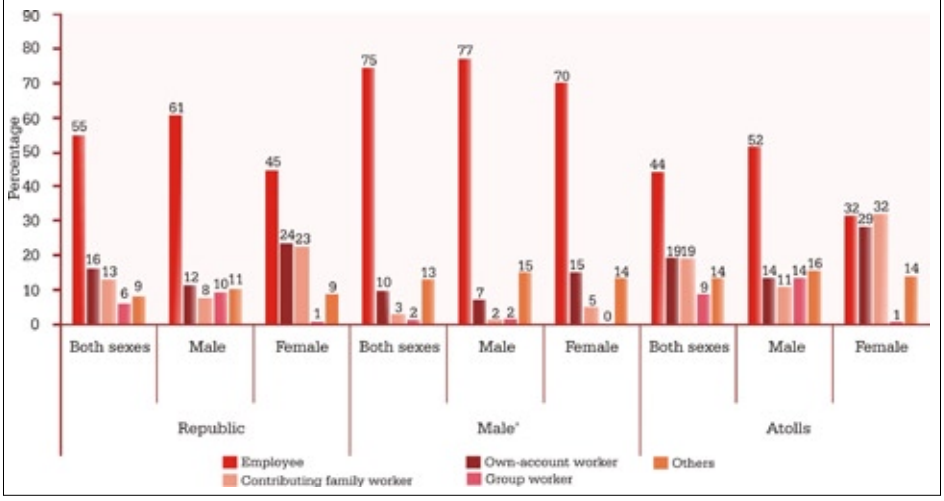
In addition time spent doing household work which even though non-economic as per current international definitions were also collected in 2006 census. Such additional information on time-use by women on economic as well as non-economic activities points out some of the factors behind the lower labour force participation rates of women and highlights the gender roles in our society. Details of this analysis are provided in section 5 of this chapter.

For understanding the structure and functioning of the labour market in the country, it is important to know the number of persons working for others (employees) or working for themselves (self employed/ own-account worker). Hence the employed population was classified into the following 5 status in employment categories: "employee", "employer/owner", "own-account-worker", "contributing family worker" and "group worker" as per the international recommendations.

Group workers have been added to capture one of the forms in which locals organise their work, mainly in the fishing, construction and small-scale manufacturing industries. These workers organize themselves in groups whereby the income they get will be distributed among the group, with each member acting an own-account worker, with one person acting as a group leader.

Figure 7 gives the distribution of employed population by selected status in employment categories. It reveals that the labour market in Male' is more organized with 75% of the employed persons working as employees vis a vi 44% in case of the atolls. A higher proportion of self employed persons (own-account workers and contributing family workers) are found in the atolls, indicating the more informal nature of employment prevalent in the atolls.

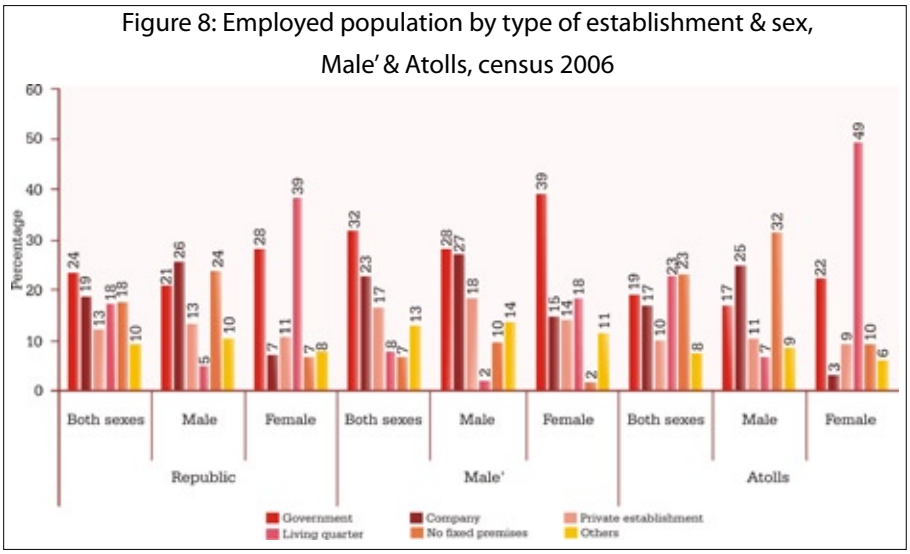
Figure 7: Employed population by status in employment & sex, Male' & Atolls, census 2006



Looking at the employment status by sex, higher proportions of women are self employed, more so in case of females in the atolls. Women, especially in the islands are less mobile to work outside their homes, given their family responsibilities. Being self employed gives them more flexibility to work as and when they please and even within their own-living quarters. This can be seen more clearly when we look at the classification of employed population by the type of establishment.

Information of type of establishment, from which the employed persons work, given in figure 8 gives valuable insights into their working arrangements and in combination with the information on their status in employment, assists in identifying some categories of informal sector workers.

Figure 8: Employed population by type of establishment & sex, Male' & Atolls, census 2006



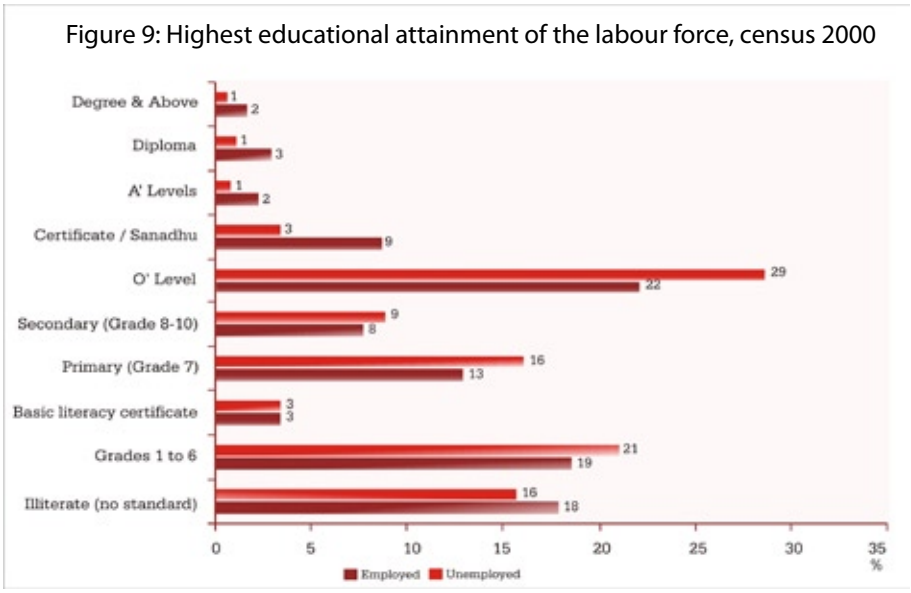
Existence of a quite large informal and unorganised sector in the country is evident from the distribution of employed population by type of establishment with over one third (37%) of the employed population engaged in informal or unorganised sectors. It is also evident that the labour market in Male' is more organized with 72% of the employed persons working in the organized sectors: government (32%), corporations (23%) and private sector establishments (17%) as employees vis a vi 46% in case of the atolls.

Work place of employed persons by sex confirms the high level of females working from their living quarters or homes, as expected. Nearly half the employed females in the atolls and 40% in case of employed females in Male' fall in this category of home-based own-account workers or contributing family workers. This highlights the economic vulnerability of women, especially those in the atolls.

Educational level of those in the labour force reveals the highest proportion of unemployment (29%) is concentrated among those who have completed 10 years of basic schooling and attained the London G.C.E O' level standard. It is interesting to note that the highest proportion of employed is also of this level of education, as seen from figure 9.

Higher proportions of unemployed are among those with lower educational attainment with. Among the unemployed 21% have attained primary level education (grades 1-6), 16% were not literate, 16% have completed primary education (grade 7) and 9% have education at secondary level (grades 8-10). Only around 1% of those with A' level, diploma and degree levels of education are among the unemployed. Hence attainment of education beyond O' level is seen as a positive factor with higher chances of getting employed. Similarly attainment of various skills by following certificate courses is also seen as a positive factor, with 9% among the employed having such certificates as their highest qualification.

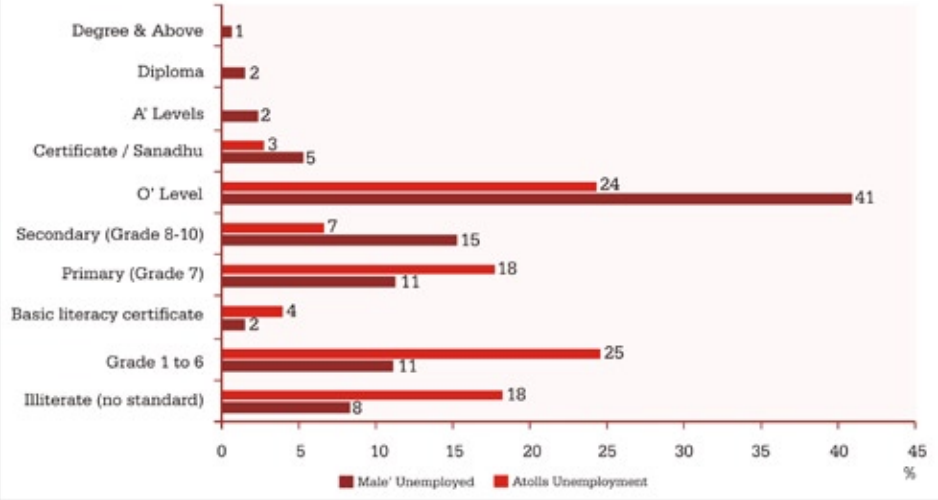
Figure 9: Highest educational attainment of the labour force, census 2000



Looking at the differences in educational attainment among the labour force in Male' and Atolls, a much higher percentages of O' levels exist among the unemployed in Male' vis a vis that in the atolls (41% versus 24%) as given in figure 10.

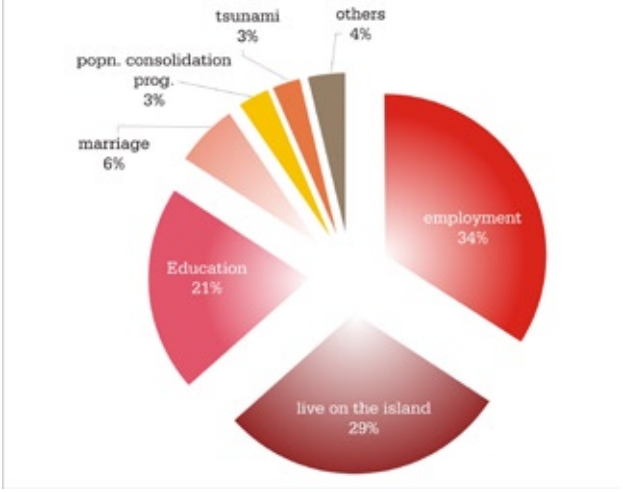
This is not surprising given the high and increasing numbers completing O' level education every year, with a large supply in the labour market, and many of them in Male' , either migrated from the atolls in search of jobs or looking for jobs after completing their O' levels in Male'.

Figure 10: Unemployed population by highest educational attainment in Male' & Atolls, Census 2006



Half the employed persons were migrants in the location that they were enumerated during the census. Out of these employed persons who had migrated, 50,595 persons responded, stating one of the following as their main reason for migration. Migrated in search or due to employment was the main reason quoted by one third or 17,300 of these persons, is given in figure 11.

Figure 11: Employed persons by main reasons for migration, Census 2006

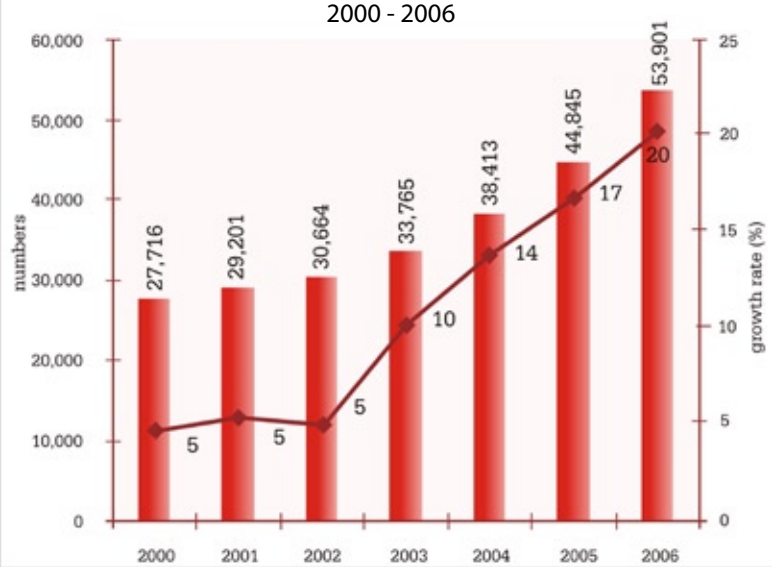


Another 29%, after living on another island at sometime in the past have returned to live on the island where they were enumerated in the census. Probably they must have returned due to employment or are engaging themselves in self-employed work on their own or resident island. Another 21% have migrated for education purposes, which is quite common in the country. Due to the non availability of secondary schooling in many of the islands and even when available, the quality of education is better in Male' and in some islands.

Hence, high proportions of students migrate during their schooling age in search of a better quality education, often resulting in settling down there for various reasons, mainly for employment and to have a better quality of life.

Due to the difficulties experienced in accurate coverage of the expatriate labour in the country, the employment figures from the census did not include the 45,183 foreigners working in the country, at the time of the census. By the end of 2006 over 10,000 expatriates were newly added to the pool to make it stand at 53,901 as can be seen from figure 12.

Figure 12: Number & growth rate of expatriate employment, 2000 - 2006



When the expatriate employees were added to the local labour force, they accounted for one third (30%) of the total employed population in the country.

Such high levels and fast rates of growth in the expatriate labour force (annual growth rate of 10% in 2003 and 20% in 2006) in the country, reflects mismatches and rigidities in the country's labour market, social perceptions and cultural factors. Due to low wages and working conditions in many of the elementary jobs, it is not attractive to the local population. In cases of many of the high skilled technical jobs, locals lack the necessary skills in filling these jobs.

Managing the high levels of foreign labour, while creating more employment opportunities for the local population, are huge challenges that need to be addressed in the near future. This requires focused attention and targeted vocational training and skill training, in line with the requirements of the job market.

Government's role needs to be geared more towards facilitating private sector development by creating an enabling business environment. Government should encourage, support and reward private and foreign investments that creates decent job opportunities for the locals and upgrade their skills. Concrete actions and results are needed to enable the country to reap the maximum benefit posed by the demographic dividend. Adherence to corporate social responsibility and very strong public private partnerships are crucial to address these critical issues in time.

3. Unemployment

A merchant may sell many things, but a worker usually has only one job, which supplies not only his livelihood but often much of his sense of identity. An unsold commodity is a nuisance, an unemployed worker a tragedy.

Paul Krugman (1999, p. 15)

Job creation in the economy was unable to keep pace with the growth rate in the working age population, during the years 2000 to 2006. Hence, even with the increased labour force participation rates during the period, it still resulted in an increase in the unemployment rate in the country from 10.2% in 2000 to 14.4 % in 2006, as seen from table 1 and figure 13.

Table :1 Labour force, employment & unemployment, Census 2000 & 2006

Census years	Population 15+	LFPR	Labour force 15+	Employed persons 15+	Unemployed persons 15+	Unemployment rate
2000	158,897	59.80	95,068	85,356	9,712	10.2
2006	205,931	64.10	128,836	110,231	18,605	14.4

Note: Definition of unemployment for 2000 has been adjusted in line with the 2006 definition, to make it comparable

It is important to keep in mind that the definition of unemployment used in the VPAs is different from the definition used in the Censuses and that of ILO, as explained in Box 2. The definition of unemployment were modified slightly in Census 2006 to include persons who were not working during the census reference period for the reasons "unable to find a suitable employment" and "lack of employment opportunities" as unemployed, even though they were not seeking and available for work. For comparability, unemployed rates for census 2000 have also been modified accordingly in this document. This modification resulted in higher unemployment rates from census 2006 as well as for 2000.

Unemployment rates also vary by sex, age and geographic location. Unemployment rates are highest for women especially for women in the Atolls, and remain so during 2000 and 2006. Unemployment rates in Male' has almost doubled from 5.6 to 11.0 percent during 2000 and 2006. In case of both males as well as females in Male' a two fold increase in unemployment rates is observed during the period. In the Atolls the male unemployment rates increased at a higher rate doubling from 4.8 to 8.2 % during the period. Although female unemployment rates did not increase as much during the period, it remain at much higher levels, at thrice that of male unemployment rates, in both the periods.

Figure 13: Unemployment rates by sex, Census 2000 & 2006

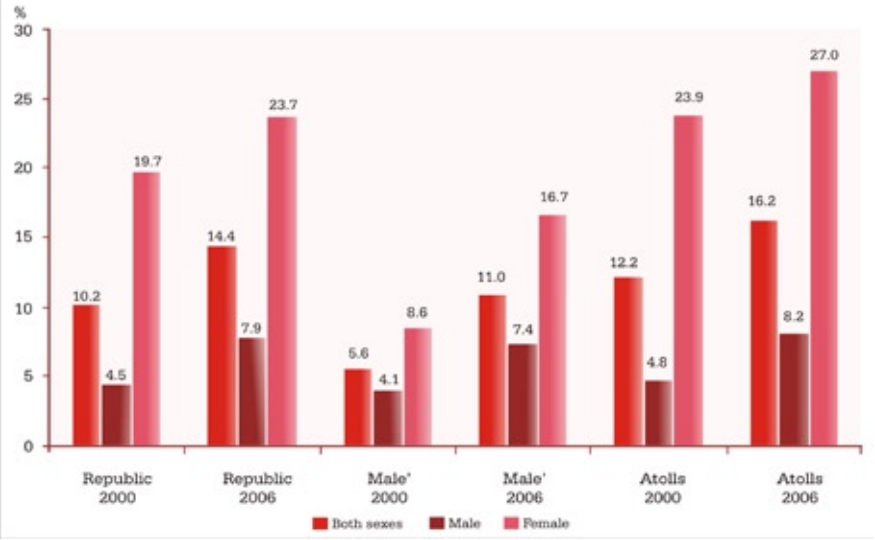
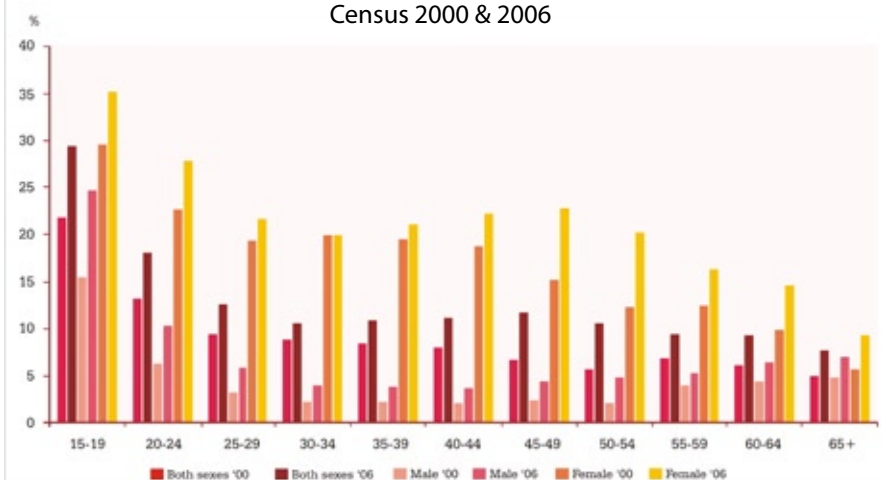


Figure 14: Unemployment rates by 5 year age groups & sex, Census 2000 & 2006



Unemployment rates for women remain higher in all age-groups, in both 2000 and 2006, as seen from figure 14. In early twenties unemployment rates remain substantially high, but starts declining from then onwards. Female unemployment rates have increased substantially from mid 30's till late 40's, as compared to the trend and levels observed in 2000. Female unemployment rates for the age-group 30-34 remained at the same levels in both 2000 and 2006, despite increases in 2006 in all other age-groups.

The above observation of same levels of unemployment rates for females in the age-group 30-34 in both 2000 and 2006 and also the increasing female unemployment from then onwards could be explained by the LFPR of females in these age-group in Male' and Atolls given in figure 1-5. It shows that at ages 30-34 female LFPR of females in the atolls increased while in Male' it started to decline. This had the opposite effect and resulted in unemployment rates for females in the age-group to remain the same in both the years. However in case of age groups from 35 and beyond the level of increase in LFPR of females in the atolls was too high that even the declining participation rates for females beyond 35 years and above, resulted in increase in unemployment rates. This increased female unemployment rates were the result of not being able to create adequate employment opportunities in the atolls for these females who were willing and available to work.

Unemployment is highest for new labour market entrants at 15 to 19 years of age as expected. This is not surprising given the demographic the largest population age-cohort moving into the working age (15-19 years) in 2006. Also this as these fresh secondary school leavers will not have either the required skills or the work experience to be among the most eligible among those who queue for the job vacancies which are meager when compared to the labour force.

Box 1: Youth Employment Network

The Youth Employment Network, established in 2001 by ILO, acts as a vehicle to address the global challenge of youth employment. The initiative brings together policymakers, employers, workers and young people to pool their skills, experience and knowledge and find innovative and durable solutions to the youth employment challenge. It encourages countries to establish action plans with a priority focus on four policy areas: employability, equal opportunities, entrepreneurship and employment creation.

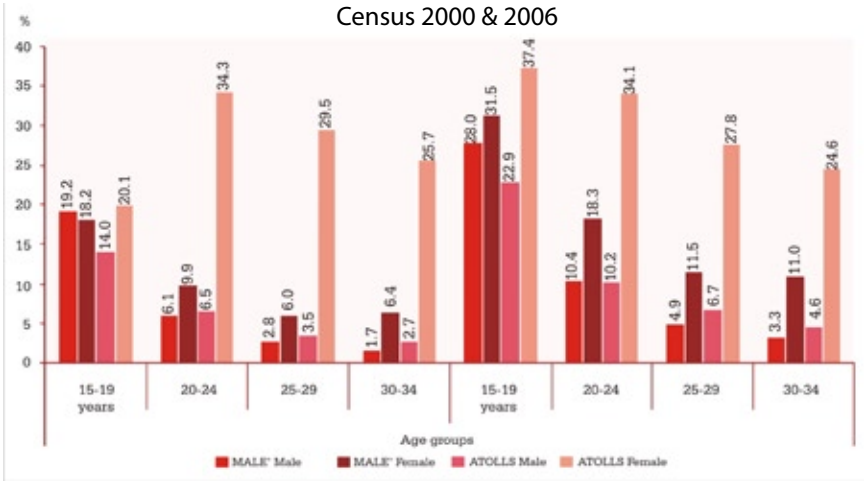
Four countries in the Asia and Pacific region, Azerbaijan, Indonesia, the Islamic Republic of Iran and Sri Lanka, are among the 16 "lead countries" that are committed to preparing and implementing action plans for youth employment. Several of the countries have already taken steps in that direction. The Azerbaijan National Action Plan on Youth Employment is an integral part of its overall National Action Plan on Employment. The Indonesian National Action Plan on Youth Employment develops an institutional framework for the Indonesian Youth Employment Network while raising awareness of the challenges faced by youth labour-market entrants. Sri Lanka has set up the Youth Employment Network to develop an integrated national action plan on youth employment, with a focus on reintegrating youthful former combatants into the workforce.

Source: Economic and social Survey for Asia and Pacific 2005

Youth unemployment is on the increase during the period 2000 to 2006. In case of Male' the unemployment rates among youths in 20 to 24 year age-group, increased from 6 to 10 percent for males while for females it increased from 10 to 18 percent. Similarly, in case of the Atolls the unemployment rates among youths in 20 to 24 year age-group, increased from 7 to 10 percent for males while for females it remained substantially higher at 34 percent in both the years.

Figure 15: Youth unemployment rates in Male' & Atolls, by sex

Census 2000 & 2006



According to the Youth voices, facts, opinions and solutions survey of 2005, securing and sustaining gainful employment was identified as the main problem facing young people in the Maldives. "Lack of job availability," or "no opportunities for advancement within existing jobs" was the most often cited sub category. After this, both adults and youth felt that a lack of professional training and guidance was a major contributor to unemployment. According to them competition created by the influx or presence of expatriate workers was tied for third place with an increase in population and low turnover of older employees.

Reducing the high level of unemployment (14%) is among the major challenges faced by the country. High and increasing rates of unemployment prominent among youth and women, also those living in the Atolls are major issues, which are getting out of hand with passage of time, resulting in increased social problems.

Box 2: Reasons behind the low unemployment rates from previous censuses and the definitional differences with the Vulnerability and Poverty Surveys (VPAs)?

The unemployed, according to the international definition are people who are willing to work, available to do so at short notice and 'actively looking for work'. On this basis, unemployment rates in the Maldives are very low. This is because although many people who are not currently working they are not 'actively seeking work'. They may not be doing so for two very practical reasons. First, on a very small island they already know about all job opportunities so seeking is redundant. Second, it is very difficult for them to seek work elsewhere on a weekly basis – in Male' or in the resorts – due to the high cost and the travel time involved.

In the Population and Housing Census unemployment is defined in terms of persons who are not working but willing to work, looking for work, and available for work. The Censuses ask the questions 'Did you look for work during the reference week?' and 'Could you have started work during the reference week, if you get a job?' When the answer to both questions is positive, the person concerned is considered to be unemployed. Unemployment rates approximating those associated with frictional unemployment caused mainly by persons moving from one job to another and exclusion of discouraged workers could be the reasons behind the lower unemployment rates in census.

The VPA uses a slightly different definition of unemployment. It does not apply the 'actively seeking work' criterion. VPAs did not include the question 'Did you look for work during the reference period? While retaining the definition of both employment and unemployment, the VPA used the questions 'If you can get a job will you be available for work? 1. Yes; 2. No; 3. Not sure' and 'What is the main reason why you do not work?, 1. Inability to find suitable work 2. Parent, spouse disapproves; 3. Poor health 4. Due to housework, baby sitting, family responsibilities 5. Income recipient (rental income, remittances) 6. Other. A person is considered unemployed when he/she was available for work and the reason the person did not work was 'Inability to find suitable work'. VPAs register much higher rates for unemployment - and labour force participation - when compared with census which uses the standard definition of ILO.

It is important to keep in mind that the definition of unemployment used in the VPAs is different from the definition used in the Censuses and that of ILO. The definition of unemployment was modified slightly in Census 2006 to include persons who were not working during the census reference period for the reasons "unable to find a suitable employment" and "lack of employment opportunities" as unemployed, even though they were not seeking and available for work. For comparability, unemployed rates for census 2000 have also been modified accordingly in this document. This modification resulted in higher unemployment rates from census 2006 as well as for 2000.

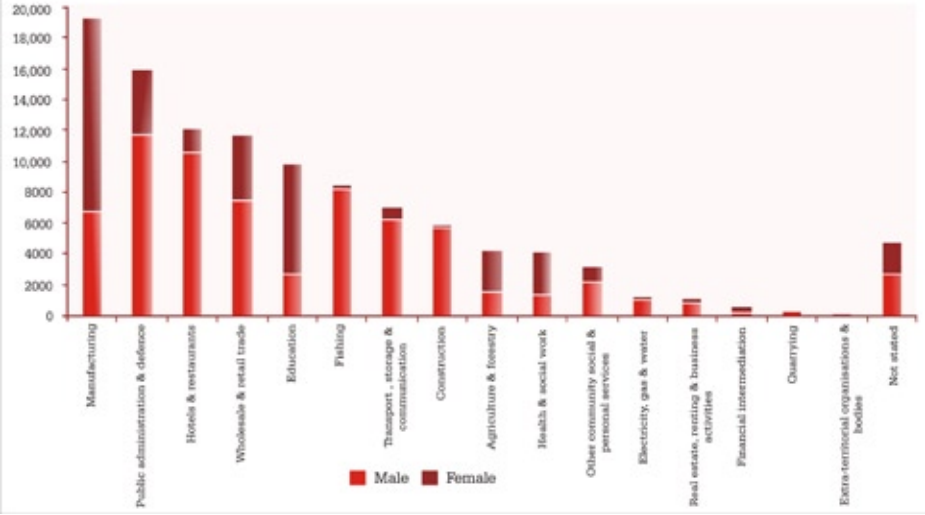
Source: VPA 1997 report and census 2006 definitions

4. Employment

4.1: Employment by Industry

Looking at the employed population by types of economic activity, the highest numbers (19,259 out of 110,231 total employed persons or 17.5%) were engaged in manufacturing industry, during the census reference period. The highest number of females (12,509 out of the 40,530 or 30.9 % of employed females) were also engaged in this industry.

Figure16: Employed population by Industry, Census 2006



Manufacturing industry is female dominated with 65% females vs. 35% males, second highest female dominance with education sector as number one as seen from figure 16. In the Atolls substantially higher proportions of females are engaged in manufacturing (39%) compared to Male' (16%).

Those employed in manufacturing are mostly engaged in small scale manufacturing activities. Detailed breakdown of activities under manufacturing industry (ISIC classification at 4 digit level) shows that the "manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials" has the highest concentration (5,364 or 28%) and the highest number of females (5,014 or 40%) are also found here.

Women in this branch of manufacturing, make products from leaves of coconut palm known as thatch or fangi, which are used to cover roofs and walls in resort construction and decorations. The 5% of males involved in this branch of manufacturing mainly produce wooden art effects as souvenirs. Both these products are geared for the tourist resorts situated close by to their home islands.

Second main branch of manufacturing includes "processing and preservation of fish and fish products" amounting for 15% (2,965 persons) of those employed in manufacturing industry. Most of the men in the manufacturing industry are found in fish processing (28% of males). One third of those engaged in fish processing comprise of females. This is probably due to the nature of this activity, often with fisherman's spouse and family being involved in smoking and drying of the daily catch.

Apart from these two areas, majority of the females in the manufacturing industry are involved in "manufacture of wearing apparel" or tailors (22% of females in manufacturing) and "manufacture of food products" mostly product such as short-eats from fish, cakes etc to be sold in hotels, corner shops, orders for parties and even sold from their own houses, catering for the local population. These are very famous among the local population during evening tea and as snacks. Many Maldivian women know how to sew clothes and hence many of them make it for sale within their living quarters using their own sewing machine. Out of the males involved in this industry, 22% are engaged in the "manufacture of furniture". Next branch of manufacturing involving 19% of males is the "building and repair of ships".

Given that manufacturing sector has the highest employment, it is important to have a closer look at the nature of organization of the industry. Distribution of those employed in this industry by type of establishment and their status in employment revealed that, nearly 80% of those employed in the industry work in the unorganized sector with 66% working in their homes or living quarters and 13% without a fixed location. Majority of them (40%) of them were either self-employed or contributing family workers who do not get any direct remuneration for their work. It also showed that almost 90% of the females in the industry (81% in Male' and 91% in the atolls) are home-based workers, who are self-employed and contributing family workers. Only 16% of those working in the manufacturing industry are employees with 11% employed in companies and 7% in private establishments.

This highlights the need for promoting small and medium sized enterprises (SMEs), focused on promoting, marketing and facilitating the products manufactured by these self employed persons. Organisation of these small scale economic activities mainly carried out by women in the islands in a more formal nature will enable in generating better economical value for their products.

The second highest percentages of persons (15,949 persons or 14.5%) were engaged in Public administration and defense. The highest numbers of males (11,697 or 30.9 % of employed males) were engaged in this sector. Government being the main employer in the country explains the high levels of employment in this area and defense being an area where mostly males are involved explains the high numbers of males being present in this industry. In case of Male' government

sector has the highest number of employed persons (2,393 out of 38,971 or 25%), similarly also for males (28%) as well as females (20%) in Male'. According to the regular administrative records, the government employees stood at 33,997 at end 2006, including 1,315 employees engaged in public corporations and joint venture companies. These figures will not be directly comparable with the census due to differences in recording and treatment. Unlike the administrative records on government employees, census data classifies those engaged in administrative related work as public administration and those in defense as per the International Standard Industrial Classification of all Economic Activities (ISIC rev. 3). Service providers such as teachers, doctors and related government staff are classified under the respective industries education, health etc as per ISIC. Furthermore, as the population census records the employed population on the basis of the activity in which the person spends most of the time during the census reference week, and also does not include those on long no-pay leaves etc, these numbers will be different.

With tourism being the main industry in the country (accounting for about one third of the country's GDP) the third highest numbers of employed Maldivians (11%) were engaged in Hotels and restaurants industry. In case of employed males 15.2 % or 10,578 persons were engaged in this industry. Tourism industry is very much male dominated with 87% males vs. 13% females working in the industry. Only 3.7% of the employed females are engaged in the tourism sector. The fact that the main industry of the nation - tourism - has so few women employed emphasizes the importance of finding ways and means to employ more females, by putting extra effort to make the resort jobs more women and family friendly, and close by to inhabited islands. Due to the mere number of jobs available in many of the islands, a high percentage of men work in resort islands, which are often-times far away from their home island and atoll, for long periods of time. Hence women in the family often stays back to care for the family and live on the remittances sent by resort workers who have migrated for work.

In the atolls, tourism industry employed the highest number of males (19%) compared to Male' (7%). However, tourism is concentrated in only a few atolls and hence the proportion of persons employed in the industry varies substantially across the atolls, depending on the level of its concentration. Out of the 88 resorts with a total bed capacity of 17,712 registered in the country in 2006, 42 resorts with 47% of the bed capacity were concentrated in Kaafu Atoll. The atolls A.Dh have 15 resorts, AA atolls 10 resorts while Baa atoll have 6 and Lhaviyani atoll 4. Vaavu and Dhaalu each have 2 while Raa, Vaavu, Meemu and Faafu has only one resort each situated in the atoll.

Half of the 20 atolls in the country did not have a resort situated within that atoll up to 2006. Currently, government policy has been geared to having at least one resort situated in each and every atoll. Tourism industry is going through a huge expansion phase with 45 new resorts targeted to become operational during the next five years. Hence, the number of resorts in the atolls and employment shares by industry in the atolls are likely to change quite substantially by the next population census.

Hotels and restaurants industry (including tourist resorts) operate in the organized sector with 75% of employment held by the corporate sector and 17% by private establishments, with 90% of

those working in the sector being employees.

At the national level, **wholesale and retail trade** is the economic activity that employs the fourth highest number of persons (11 %) at the national level. However, in the case of Male' as a whole and also for the males in Male' (19% of employed males) this industry employs the most people, next to those in Public administration and defense activity. A little over half of the employment in the industry is held by private establishments (52%), corporations hold around one fourth (23%) while 11% of them operate from their own living quarters. As for their status in employment 55% comprises of employees, 12% employers in the organized sector while one third of the workers in the industry are self employed (14% own-account workers and 17% contributing family workers).

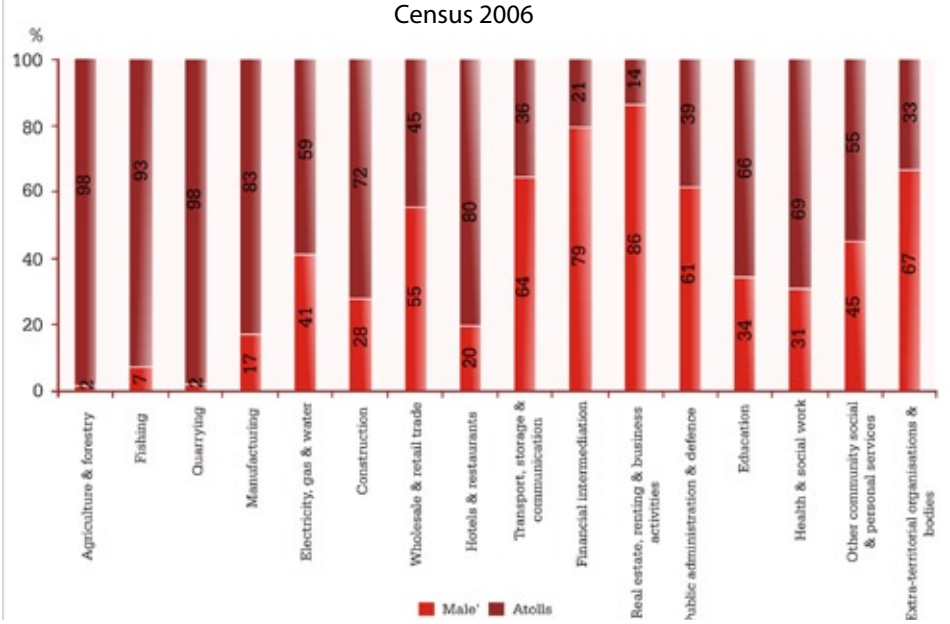
Education sector employed the fifth highest number of employees (9,872 or 9%) at the national level. Education sector employs the second highest number of women at the national level (18% of females) and also in the atolls (17%), coming next to manufacturing. Teaching, especially primary teaching is an activity that is dominated by females. In the Maldivian society, from traditional times up till now women play the role of taking care of the children including the supervision of their schooling, and is also seen as a feminine role in the society. Although majority of those engaged in the provision of education services (62%) is provided in government establishments, around one fourth of the workers provide education services from their own living quarters and another 8% through private establishments.

Almost one fourth of those engaged in provision of education comprises of own-account workers. This is not surprising, given the fact that a very high proportion of students attending schools also attend private tuition. It is quite common for young school leavers and even for students currently attending higher grades in schools, to provide tuition as a part-time economic activity, as it requires hardly any investments.

Although **fishing** industry employed the sixth highest number of persons at the national level, it remains the third major economic activity in the atolls, providing livelihood for the majority of the atoll population. Among the males in the atolls, it employed the second highest numbers (19% of employed males) coming next to tourism. Fishing industry in the country operates as small-scale informal sector economic activity. Majority of the fishermen (88%) have no fixed location of work as they operate from the fishing vessels out at sea. Over a third of the fishermen (36%) operate as group workers, around one fourth as own-account workers and contributing family workers. Only 16% of the fishermen worked as employees. Other primary industries: agriculture and sand mining also comprised of similar characteristics in terms of its informal nature of operation.

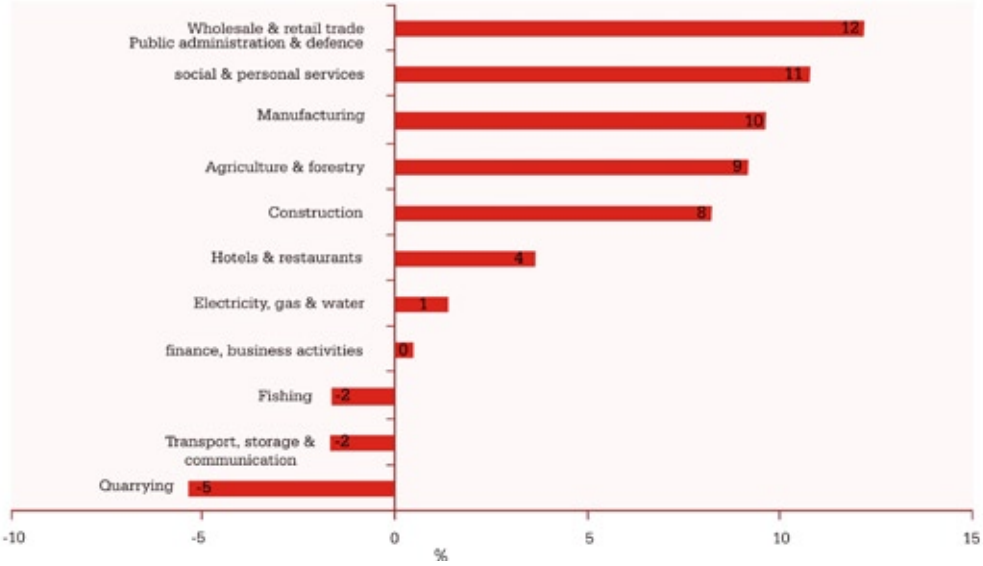
The concentration of industries in the Atolls and Male' are quite different as can be observed from Figure 17. "Agriculture and forestry", "Fishing" and "Quarrying", all the primary industries have over 90% representations in the atolls. Apart from these "Manufacturing", and "Hotels and Restaurants" industries also employ higher proportions of population living in the atolls with over 80% representation of the employment in these industries. On the other hand industrial categories employing proportions of 80% and above in Male' include "Real estate, renting and business activities" and "Financial intermediation".

Figure 17: Employed population by industry in Male' & Atolls, Census 2006



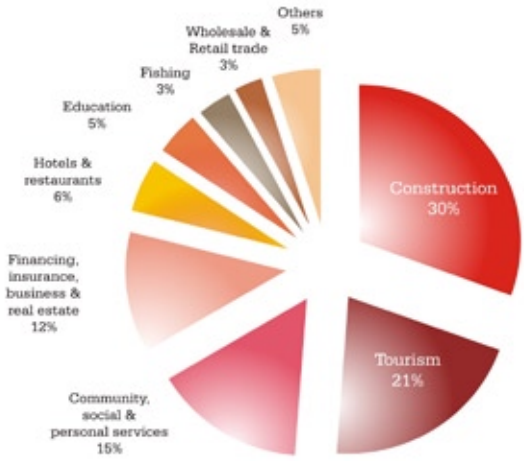
In order to identify the industries that expanded over the 6 year period, in terms of creating employment opportunities for the local population, a comparison of the employment in various industries in census 2000 and 2006 was made. As can be seen from Figure 18, average annual growth rates of employment differed among industries, with some even displaying negative growth rates. Employment in the "Wholesale and retail trade" industry grew at the fastest rate (12% per annum), followed by "Public administration and defense and other Community, social and personal services" (11%). Employment in the "Manufacturing" industry grew at 10% per annum while "Agriculture" and "Construction" industries grew at 9% and 8% respectively. Employment in the industries: "Fishing", "Transport, storage and communication" and "Quarrying" declined during the period.

Figure 18: Average annual growth rates in employment by various industries, Census 2000 - 2006



Expatriate labour working in the country is mainly concentrated in the construction industry (30 %) and tourist resorts (21 %), working in elementary level occupations. Expatriate workers in the construction industry increased at alarmingly high rates during 2005 and 2006, mainly due the increased demand for construction workers resulting from the tsunami reconstruction and also in resort repairs and construction.

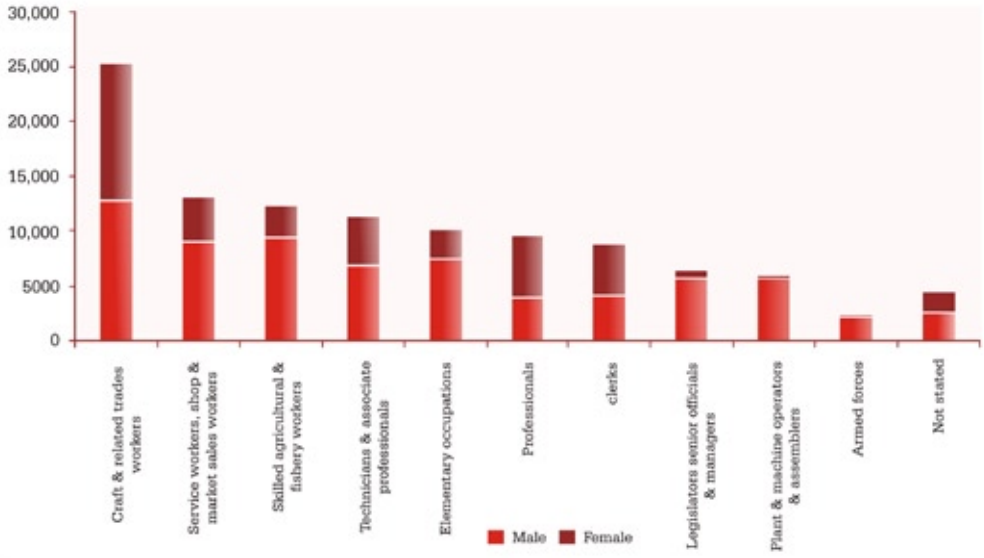
Figure 19: Expatriate employment by major industries, 2006



4.2: Employment by Occupation

Looking at the occupations among the employed population, the occupation category "craft and related trade workers" employed the highest numbers (25,329 persons or 23 %) during the census reference week. This was also the highest in case of employed females (31%) and also for males (18 %), as given in Figure 20.

Figure 20: Employed population by occupation & sex, Census 2006



Majority of these Craft and related trade workers were engaged in the manufacturing industry (67%) and the construction industry (18%).

The second highest occupational category was "Service workers, shop and market sales workers" which employed around half of those in the first category, (3,207 persons or 12%). These occupations were concentrated in the industries; "Wholesale and retail trade" (45%), "Hotels and restaurants" (26%) and "Public administration and defence" (18%).

The next highest numbers were engaged in the occupational categories "skilled agricultural and fishery workers (11%), and "technicians and associate professionals (10%)". Fishing industry employed 62% while Agriculture and forestry employed the remaining 33% of the skilled agricultural and fishery workers, as expected. As for the "technicians and associate professionals" they are in the industries education (27%), Public administration and defence (18%), Transport, storage and communication (16%) and Hotel and restaurants (11%).

Elementary occupations accounted for the fifth highest occupational category (10,129 persons or 9%). Over one fourth of the elementary occupations were in the Public administration and defence (28%). Another 21% were in the Hotels and restaurants industry, 11% in other community social and personal services and 10% in education.

Apart from these five, the remaining occupational categories employed less than a thousand workers each.

Looking at the distribution of employment by sex, the following occupations have the highest numbers of females: "Craft and related trade workers" (31%) comprising of weavers (kunaa or mats), tailors or dressmakers and those who make food products (short-eats, fish and related products etc); "Professionals" (14%) comprised mainly of primary teachers, "Clerks" (12%) also include secretaries and cashiers; "Technicians and associate professionals" (11%) comprised mainly of primary teaching related associates; "Service workers, shops and market sales workers" include mainly sales girls and related occupations (10%). Apart from these, the remaining broad occupational categories employed less than 10 % of the employed females.

In case of males the following occupations have the highest number of males: "Craft and related trade workers" (18%) such as construction related craft workers and carpenters, "Skilled agricultural and fishery workers" (14%) mainly fishermen, "Service workers, shops and market sales workers" (13%) mainly shopkeepers, waiters and police officers, "Elementary occupations" such as helpers and cleaners in offices, hotels and other establishments and security guards (11%) and "Technicians and associate professionals" (10%). The remaining categories employed less than 10% of the employed males.

The concentration of occupational categories in the Atolls and Male' are quite different as can be observed from Figure 21. "Skilled agricultural and fishery workers", "Craft and related trade workers" and "Elementary occupations" categories employ higher proportions of population living in the atolls. On the other hand occupational categories employing higher proportions of population in Male' include "Armed forces", "Legislators, senior officials and managers" and "clerks".

Figure 21: Employed population by occupation in Male' & Atolls, Census 2006

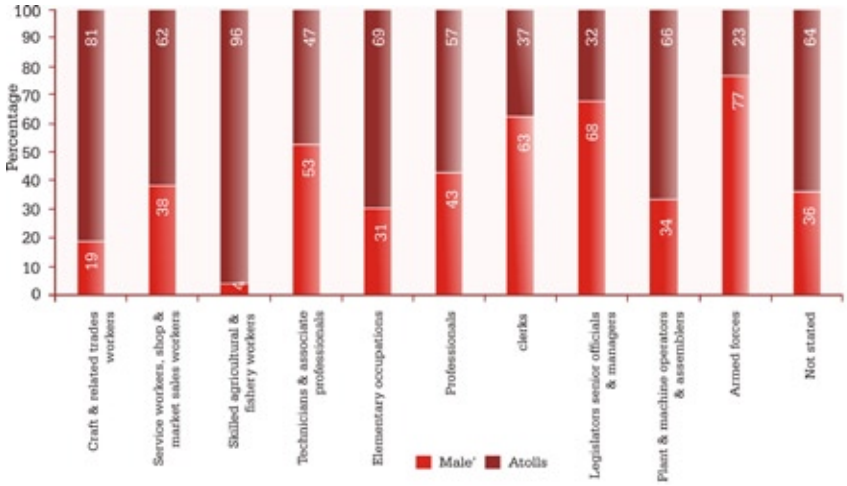
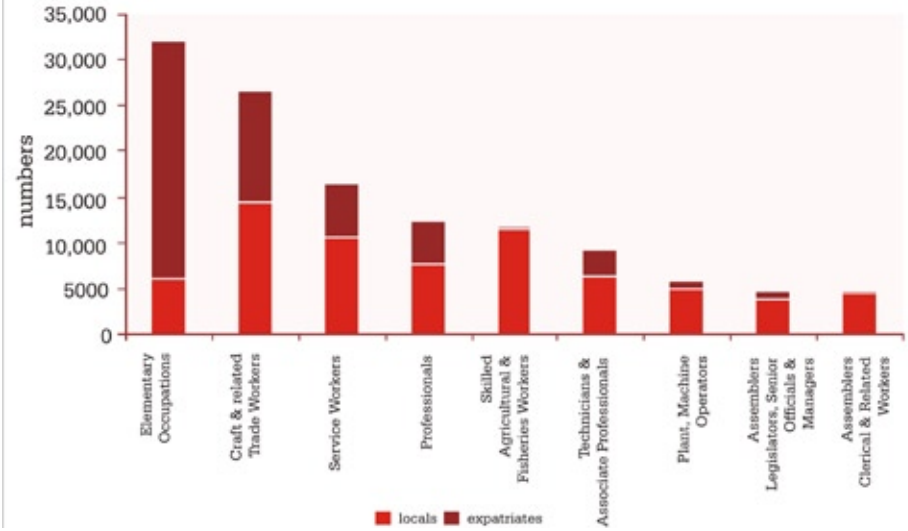


Figure 22 shows the distribution of local and expatriate employment by major occupational categories. At the end of 2006 there were 53,901 expatriate employees working in the country.

Expatriate labour is mainly concentrated in the Elementary occupations (48% of employed expatriates), and shares 80% when locals are included. They were employed mainly in the industries: construction; community social and personal services and tourism. Elementary occupations were filled by only 20% of local population.

Craft and related trade workers is the occupational category with the second highest concentration of expatriate labourers (23 % of employed expatriates). These expatriates are employed mainly by the industries: construction; community social and personal services and tourism. Elementary occupations are filled by roughly 20% of local population.

Figure 22: Locals & expatriates employed in major occupational categories, 2006

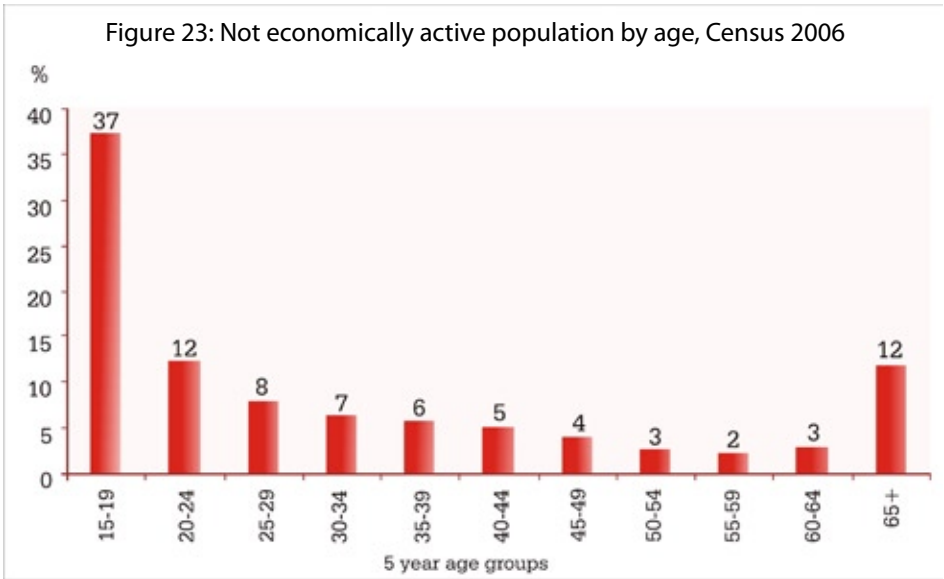


During the past 6 years (2000-2006) the largest number of jobs were created in the "Craft and related trade workers" occupational category with 10,842 of these jobs filled by locals and another 7,951 by expatriates. Jobs in this category grew at an average annual rate of 10% among locals adding 1,800 jobs per year while for expatriates it grew at 19% adding 1,325 jobs per year.

5. Not-economically active population

One third (32%) of the population 15 years and above were not economically active during census 2006. This does not seem such a high proportion, if we study the composition of the not-economically active (NEA) population in view of their age structure as given in figure 23.

Figure 23: Not economically active population by age, Census 2006

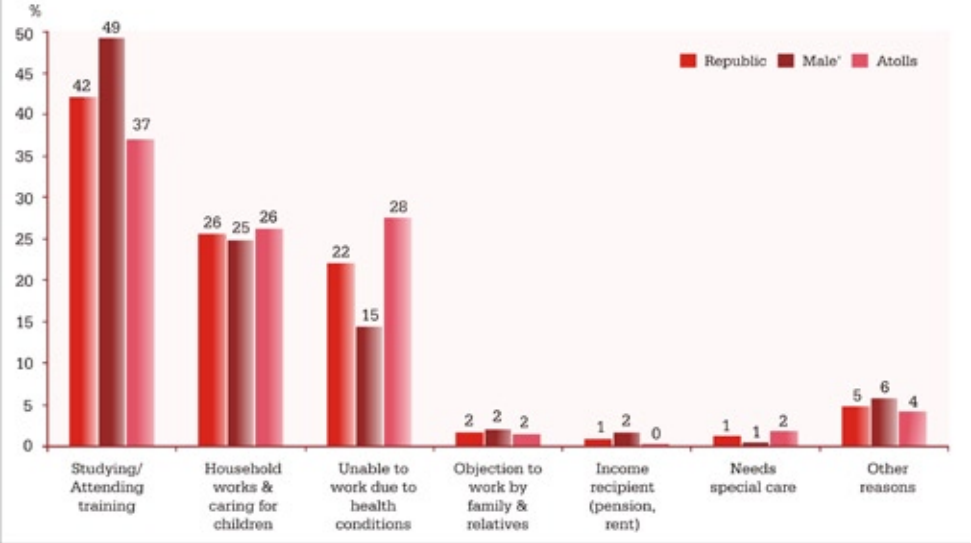


The young age structure of the population explains one of the major factors for the high level of economically inactive persons, with half of them aged between 15-24 years, majority of them attending school. Composition of NEA persons by sex, shows that a much higher proportion (68%) of them were females, with somewhat higher proportion of females among those not active residing in Male' (71%) compared to those among the atolls (65%). Also the proportions of NEA persons in the atolls were somewhat higher than that of Male' (59% in Atolls vs. 41 % in Male').

As questions were asked in the census from the not-economically active persons as to their main reasons for not working, their responses shed some light on this important aspect. As given in figure 24, one third (42%) of the NEA persons stated as being unable to work due to studies. One fourth (26%) stated being pre-occupied with household tasks and care of their family (children or elderly). Another 22% reported as being unable to work due to health conditions (12% of the NEA population were 65 years of age and over). Considering the high proportion of elderly persons among those who stated their health conditions which inhibit them from being economically active (50% comprised of elderly persons aged 65 years and above, and another 10% aged 60 to 64 also quite old) helps explain this. The extended family structure prevalent in the country enables elderly parents to get support from their grown-up children who earn for the family, enabling the parent to take rest from work, even though they are not too sick to work.

Some differences exist among Male' and the Atolls to the responses to the main reasons for not being economically active, as seen from Figure 24. Higher proportions of those inactive, living in Male' stated studying (49% vs 37%) while a higher proportion of those living in the atolls (28% vs 15%) stated bad health as their main reason for not being economically active.

Figure 24: Not economically active persons by main reasons for not working, Census 2006



Similarly, composition of the not-economically active population by sex in Figure 25 and 26 shows that the proportions of males and females by these major reasons are also quite different. A much higher proportion of males stated studying (33% vs 63%). There was not much difference among the proportions by sex that stated health reasons. Well over a third of females (38%) and hardly any men stated household work (non economic in nature) as their main reason for not being economically active. This again reveals why the labour force participation rates for women are low and emphasizes the women's reproductive role in the society. It is argued by many that unless the time spent by women on non-economic activities are taken into account; it will not bring out the additional burden on women and their contributions to the society will not be properly accounted, as explained in Box-3.

Box 3: Productive and reproductive work

Production traditionally refers to all activities that are traded in the market place and contribute to a country's GDP. Reproduction, by contrast, refers to those activities that add to and take care of societies' human resources including caring for children, the old, sick and disabled. Reproductive work has typically been excluded from economic and statistical analysis because it is unpaid. By using paid economic work as the yardstick, economic analysis and statistical systems have failed to appreciate and measure what is distinctive about women's work patterns and reproductive activities.

Beyond the visible formal economy there is the less visible informal economy, where a large proportion of the traded goods and services are undocumented by official statistics. Even less

observed is the subsistence economy, where goods and services are produced for households' own consumption, which in many countries is an important sub-economy in its own right. These different economic activities rest on the unpaid work, done mostly by women and children, in the reproductive sub-economy. Although both the statistical collection of the labour force data and the national accounting systems (1993 SNA) have tried to develop solutions to account for some of this work, they are difficult to implement and the bias against unpaid work remains.

Figure 25: Not economically active males by main reasons for not working, Census 2006

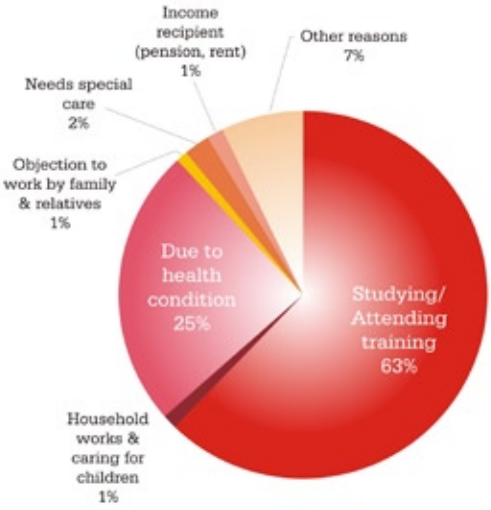
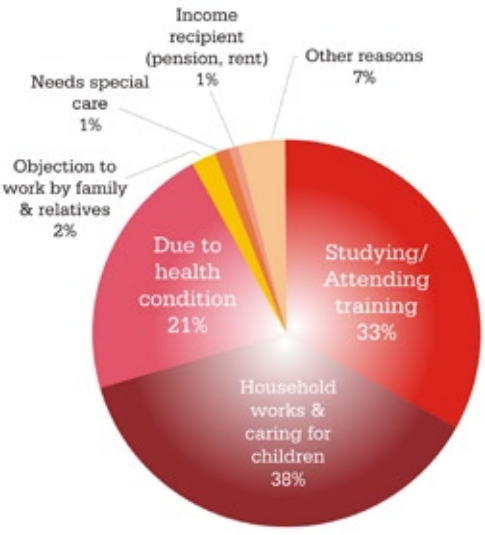


Figure 26: Not economically active females by main reasons for not working, Census 2006



Considering the high proportion of females among the inactive, data on time-use collected in the census was reviewed to see how they sped their time. It showed the not-economically active women spend on average, 7 hours per day on housework, equivalent to a full work-day of an employed person. Unless alternative support services (such as child care and care for elderly) are available in the market, at economical prices, reduction in these proportions of inactive women

will not be possible. Support from families and time-off from non-economic work that occupies women's day within the household need to be freed to enable them to go out for work in the formal sector, which offers adequate remuneration.

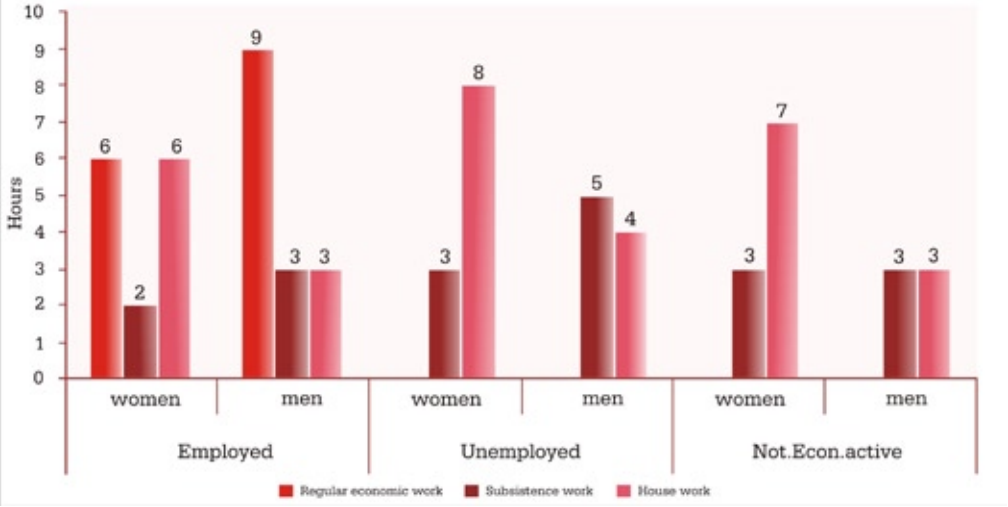
As per current practices, if women were to go out for work, households employ expatriate domestic helpers from neighboring countries, to help with child rearing and other household activities. When we come to think of it, there is actually not much gain, as the women's remuneration from paid work is not much different from what needs to be paid to the domestic helper. Hence parents tend to count the satisfaction derived from being able to care for their own children, some even hesitating to leave the children under the sole care of domestic helpers, while both parents are out at work. The current extended family system helps relieve some of these pressures in the society, as grandparents are there to play a supervisory role. This type of support is also expected to be less in the future as the current trends and lifestyles are changing for more nuclear families. Hence, unless proper actions are taken to address these issues, there is a possibility for lower female labour force participation in the near future, due to lack of other options available to women.

6. Under-employment, time-use and economic dependency

Employed persons worked on average, 9 hours per day on their main activity, with men spending 10 hours while women spent 6 hours. One fourth (25%) of the employed persons worked less than 6 hours per day and hence can be considered underemployed. As per the ILO definition "underemployment is the difference between the amount of work performed by persons in employment and the amount of work they would normally be able and willing to perform".

Given the gender differences observed on time use, Figure 27 looks at the time spent by men and women on economic and non-economic activities.

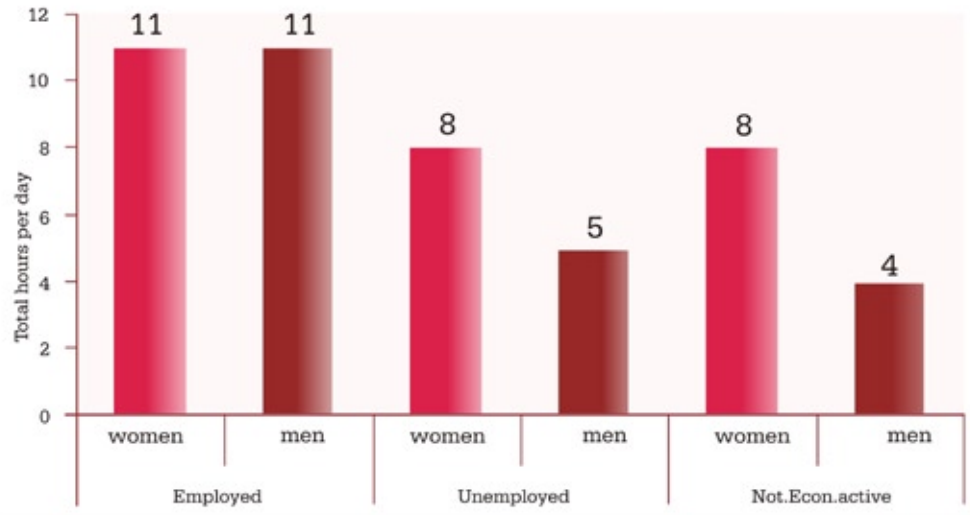
Figure 27: Time spent on economic & non-economic activities, by persons 15 years & above, Census 2006



Employed men spend 9 hours per day on average in regular economic activities compared to 6 hours by women. Men spent on average 3 hours and women 2 hours on subsistence economic activities. Employed women worked 6 hrs per day on housework while men spent half this amount. Although housework is not considered an economic activity as per the census and other international definitions in this area, it adds to employed women's workload. Unemployed females spent 3 hrs on subsistence economic activity and 8 hours on housework, while unemployed men spent 5 hrs on subsistence and 4 hrs on household activities. Not-economically active females spent 3 hrs on subsistence economic activity and 7 hours on housework, while unemployed men spent 3 hrs on both subsistence and household activities.

When the total hours worked per day on all activities was added, economic and non-economic, the time spent by employed persons, males as well as females was on average 11 hours per day. As for unemployed and not-economically active women spent on average 8 hrs per day on all activities which is roughly half the amount in case of men, as given in Figure 28.

Figure 28: Total time spent on economic & non-economic activities, Census 2006

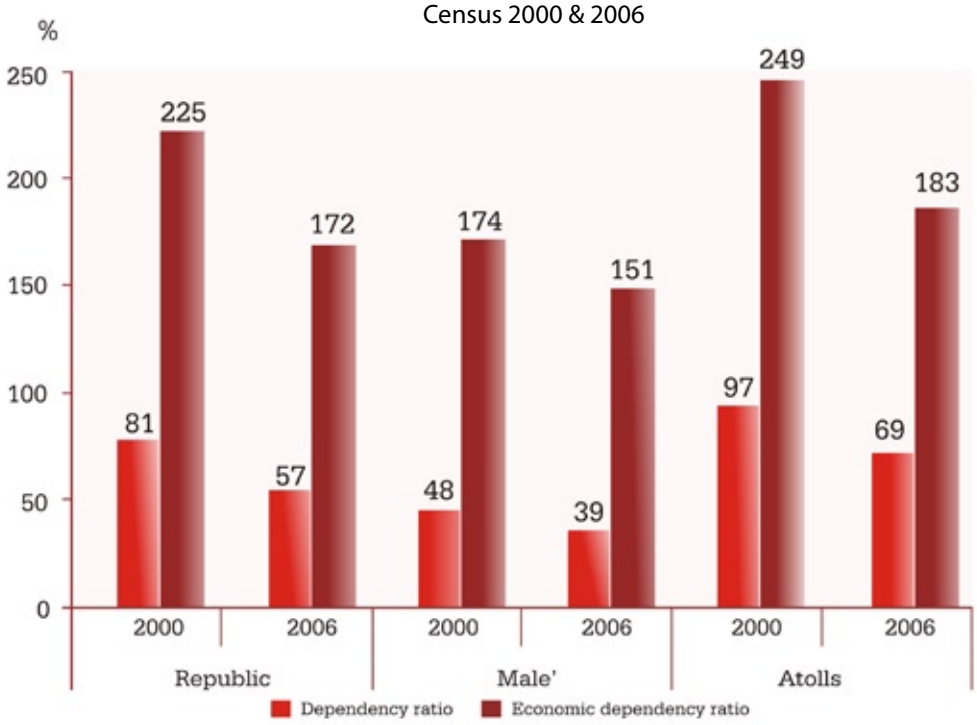


The differences in the broad population age-structure in Male' and the Atolls due to the population distribution and migration patterns over time have resulted in the dependency ratio being much higher in the Atolls compared to Male'. In 2006 there were 69 dependents per every 100 persons of the working age in the Atolls, while it was 39 in the case of Male'. Over the years 2000 and 2006, dependency ratio improved substantially. At the national level it improved from 81 to 57 while in Male' it improved from 48 to 39 and in the Atolls from 97 to 69 dependents, as seen from Figure 29.

As a substantial proportion of the working age population is not-economically active and out of the labour force, and even among those in the labour force a high proportion is unemployed, it is more meaningful to look at "economic dependency". Economic dependency is in terms of the number of dependents (those who are unemployed, not-economically active and also those below 15 years and the elderly persons 65 years and over) per employed persons. It can be seen from figure 29,

that economic dependency is much higher, but under both the definitions the dependency ratios has improved during 2000 and 2006. At the national level economic dependency ratio it improved from 225 dependents per every 100 employed persons to 172, while in Male', it improved from 174 to 151 and in the Atolls from 249 to 183.

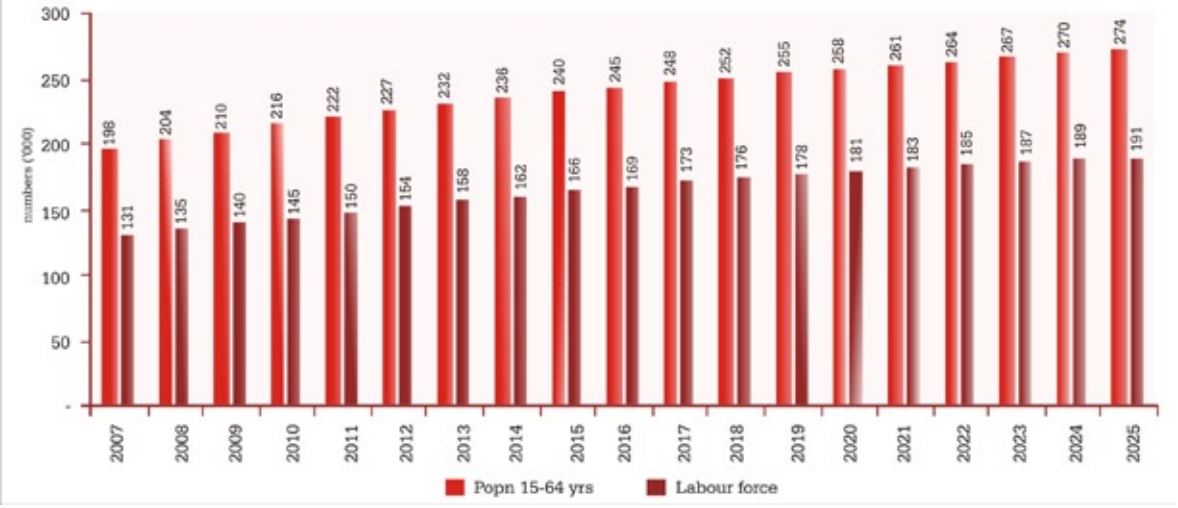
Figure 29: Dependency ratio & economic dependency ratios, Census 2000 & 2006



7. Projections of labour force and employment

Projections of the working age population (locals) of the country shows a steady increase from 198 thousand in 2007 to 274 thousand by the year 2025. Working age population (aged 15 to 64 years) are the mid-year population projections prepared by MPND in 2007. These projections take into account the population growth and age-structure from census 2006 and also data on births and deaths from the vital registration system, in addition to other related rates and ratios. Using these projected population in the working ages, age-specific labour force participation rates from census 2006 has been used to derive the labour force projections.

Figure 30: Projected population aged 15-64 years & labour force, 2007 to 2025

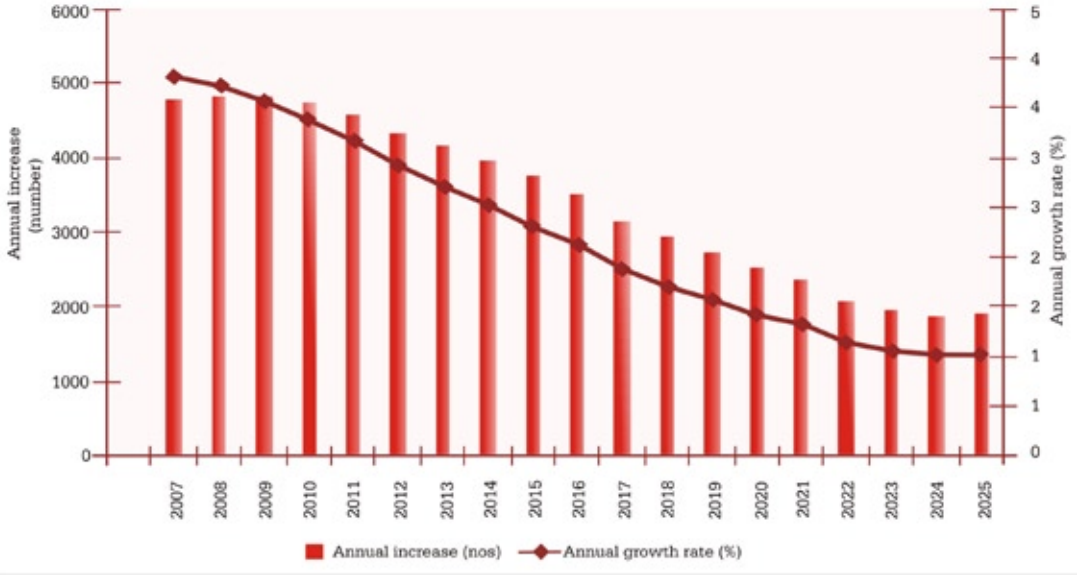


Projections of the country's labour force (locals) show a steady increase from 131 thousand in 2007 to 191 thousand by the year 2025. According to these estimates, an annual growth rate of 3.8% in the labour force is expected with an addition of 4,805 persons to the labour market in 2007. According to these estimates the annual growth rate of the labour force is getting somewhat slower over time with an expected annual growth rate of 3.4% in 2010, 2.3% in 2015, 1.4% in 2020 and 1% in 2025. Due to these slower annual growth rates, the resulting annual additions to the labour market is expected to show a declining trend. Number of new entrants to the labour market on an annual basis is expected to go down from 4,764 to 3,771 to 2,544 to 1,952 persons in the years 2010, 2015, 2020 and 2025 respectively.

In order to create adequate employment opportunities and maintain unemployment at reasonable levels, the country's economy needs to generate roughly 25 thousand jobs during the 5 year period 2006-2010, another 21 thousand jobs during the period 2011-2015, yet another 15 thousand jobs during 2016-2020 and a further 10 thousand more jobs during the 5 year period 2021-2025.

As important as the numbers of jobs to be created are the answers as to which geographical regions/ islands it should be created, what industries, requiring what sorts of skills are to be targeted. All these employment requirements need very careful planning and skill development and support and initiatives from all the major players in the economy.

Figure 31: Annual growth rate & increase in labour force, 2007 to 2025



8. Quality of data on economic activity

Special emphasis was given to improve the response rates to the economic activity questions in census 2006, as the previous census of 2000 encountered very high levels of non-response to these questions. High rates of non-response result in distortions in the recorded percentages, as they might fall in any of the categories. One of the reasons for this high non-response might be due the number of screening questions required to identify the employed, unemployed and the not-economically active population. A total of sixteen questions on economic activity were asked in the census questionnaire. Furthermore, detailed descriptions on the industry and occupations of the employed persons have to be recorded in the field, in order for proper coding according to the categories identified in the ISIC and ISCO classifications.

During enumerator and supervisor training sessions in 2006, examples on the high levels of non-response encountered in previous census and the consequences were highlighted.

In case of the industrial distribution of employed persons, the non-response rate reduced to 4.3% in 2006 compared to 17.2% in 2000. For the occupational distribution of employed population the non-response rate reduced to 4.1% in 2006 from 16.9% in 2000.

The classification of employed population by status in employment had a non-response of 5.2% in 2006 compared to 16% in 2000. Distribution of employed persons, by institutional sector of employment had a non-response of 6% in 2006 compared to 15% in 2000. It was observed that the resulting non-response rates of labour force and employment questions reduced substantially in 2006 with improvements in data quality compared to 2000 census.

9. Recommendations and policy guidelines

9.1: Improving the macroeconomic and business environment

Implementation of sound macroeconomic policies, creation of a strong macroeconomic and business environment and putting forth a strong development agenda plays a fundamental role in resolving the labour market issues and achieve tangible and sustained reduction of unemployment.

It is heartening to know that the country's current national development plan aims for a strong diverse economy with employment for all. The two broad goals "Create an environment conducive for growth and generate employment" and "Enhance trade, support businesses and build competitive industries" is put forth as major focus in achieving economic development.

The main strategies proposed to achieve this first goal are: Ensure an annual economic growth rate of 7 percent or higher; ensure fiscal responsibility by having a balanced budget by the end of the Plan period; ensure listing of at least 10 SOEs to be listed on the stock exchange; increase ODA to 5 percent of government revenue (or ratio of grant to loan assistance); pay down debt to ensure external debt remains sustainable; keep weighted average inflation less than or equal to 6 percent; create at least 15,000 new and additional high quality, good paying jobs in the atolls

The main strategies proposed to achieve the second goal are: increase export of goods as a percent of GDP by 40 percent by 2010;increase FDI share in the capital account of BoP to 3.5 billion by 2010; support at least 2,500 entrepreneurs through loans and other incentives; increase tourist bed capacity in the Maldives to 30,000 beds; ensure average occupancy of more than 80 percent; increase local participation in the tourist resort labour market from 56 percent to more than 60 percent; increase share of non-skipjack tuna fish catch to 15 percent of annual catch; increase production of tertiary processed fish products to more than 50 percent of annual production; increase the share of contribution from Agriculture sector to GDP not less than 5 percent; replace imports of at least 6 agricultural products which are commonly used in Maldives; increase the share of contribution from construction sector to GDP to not less than 7.5 percent; increase the ratio of sports participation of the population to 5 percent.

It is important to note that Investment Climate Assessment (ICA) survey in the country in 2005 by World Bank identifies access to finance; cost of finance; access to land; lack of skilled labor and corruption and lack of a strong legal framework as severe obstacles to growth and expansion of business activities in the Maldives. Access to finance is identified as one of the most important and most severe constraints affecting enterprise performance. In light of this it is crucial that measure to address and resolve these constraints be taken on a priority basis.

Providing an environment that is conducive to private sector activity is a necessary condition for active private sector engagement in employment generation. In today's globalised world public sector's ability to generate adequate levels of employment on its own is increasingly limited. Hence public private partnerships are becoming increasingly the most feasible option to achieve concrete actions for achieving results.

9.2: Focus on human resource development

In spite of the country enjoying high literacy rates, achieved universal primary education and have high levels of secondary education attainment, high unemployment rates prevail n the country. The mismatch between what is provided through the education system and the skills demanded for the job market is an increasing concern in the country.

While basic education remains a fundamental necessity, technical knowledge needs to be adjusted to market demand. Hence reforms in secondary and tertiary education to suit the changing demand would minimize the skills mismatch currently experienced by the country in many of the occupations. A special focus on vocational training and skill development is increasingly in demand, as education and technical skills are vital to the employability of workers. By the same token, focus on the content, quality of education and skills are also crucial.

Some of the experiences in the Asia Pacific region include: government working with educational institutions to improve employment opportunities for youth through internships and apprenticeships that provide tangible work experience. Specific programmes focusing on training highly skilled labour and also strengthening vocational training to improve the employability are some of the measures. Establish formal training agreements with employers, subsidise enterprises that hire youth, encourages industries and universities to work together to meet The future demand for skills, provide government financial support for facilities and research costs for companies that work with universities to meet industrial needs. It is important that policy measures are devised to encourage employers to expand investments in youth employment and to use human resources more effectively. Also training programmes that are tightly targeted and small-scale, with a strong on-the-job component that is linked to industry have proven to be most effective in many of the countries in the Asia Pacific region.

Some measures highlighted in the country's seventh national development plan to address these issues include: Conduct training needs assessments and deliver skills development programs; increase the skill base of the labour force to meet the market demands; creation of employment sector councils in the key sectors of tourism, fisheries and agriculture, transport and the social sectors and use this as an avenue to design, develop and deliver training and the development and implementation of a national apprenticeship scheme to train school leavers. Develop and implement skills training and extension program for fishing communities to increase their capacity to obtain jobs; establish a fisheries training institute; enable the Maldives College of Higher Education to deliver high quality academic programs related to construction and strengthen vocational institutions for agriculture and agribusiness education. Doubling the proportion of working–age population with higher education qualifications to 6.5% by 2010 is also a target in the NDP.

Special measures are also required to address the issue of high female unemployment and low female labour force participation prevailing in the country. Attempts to change the perceptions in the society towards women's employment through increased awareness, provision of necessary support facilities to mobilise women from household duties, availability of easy access to credit for women entrepreneurs and empowerment of women are important in this regard.

9.3: Facilitate labour market entry by provision of Labour Market information and career guidance

Timely, reliable and accurate labour market information is essential for making government policy as well as for corporate decision-making and for business expansion. Improving labour market information would help to bridge the information gap between job seekers and employers. It will also help in gearing training systems in line with changing market demands. The NDP has identified "Set up a Labour Market Information System to collect and analyse labour market data for policy" as a strategy in this regard.

Timely intervention in enhancing the employability of youth is required. Career guidance and counselling can help to steer youth towards a career path that matches their interests and skills. This could also help reduce the frustration arising from prolonged job searches and unemployment, even act in reducing anti-social behavior. Promoting youth interest in employment and changing attitudes towards employment by awareness campaigns on the range of occupations available and the merits of training and education is a strategy put forth in the NDP.

Facilitate job search though establishment of institutional mechanisms for job matching is important, as individual job searches are less efficient and more costly than institutional arrangements organised by the government or the private sector.

9.4: Creating jobs and employment opportunities

Implementing growth-promoting policies is identified to have the highest impact in achieving full and productive employment, according to the Key Indicators of Developing Asia Pacific countries, 2006. Growth promoting policies include policies such as measures to improve productivity and incomes in the rural economy and urban informal sector; export push and industrial policies for public-private coordination, diversification and restructuring. It also highlights that the essence of successful industrial policy is effective coordination and this is a role that must be undertaken by government.

The paper also recommends being creative by putting forward a big-push rural development program in terms of targeted investments, in particular in infrastructure, in order to reduce migration. This big push will have to be enough to place a sufficiently large number of people in a situation where migration offers no attraction. Such an initiative in Maldives could be the emphasis given on developing the north and south regions as growth centres. However, this push needs to be much stronger, very transparent, with financial commitments from both public and private sector to bring the necessary investments in education, health, housing, human resource development and create enough employment opportunities to attract population towards these growth centres. The details on what is to come needs to be known in advance for people to consider these in their decisions.

Increasing employment opportunities for Maldivians is given utmost priority in the NDP. Some of the strategies to achieve this is to establish Employment Services Centre in Male', job centres in Atolls and job information kiosks in growth centres. These centres are to provide employment

advice to job seekers and employment exchange services for employers and employees. NDP aims to reduce youth unemployment to 10% and increase the female LFPR to 60% by 2010.

Generating employment and re-employment opportunities through business creation is also important. In this regard it is critical that the jobs created are attractive and remunerative and are also of the types that are attractive to youth and friendly to women.

It is interesting to note that Republic of Korea is reviewing economic and labour policies from the perspective of job creation, working to establish a business-friendly environment by stabilizing the labour market, improving the corporate investment and management environment through cooperative labour management relationships and subsidizing small and medium-sized enterprises that create new jobs.

9.5: Employment policy and wages

Strengthen the employment legal framework in line with ILO standards, Enact an Employment Act which would include provisions on unfair dismissal, equal pay, sexual harassment and all forms of discrimination including on grounds of disability is among the policies identified in the NDP. Establish a mechanism to facilitate resolution of employer-employee disputes is also another policy direction. Some of the strategies in this regard is to establish a Labour Relations Commission to research and provide policy advice on industrial and employment relations issues and establish an Employment Tribunal to resolve employment-related disputes.

It is also very important that any differences in the salary, other benefits, accommodation, travel allowances, leave etc that are provided as a remuneration package for expatriates with same skills are the same with that for locals. Currently many employees claim that such differences in treatment acts as hindrances for local employment to flourish.

Employment policy needs to have special focus for promoting employment opportunities in the islands by putting forth better options and incentives for those working in the islands. Salary structure needs to enable people to live a decent life. In order to attract highly educated people for jobs, salary structure needs to incorporate such rewards. Establishment of social security systems is extremely important.

9.6: Focus on industries where labour is concentrated and develop new industries

In many countries that experienced high economic growth but low labour absorption, skill-based technical change has become prominent in the production process while the traditional sectors have been neglected. Balancing high growth and employment creation requires improving the productivity of workers in niche industries while focusing on sectors where the majority of labour is concentrated.

Well-targeted safety nets, means-tested income transfers and subsidized micro credit aimed at improving the access of the poor to financial services could also be used to help the poor to build assets.

In countries where agriculture still dominates production and employment, the emphasis should be on promoting traditional employment opportunities through accelerated growth and development in the sector. Land reform, extension services, provision of credit, crop diversification and rural infrastructure development would play a critical role in this respect.

Improved marketing facilities and cooperative organizations could also be effective instruments in advancing rural employment.

Creating jobs in the informal services and agricultural sectors, with a focus on productivity improvement, is vital in providing additional employment opportunities and in narrowing the deficit in decent work. This process could be facilitated by measures to formalize the informal sector. Important would be a reduction in the unit labour costs prevailing in the formal sector, which act as a disincentive for informal sector enterprises to expand and make the transition to the formal sector.

According to the Strategic economic Plan of the country Tourism, Fisheries and Agriculture are existing economic activities that have strong potential for further development to generate economic benefits and stability for the country.

Development of a "technology park" with the aim to facilitate the development of the ICT industry is a strategy that has been identified in this regard in the country's national development plan.

9.7: Promotion of small and medium-sized enterprises

Small-scale enterprises, common in the informal sector, have substantial growth potential, but they appear to be less productive than their potential and tend to have a high "mortality" rate. To reduce the mortality rates of SMEs these firms need a more conducive business environment, with lower entry costs, better infrastructure, more capacity-building, good governance and open-market economic settings and improved access to credit. Provision of a conducive- business environment will enable these SMEs that have substantial growth potential, to be more productive and reach their potential.

Policy direction that is identified in the NDP is to support the development of small and medium enterprises (SME) promoting healthy competition. Strategies to achieve these include: introduce private sector development programs for small and medium enterprises by providing technical assistance to start-up enterprises; facilitate the establishment and growth of SME's, through providing access to business support services at the Hulhumale' Business Park/Industrial Zone and encourage technology transfer, innovation and creativity for businesses.

9.8: Entrepreneurship development and access to finance

The development of entrepreneurship is a vital component of human resources development aimed at job creation. Lack of competence and the aptitude to initiate, nurture and expand industrial enterprises is a major reason why small and medium-sized enterprises and self employment fail to become viable options for generating employment in the informal sector. Although many governments have encouraged the development of entrepreneurship and self employment among youth, relatively few micro financing initiatives are specifically targeted at youth and those that are tended to be implemented by non-governmental organizations or private banks. Many initiatives are too small in scale and lacking in resources to make a substantial dent in youth unemployment. There is a need to increase national commitments to youth employment initiatives and to scale up investment in youth employment.

Some country initiatives include, fostering linkages between large and small enterprises, believing that large companies have the knowledge, expertise, resources and networks to assist small and medium-sized enterprises and start-ups in accessing the necessary support.
Focus on training young entrepreneurs, employment training and support for start-up businesses, conceptualization and intermediary services.

Establishing youth entrepreneurship development programs, provision of relevant training and access to finance is one of the strategies identified in the NDP.

9.9: Promoting Corporate Social Responsibility and social dialogue

Employers also play a role in generating employment. Corporate responsibility entails providing opportunities for training and retraining workers, establishing markets, collaborating with the public sector in providing opportunities for unemployed youth to train as interns and ensuring workplace safety and the welfare of employees.

Social dialogue, involving employers, unions and even government, is a key instrument for overcoming an employment crisis. A compact between the employees and employers aimed at collectively managing labour market outcomes could avoid such adverse effects. Such a compact could include agreements on wage moderation (to accommodate macroeconomic stability), tax cuts, employment benefits and job security. Such social dialogue entails a compromise between profit maximization by firms and optimum wages by employees through a common understanding and partnership.

9.10: Management of the expatriate labour

International migration acts as a stabilizing factor labour markets. Migration of skilled workers from countries with excess labour could benefit labour-importing countries and help to ease the pressure on labour markets in the labour-exporting countries.

According to the Investment Climate Assessment Survey in Maldives, firms viewed the ability to rely on expatriate labour as a positive development. Viewed from a long-term economic and social perspective, it poses a major challenge that needs to be addressed without affecting industry performance. Being situated so close to cheap labor markets such as India, Sri Lanka, and Bangladesh, makes it difficult to address the issue.

Improving working conditions in accordance with national and international human rights standards is a strategy identified in the NDP in this regard. Some measures to address these could be the introduction of minimum wages, in specific industries or occupations, provision of better working conditions for the expatriate labour and acquiring locals with the skills required for the jobs where the expatriates are concentrated.

10. Conclusion

This chapter has analysed and proposed some recommendations on addressing some of the most pressing issues and problems in terms of labour force and employment in the country. Increasing unemployment rates, under-employment, youth unemployment, lower female labour force participation, increased rate of urbanization, lack of adequate employment opportunities in the atolls, slower rate of employment creation compared to the rates of labor force growth, existence of huge informal sector, increase in expatriate workers are among the major issues.

Labour market in the country has not progresses in line with the economic growth rates in the country. Despite the high rates of economic growth rates of 8% recorded in the country during the past 10 to 11 years, employment among local population grew at 5%. Fast rates of increase in the expatriates labour, in spite of high unemployment among the locals, especially among the youth population is a huge concern faced by the country. Expatriate employment grew at an average annual rate of 10% during this period 1995 to 2006. Higher unemployment rates were observed for females and in the atolls.

Some of the underlying factors behind this could be the weak policy environment and the high costs for businesses. With many of the businesses concentrated in Male' the overhead costs are quite high, especially for those smaller enterprises that are starting-up their operations. The high rents in the capital combined with the fact that almost all types of goods are imported, makes employers go for the option of hiring expatriate employees as a means to keep the labour costs down. It is also easier for the businesses to layoff these employees, many a times temporary workers with low or no skills, at business downturns and rehire others when business climate is better.

The job vacancies in the market often require low skills and come with pay scales that are not attractive to youth who completes secondary education. Given the small scale of businesses and the low level of technology used are not sufficient to create the types of jobs required by the unemployed youth. The type of education attained by secondary school leavers is not enough for most jobs. This mismatch between skills and job requirements is evident from the high and increasing number of expatriates in the country.

The two key industries in the economy-tourism and fisheries- were dominated by males. This shows the importance of finding ways to employ more females especially in the tourism industry.

Combining the expatriate employment data compiled by the Ministry of Human Resources Employment and Labour with the census 2006 data on local labour force, shows that one third of the employed population in the country consisted of expatriate workers. Expatriates exceeded the local labour in the construction and finance and business services, while in case of tourism fifty percent of those employed were expatriates. In terms of occupations, the expatriates exceeded the local labour in the elementary occupations category. This indicates that these elementary occupations were not attractive to local labour. Considering the fact that these elementary and unskilled occupations do not require high educational qualifications, this is a category where local labour, if desired can be mobilized in the short-term. However rigorous campaigning and additional benefits or incentives will be needed.

Status in employment and institutional sector of the employed persons shows high proportions of own account workers or self employed persons, most of who work at their own homes or without a fixed location. Government is still the major employer. This indicates a huge informal sector and that the county's labour market is not well developed. This is often the case in developing countries in the early stages of development.

Study of the not economically active population showed that a high proportion of women were unable to work due to difficulties in taking care of their children and doing housework if they work. This highlights the importance of finding means for mobilising these resources, either by providing child care facilities or by creating employment that can be done at home or in the island that they live, in order to increase the labour force participation rates for females. As females comprise half the potential labour resources in the country, their involvement in economic activity is crucial for the country to reach its full development potential.

Manufacturing industry is more female dominated with 65% females vs. 35% males. Those employed in manufacturing are mostly engaged in small scale manufacturing activities with almost 90% of the females in the industry (81% in Male' and 91% in the atolls) being home-based workers, who are self-employed and contributing family workers. This highlights the need for promoting small and medium sized enterprises (SMEs), focused on promoting, marketing and facilitating the products manufacture by these self employed persons to get a better economical value for their products and thereby help expand these economic activities, mainly carried out by women in the islands.

The fact that the main industry of the nation - tourism - has so few women employed emphasizes the importance of finding ways and means to employ more females, by putting extra efforts to make the resort jobs more women and family friendly, and close by to inhabited islands.

Half of the 20 atolls in the country did not have a resort situated within that atoll up to 2006. Currently, government policy has been geared to having at least one resort situated in each and every atoll. Tourism industry is going through a huge expansion phase with 45 new resorts targeted to become operational during the next five years. Hence, the numbers of resorts in the atolls and employment shares by industry in the atolls are likely to change quite substantially by the next population census

Some of the ongoing initiatives by the government include a new labour law as well as a number of initiatives aimed to raise educational standards of the local labour force to address the skill mismatches in the labour market, the introduction of a minimum wage, setting a retirement age, setting-up a social security system, expansion of tourism in the atolls and population and development consolidation.

In increasingly open economic systems, the role of the private sector in providing employment becomes ever more vital as Governments limit their role to that of regulators and facilitators of private sector growth and employment generation. Elimination of constraints such as complex firm-registration requirements, stringent licensing and high taxation would be of paramount importance. Harmonious industrial relations through social dialogue could enhance private sector initiatives.

Government's role needs to be geared more towards facilitating private sector development and creating an enabling business environment to increase private and foreign investments. Public private partnership is critical to address these critical issues.

For a sustained reduction in unemployment and achieving full and productive employment, solutions have to be considered in the context of the overall macroeconomic and political environment. While economic growth is a necessary condition, growth alone cannot create sufficient employment opportunities to adequately reduce unemployment, as many economies in the region have documented. A balanced approach based on economic growth and State interventions is needed to ensure that growth is broad-based and equitable.

To bridge the gap between supply and demand while providing an enabling environment for smooth employment adjustment at times of shocks and structural change, countries need active labour market policies, in particular policies aimed at developing human capital, facilitating labour market entry, providing labour market information, facilitating job searches, creating opportunities and providing targeted safety nets for the unemployed.

11. Sequence of questions on economic activity

A total of 16 questions on economic activity were included in the 2006 census questionnaire (M-21 to M-36). The economic activity questions were asked from all persons aged 15 years and above. Students and elderly were also included. Reference period for the economic activity were the past 7 days depending on the day that enumerators visited the household during the census period (21 to 28 March 2006). First of all, people were asked whether they were engaged in an income generating activity for 1 hour or more per day during the reference week (M-21). If the person said yes then they are employed. If not they were asked whether they were engaged for 1 hour or more during the reference week in any activity that generated income for their family (M-22). Both questions were followed by list of examples of such activities commonly carried out in the country, to clarify the question to the respondent and thereby to enable better responses. If the person said yes then they are employed.

They were then asked the reason for not engaging in an income generating activity during the past week (M-25). This questions helps separate the not-economically population, those discouraged workers who do not look for work anymore because they believe they won't find it and also those persons who were employed but were temporarily absent from work during the census reference week due to being sick, being on leave, maternity leave. There were 11 answer categories to this question. Persons who responded to the category 1 and 2 comprise of those who should be included under employed, as they have a job or work and was temporarily absent from work. Those persons that responded to answer categories 5 "not able to get appropriate work" and 6 "no opportunity for doing income generating work" were considered as discouraged workers and hence classifies under the unemployed persons, irrespective of their responses to unemployment questions on seeking and available for work. Persons who did not work because they were attending school or undergoing training were then asked the time-use question (M-34 and M-35). Persons quoting the reasons as requiring special needs or unable to work due to health reasons were not asked any more of the employment questions.

Unemployed and not economically active persons were then asked whether they worked during the past 2 years and afterwards they were asked the time-use questions.

All the employed persons were asked questions on industry, occupation, employment status, type of establishment that they work, hours worked etc on the main economic activity which was the one on which he/she spent most of the time during the census reference week.

Time-use questions (M-32 to M-36) were asked separately for main economic activity, other economic activities, subsistence economic activities, household non-economic activities, voluntary community activities, during the reference week. Those who were abroad during the census week were not asked all the time-use questions.

Major findings:

During this period the largest age cohort of the population in 2000 (10 to 14 years) gradually moved into the working age, resulting in a huge expansion of the working population from 55% in 2000 to 63% in 2006. The working age population increased at an average annual rate of 3.9 percent during the period.

The labour force participation rate of the country as a whole improved from 59.8% in 2000 to 64.1% percent by 2006. During the period, labour force participation rates in Male' improved slightly from 56.8 to 58.5 while in the atolls it improved substantially from 61.7 to 67.5 percent during 2000 and 2006. A closer look however reveals that a higher proportion among the labour force in the atolls in 2006 comprised of the unemployed persons.

Although participation rates tend to be much higher for males than females, both in 2000 and 2006, a marked improvement in female labour force participation is evident in 2006. Labour force participation for women increased from 45.3% in 2000 to 52.9% in 2006. In case of males the participation rates increased from 74% to 75.4% during the period.

Apart from the employed persons, 22% of the unemployed women and 10% of the not-economically active women were engaged in subsistence economic activities for 1 hour or more during the census reference week. Hence, when these women engaged in subsistence work were included in the labour force, the LFPR of females increased by 4 % from 52 to 56%, and female unemployment rate reduced from 21% to 17%.

Labour force participation varies in different Atolls, ranging from the highest in Kaafu Atoll (K), of 77.6 percent and the lowest in Seenu Atoll (S) at 59.2 percent. Females have lower participation rates than males in all the atolls, especially lower in case of females in Seenu (S) and Lhaviyani (Lh) atolls with 42.8 and 52.3 percent respectively.

Employed population by major status in employment categories reveals that the labour market in Male' is more organized with 75% of the employed persons working as employees vis a vis 44% in case of the atolls. A higher proportion of self employed persons (own-account workers and contributing family workers) are found in the atolls, indicating the more informal nature of employment prevalent in the atolls. Looking at the employment status by sex shows, higher proportions of women being self employed, more so in case of females in the atolls.

Existence of a quite large informal and unorganized sector in the country is evident from the distribution of employed population by type of establishment with over one third (37%) of the employed population engaged in informal or unorganized sectors. Work place of employed persons by sex, confirms the high level of females working from their living quarters or homes, as indicated from the employment status data. Nearly half the employed females in the atolls and 40% in case of employed females in Male' fall in this category of home-based own-account workers or contributing family workers. This highlights the economic vulnerability of women, especially those in the atolls.

Educational level of those in the labour force reveals the highest proportion of unemployment (29%) is concentrated among those who have completed 10 years of basic schooling and attained the London G.C.E O' level standard. Higher proportions of unemployed are among those with lower educational attainment with 21% among those with primary level grades (grades 1-6) and 16% among those who are not literate. Attainment of education beyond O' level is seen as a positive factor with higher chances of getting employed. Similarly attainment of various skills by following certificate courses is also seen as a positive factor, with 9% among the employed having such certificates as their highest qualification. Looking at the differences in educational attainment among the labour force in Male' and Atolls, shows much higher percentages with O' levels among the unemployed in Male' vis a vis that in the atolls (41% versus 24%)

Out of the 45% of the employed population who migrated, over a third (34%) has migrated in search or due to employment. Another 29%, after living on another island at sometime in the past have returned to live on the island where they were enumerated in the census. Probably they must have returned due to employment or are engaging themselves in self-employed work on their own or resident island. Another 21% have migrated for education purposes, which is quite common in the country.

When the expatriate employees were added to the local labour force, they accounted for one third (30%) of the total employed population in the country. Such high levels and fast rates of growth in the expatriate labour force (annual growth rate of 10% in 2003 and 20% in 2006) in the country, reflects mismatches and rigidities in the country's labour market, social perceptions and cultural factors. Due to low wages and working conditions in many of the elementary jobs, it is not attractive to the local population, while in case of many of the high skilled technical jobs, locals lack the necessary skills. Managing foreign labour that is increasing at such a rapid pace over the past few years, creating more employment opportunities for the local population and providing them with the necessary skills are major challenges that need to be addressed.

Job creation in the economy was unable to keep pace with the growth rate in the working age population, during the years 2000 to 2006. Hence, even with the increased labour force participation rates during the period, it still resulted in an increase in the unemployment rate in the country from 10.2% in 2000 to 14.4 % by 2006.

Unemployment rates for women remain higher in all age-groups, in both 2000 and 2006 with unemployment being highest among new labour market entrants at 15 to 19 years of age.

Youth unemployment is on the increase during 2000 to 2006 period. In case of Male' the unemployment rates among youths in 20 to 24 year age-group, increased from 6 to 10 percent for males while for females it increased from 10 to 18 percent. Similarly, in case of atolls the unemployment rates among youth in 20 to 24 year age-group, increased from 7% to 10% for males while for females it increased from 30 to 34%. It is substantially higher for females in the atolls.

Reducing the high level of unemployment is currently one of the major challenges faced by the country, especially increasing unemployment among youth and women are major issues.

Looking at the employed population by types of economic activity, the highest numbers (19,259 out of 110,231 total employed persons or 17.5%) were engaged in manufacturing related activities, during the census reference period. The highest numbers of females (12,509 out of the 40,530 or 30.9 % of employed females) were also engaged in manufacturing related activities.

Manufacturing industry is more female dominated with 65% females vs. 35% males. Those employed in manufacturing are mostly engaged in small scale manufacturing activities with almost 90% of the females in the industry (81% in Male' and 91% in the atolls) being home-based workers, who are self-employed and contributing family workers

The second highest percentages of persons (15,949 persons or 14.5%) were engaged in Public administration and defense. The highest numbers of males (11,697 or 30.9 % of employed males) were engaged in this sector. Government is the main employer in the country.

With tourism being the main industry in the country (accounting for about one third of the country's GDP) the third highest numbers of employed Maldivians (11%) were engaged in Hotels and restaurants industry. In case of employed males 15.2 % or 10,578 persons were engaged in this industry. Tourism industry is very much male dominated with 87% males vs. 13% females working in the industry. Due to the mere number of jobs available in many of the islands, a high percentage of men work in resort islands, which are often-times far away from their home island and atoll, for long periods of time. Hence women in the family often stays back to care for the family and live on the remittances sent by resort workers who have migrated for work.

In the atolls, tourism industry employed the highest number of males (19%) compared to Male' (7%). However, tourism is concentrated in only a few atolls. Out of the 88 resorts with a total bed capacity of 17,712 registered in the country in 2006, 42 resorts with 47% of the bed capacity were concentrated in Kaafu Atoll. Half of the 20 atolls in the country did not have a resort situated within that atoll up to 2006. Currently, the government policy has been geared to having at least one resort situated in each and every atoll and the industry is going through a huge expansion phase.

Although fishing industry employed the sixth highest number of persons at the national level, it remains the third major economic activity in the atolls, providing livelihood for the majority of the atoll population. Among the males in the atolls, it employed the second highest numbers (19% of employed males) coming next to tourism. Fishing industry in the country operates as small-scale informal sector economic activity. Over a third of the fishermen (36%) operate as group workers, around one fourth as own-account workers and contributing family workers. The concentration of industries in the Atolls and Male' are quite different. "Agriculture and forestry", "Fishing" and "Quarrying" all the primary industries have over 90% representations in the atolls.

In order to see the industries that expanded over the 6 year period, in terms of creating employment opportunities for the local population, Employment in the "Wholesale and retail trade" industry grew at the fastest rate (12% per annum), followed by "Public administration and defense and other Community, social and personal services" (11%).

Employment in the "Manufacturing" industry grew at 10% per annum while "Agricultre" and "Construction" industrries grew at 9% and 8% respectively. Employment in the industries: "Fishing", "Transport storage and communication" and "Quarrying" declined during the period.

Expatriate labour working in the country is mainly concentrated in the construction industry (30 %) and tourist resorts (21 %), working in elementary jobs. Expatriate workers in the construction industry increased at alarmingly high rates during 2005 and 2006.

Looking at the occupations among the employed population, the occupation category "craft and related trade workers" employed the highest numbers (25,329 persons or 23 %) during the census reference week. This was also the highest in case of employed females (31%) and also for males (18%). Majority of these Craft and related trade workers were engaged in the manufacturing industry (67%) and the construction industry (18%).

The second highest occupational category was "Service workers, shop and market sales workers" which employed around half of those in the first category. (3,207 persons or 12%). These occupations were concentrated in the industries; Wholesale and retail trade (45%), Hotels and restaurants (26%) and Public administration and defence (18%).

Expatriate labour is mainly concentrated in elementary occupations (48% of employed expatriates), and shares 80% when locals are included. They were employed mainly in the industries: construction; community social and personal services and tourism. Elementary occupations were filled by only 20% of local population.

During the past 6 years (2000-2006) the largest number of jobs were created in the "Craft and related trade workers" occupational category with 10,842 of these jobs filled by locals and another 7,951 by expatriates. Jobs in this category grew at an average annual rate of 10% among locals adding 1,800 jobs per year while for expatriates it grew at 19% adding 1,325 jobs per year.

One third (32%) of the population 15 years and above population were not economically active during census 2006. The young age structure of the population explains one of the major factors for the high level of economically inactive persons, with half of them aged between 15-24 years, majority of them attending school. Composition of NEA persons by sex, shows that a much higher proportion (68%) of them were females.

Considering the high proportion of females among the inactive, data on time-use collected in the census was reviewed to see how they spent their time. It showed the not-economically active women spend on average, 7 hours per day on housework, equivalent to a full work-day of an employed person. Unless alternative support services (such as child care and care for elderly) are available in the market, at economical prices, reduction in these proportions of inactive women will not be possible. Support from families and time-off from non-economic work that occupies women's day within the household need to be freed to enable them to go out for work in the formal sector, that offers adequate remuneration.

One fourth (25%) of the employed persons worked less than 6 hours per day and hence can be considered underemployed.

Although housework is not considered an economic activity as per the census and other international definitions in this area, it adds to employed women's workload. When the total hours worked per day on all activities, economic and non-economic, the time spend by employed persons, males as well as females was on average 11 hours per day.

Over the years 2000 and 2006, dependency ratio improved substantially. At the national level it improved from 81 dependents per every 100 working-age person to 57, while in Male' it improved from 48 to 39 and in the Atolls from 97 to 69 dependents. As a substantial proportion of the working age population is not-economically active and out of the labour-force, and even among those in the labour force, a high proportion is unemployed, it is more meaningful to look at "economic dependency" (the ratio of those who are unemployed, not-economically active, children below 15 years and the elderly persons 65 years and over per employed person). It was observed that the economic dependency ratios are much higher. At the national level economic dependency improved from 225 dependents per every 100 employed person in 2000 to 172 dependents by 2006, while in Male' it improved from 174 to 151 and in the Atolls from 249 to 183 dependents per every 100 employed person. At the same time it is important to note that, under both the definitions, the dependency ratio has improved during 2000 and 2006.

In order to get an idea on the working –age population (locals) and the labour force (locals) in the medium-term, projections were made up to the year 2025. As per these projections, the working age population shows a steady increase in from 198 thousand in 2007 to 274 thousand by the year 2025, while the labour force show a steady increase in from 131 thousand in 2007 to 191 thousand by the year 2025.

In order to create adequate employment opportunities and maintain unemployment at reasonable levels, the country's economy needs to generate roughly 25 thousand jobs during the 5 year period 2006-2010.

As important as the numbers of jobs to be created are the answers as to which geographical regions/ islands it should be created, what industries, requiring what sorts of skills are to be targeted. All these employment requirements need very careful planning and skill development and support and initiatives from all the major players in the economy.

Glossary of terms:

Economically active population (currently active or the labour force)

The economically active population consists of all persons (15 years of age and over) who are either employed or unemployed, as defined below. Household chores such as preparing the food, cleaning the house, taking care of children, or collecting firewood for the use of the household, were not considered to be productive activities unless they were performed for pay.

Employed population

The employed comprises of all persons (15 years of age and over) who, during the reference week, were at work or with a job but not at work in paid employment or self-employment.

At work: persons in paid employment who during the reference week performed some work (at least one hour during the reference week) for wage or salary, in cash or in kind and persons in self-employment who during the reference period performed some work for profit or family gain, in cash and in kind.

With a job but not at work: persons, who are in either paid employment or self-employment, having already worked in their present job, were temporarily not at work during the reference period (due to sickness, leave, bad weather, etc) and has a formal attachment to their job. (as evidenced by eg: a continued receipt of wage/salary, an assurance of return to work following a short duration of absence). Persons with an enterprise (eg: a business enterprise, service undertaking etc), who were temporarily not at work during the reference period are also included in this category.

Labour force participation rate

Labour force participation rate is the number of economically active persons as a percent of the population 15 years of age and over. This represents the overall extent of participation of the population in economic activity.

Unemployed population

The unemployed comprises of all persons (15 years of age and over) who, during the reference week, were without work and available and seeking for work in paid employment or self-employment. Persons who were not working during the census reference period for the reasons "unable to find a suitable employment" and "lack of employment opportunities" were classified as unemployed, even though they were not seeking and available for work.

Without work: persons who during the reference week were not in paid employment or self-employment as defined above.

Currently available for work: were available for paid employment or self-employment during the census reference period.

Seeking work: took specific steps during the reference week to seek paid employment or self-employment.

Unemployed population: Unemployed persons in 2006 are those seeking and available for work during the census reference period.

Note: Definition of unemployed population from Census 2000 has been adjusted in this document to make in comparable with the 2006 definition. It is adjusted to include persons who were previously classified as NEA for the reasons: "not able to find work at current place of residence", "unable to get any type of work" and "unable to get work appropriate to the person's educational attainment".

Unemployment rate

Unemployment rate is the number of unemployed persons expressed as a percent of the economically active population.

Under-employment

In this paper underemployment is defined as the proportion of employed persons who worked for less than 30 hours during the reference week expressed as a percent of the economically active population.

Not economically active population

The not economically active population comprises all persons (15 years of age and over) who, during the reference week, were without work, and were not available for work and not seeking for any work, due to reason such as being old, sick or disabled, being in school, being homemakers and being income recipients.

Persons who were not working during the census reference period for the reasons "unable to find a suitable employment" and "lack of employment opportunities" were classified as unemployed in census 2006.

Note: Definition of not economically active population from Census 2000 has been adjusted in this document to make in comparable with the 2006 definition. It is adjusted to exclude persons who were previously classified as NEA for the reasons: "not able to find work at current place of residence", "unable to get any type of work" and "unable to get work appropriate to the person's educational attainment". This adjustment included these discouraged workers under unemployed.

Industry

Industry refers to the activity of the establishment in which an employed person worked during the reference week. For purpose of international comparisons 'The International Standard Industrial Classification of all Economic Activities (ISIC) 'is recommended. The most recent revision of ISIC (Rev. 3) was used for coding and tabulating the 2000 census data.

Occupation

Occupation refers to the type of work done during the reference week by the employed person at the primary job or type of work in which the person worked most of the time during the reference week. For purpose of international comparisons 'The International Standard Classification of Occupations (ISCO) 'is recommended. The most recent revision (ISCO-88) was used for coding and tabulating the 2000 census data.

Status in Employment

Status in employment refers to the status of an economically active person with respect to his or her work or employment. The employed population was classified by status in employment in census 2000 as follows: (a) employees (b) employers (c) own-account workers (d) family worker

Institutional Sector of Employment or type of establishment

The institutional sector of employment refers to the legal organization and principal functions, behavior and objectives of the enterprise with which a job is associated. The following institutional sectors were identified in the census: corporation, general government, non-profit institution, unincorporated establishment, work at home, and no fixed place of work, National Security Service and Police.

Dependency ratio

A common practice in demographic analysis of manpower is the calculation of a dependency ratio from the population age statistics without regard to actual participation in economic activities. That is by considering all persons between the age of 15-64 as producers and all those in younger and older age groups (< 15 years and 65+) as dependents.

Economic dependency ratio

Economic dependency is in terms of the number of dependents (those who are unemployed, not-economically active and also those below 15 years and the elderly persons 65 years and over) per employed persons.

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1. Introduction

A household refers to a unit where people live within the same arrangement socially and economically. Usually a household comprises of a group of people sharing a living room and main meals together. The occupants may be a single family, two or more families living together, one person living alone, or any other group of related or unrelated persons who share living arrangements. Those people whose sleeping arrangements are different from where they take their meals are counted as part of the household where their sleeping arrangements are made. Those people who take their meals from various places are counted as part of the household where their sleeping arrangements have been made.

In the 2006 Census, a total of 46,194 households were enumerated out of which 14,107 households were in Male' and the remaining 32,087 in the atolls. This chapter attempts to analyze the census data on family size and structure, gender, marital status, number of children, education and employment status of household heads and the living arrangements of children and the elderly. An attempt has been made to compare the 2006 Census with previous censuses wherever possible.

2. Household size

In 2000 Census, 40,912 households were enumerated with a total population of 270,101 and in 2006 there were 46,194 households with a total population of 298,968. There were 9,700 households in Male' in 2000 and this number increased to 14,107 in 2006. In the atolls the total number of households was 31,212 in 2000 and it increased to 32,087 in 2006. The 2006 Census shows that one third of the population is concentrated in the urban centre (Male'). Census data shows that the influx of migrants to Male' is highest compared to all the other atolls in the Maldives (MPND, 2005). The sharp increase in the number of households in Male' between 2000 and 2006 could be due to this factor.

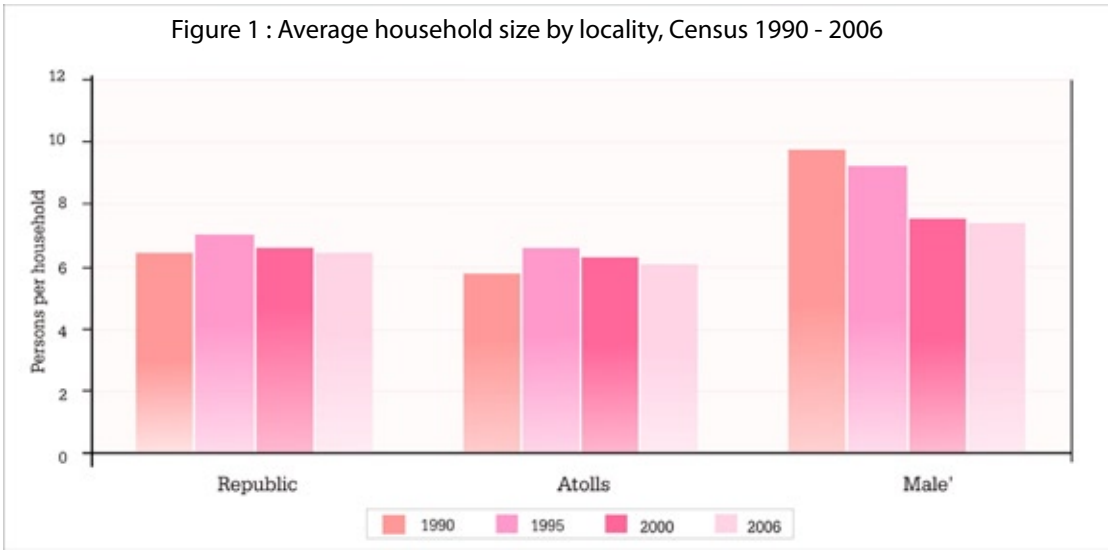
Household size is calculated by taking the population residing in that locality and the number of households in that locality. As shown by Table 1 the average household size for the whole country is 6.5 people per household. The average household size for Male' is higher than the national average, at 7.4 people per household, while for the atolls it is 6.1 people per household

Table 1 : Average household size by locality, Census 1990 - 2006

Year	Republic		Atolls		Male'	
	Household no:	Household Size persons per HH	Households	Household Size	Households	Household Size
1990	32,941	6.5	27,288	5.8	5,653	9.8
1995	34,435	7.1	27,677	6.6	6,758	9.3
2000	40,912	6.6	31,212	6.3	9,700	7.6
2006	46,194	6.5	32,087	6.1	14,107	7.4

When comparing the change in average household size between the inter-censal periods, it can be seen that there has been a slight decrease in the household size between 2000 and 2006. The average household size for the Republic dropped slightly from 6.6 to 6.5, while in the atolls the value dropped from 6.3 to 6.1 and in Male' from 7.6 to 7.4.

Figure 1 : Average household size by locality, Census 1990 - 2006



3.Household type

Households were classified into eight main categories in the Population and Housing Census 2006. These classifications and their definitions are stated below.

1. Living quarters: A living quarter refers to houses, flats, apartments, and other similar types of places that have been made only for living purposes.

2. Collective living quarters: Collective living quarters are those places that have been established in such a way that enables a number of people to live together. Usually services such as common bathrooms, kitchens and dining are arranged within these quarters. Examples include hostels, labour quarters, factories, guest houses and resorts.

3. Establishments: Establishments refer to those places that have been established for an economic purpose but are being used for sleeping by individuals. Examples include garages and cafés.

4. Institutions: Institutions refer to a facility containing one or more group quarters where people live or stay under supervision over a period of time. Institutions include rehabilitation centers, hospitals or jails.

5. Temporary shelters: Temporary shelters are those places such as tents and shelters that have been set up for the Internally Displaced Population (IDP's) after their own homes were destroyed by the Tsunami of 2004 December.

6. Permanent New housing: These housings refer to the newly brought up permanent houses for the IDPs living purpose after the Tsunami.

7. Mobile Units: Mobile units refer to containers and vessels which could be taken from one place to another. Examples include dhonis, boats, fishing vessels and tents.

8 Others: Any other place which was used for a living purpose during the Census 2006 would come under this category. For instance if a person has his sleeping arrangements made within a place that was under construction during the time of the Census, it would be identified under this category.

As seen from the Table 2, majority of the population lived in living quarters such as houses, flats, apartments or in other similar type of places that have been made only for living purposes. Approximately 90 percent of the population is living in such quarters. There are more people living in houses, apartments or flats in the atolls when compared to Male'. Furthermore, collective living quarters such as resort labour quarters and institutions such as the drug rehabilitation center and the jails are located outside Male', thus explaining the significant gap between people living in collective living quarters in Male' and in the atolls.

Table 2 : Population classified according to household type by locality, 2006 Census

	Total	Living quarter (house/flat/apartment/rooms)	Collective Living quarter	Establishment	Institution	Temporary shelter	Permanent new housing (tsunami)	Mobile units	Other	Not Stated
Republic	298,968	270,018	8,420	1,017	736	5,430	221	2,132	340	10,654
Male'	103,693	94,408	1,231	49	4	54	7	1,285	13	6,642
Atolls	195,275	175,610	7,189	968	732	5,376	214	847	327	4,012

The catastrophic tsunami which destroyed several islands in December 2004 left 8000 homes damaged and 29,000 (10 percent of the population) displaced. According to the 2006 Census, there are 5,376 people living in temporary shelters and 214 people living in permanent new housing provided by the government and other foreign aid agencies within the atolls. This number is much

less when compared with Male', where only 54 people live in temporary shelters and 7 people live in permanent new housing granted after the tsunami.

Male' being the urban centre of the country, houses a large number of mobile units such as dhonis, fishing vessels and speed boats. Most of these people arrive in Male' for various economic reasons such as selling fish, agricultural products or purchasing goods to be taken back to their islands. They are likely to take their meals from small cafés (referred by the locals as hotels) and have their sleeping arrangements made on these mobile units.

4. Household head

The household head is responsible for making all the decisions within that household although he/she is not necessarily the main income earner of the household. The household head is any member of the household, whether male or female, who is acknowledged as such by the other household members. For example, a household is sometimes headed by a female if her husband works and resides in a nearby resort. This female is therefore not the bread winner but an absent husband requires her to make the household decisions and as a result she is seen by the other members as the head.

This part of the analysis will explore household heads with respect to their gender, marital status, educational qualifications and employment status. In this chapter, household heads are classified as below.

- Head of the Household: HHH
- Female Headed Households: FHH
- Male Headed Households: MHH
- FHH1= with no migrants
- FHH2= never married, divorced or widowed

4.1 Household heads classified by sex

Figure 2 shows household heads classified by sex and locality according to the 2006 Census. As seen from the figure, Male Household Heads (MHH) are predominant throughout the country. For the Republic, 56 percent of the household heads are male while 44 percent are female. The proportion of the Female Household Heads (FHH) in 2000 Census was 46 percent.

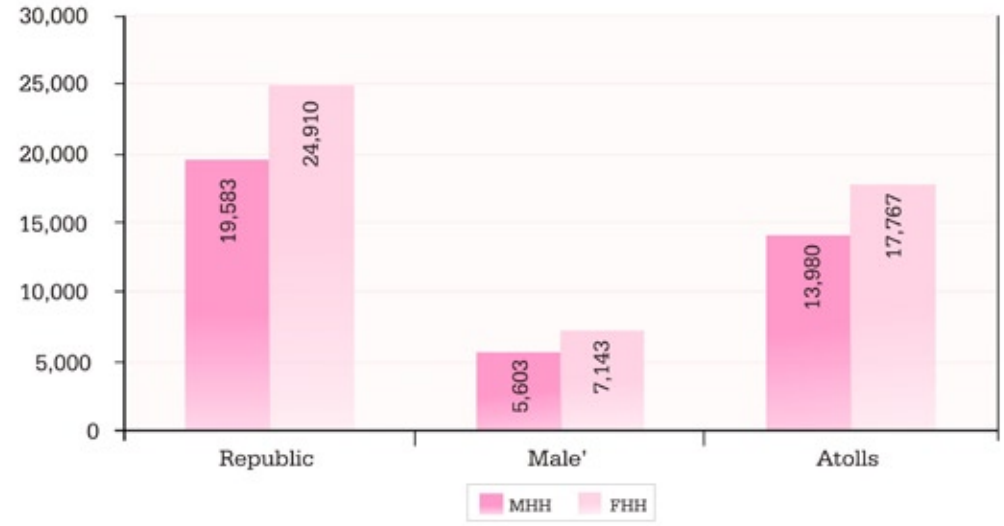
As highlighted earlier in the chapter, many FHH are created due to the absence of their husbands for reasons of employment. The unique geography of the country coupled with major transportation difficulties results in a majority of the people working outside their islands having to reside in their workplace. For instance, due to transportation constraints people working in nearby resorts have to reside there, even if their island of residence is within the same atoll. Furthermore, many people migrate to Male' seeking better employment opportunities. According to the Migration Survey conducted by MPND in 2005, employment is the second major pull factor of the migrant population

to Male' after Education. In this survey, 24 percent of the migrants reported employment as their primary reason for migration. This therefore creates many female headed households under international definitions, as the main bread winner is working outstation.

It is presumed that those households headed by a female would be less prosperous given that females usually occupy jobs within the lower wage bracket. However, those households which are headed by a female due to an absent breadwinner would not have to face the financial limitations as by other female headed households.

Another possible factor relating to the increased number of female household heads is divorce. According to the 2006 Census, Five percent of the FHH are divorced. Furthermore, a similar percentage is seen in the number of widowed.

Figure 2 : Households heads classified by sex & locality, Census 2006

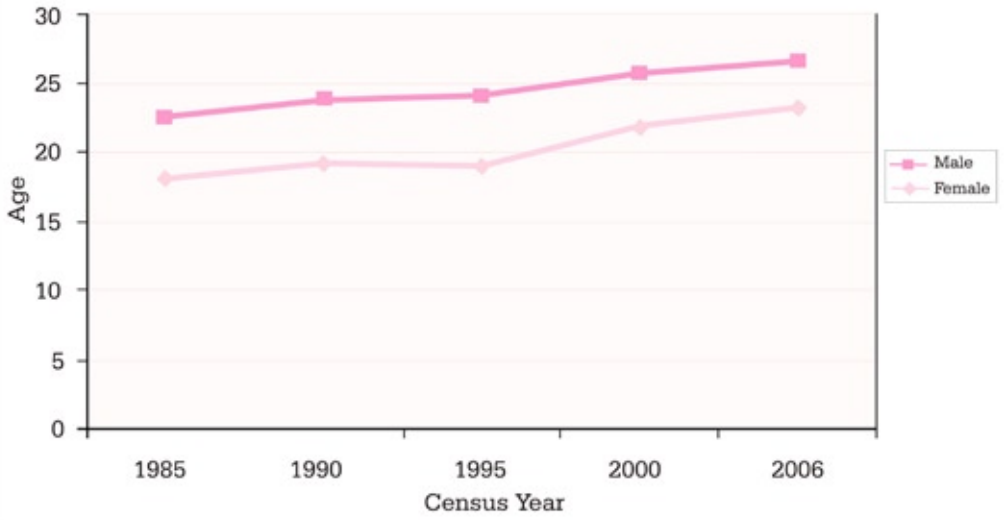


4.2 Marital status of household heads

The period prior to marriage has extended compared to traditional times, where people got married as young as 9 years of age. After the Family Law came into effect on 1 July 2001, the minimum legal age of marriage was set to 18 years. The new Family Law, along with improved access to education across the country has increased the average age at first marriage of the population, especially the female population.

Figure 3 shows the Mean Age of First Marriage (MAFM) for males and females from 1985 to 2006 Censuses. The graph shows that the MAFM has gradually increased over the years for both sexes. In 1985 the MAFM was 22.51 (males) and 17.99 (females). These figures increased to 26.54 (males) and 23.08 (females) in the 2006 census.

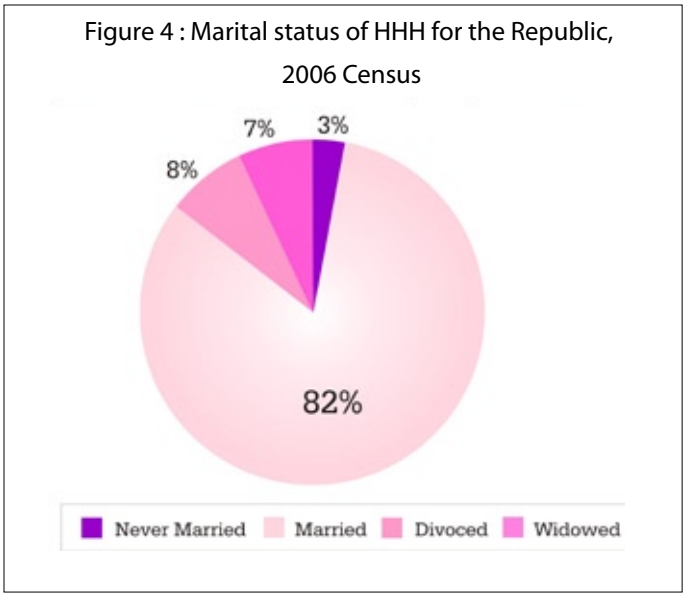
Figure 3 : Mean age of first marriage by sex, 1985 to 2006 Census



The new Family Law specifies many rights available to women in the Shari'a, such as pre-nuptial agreements to ensure the rights of both parties within the marriage. Pre-nuptial agreements can also lay the foundation for protection of the rights of women in case of unwarranted divorce and polygamy (MGF 2006). Maldivian men, under Shari'a, are allowed to have four wives at the same time. According to the 1995 Census, one in eleven married men reported having more than one wife. This question was not asked in the consecutive censuses thus hindering this analysis.

The majority of the household heads are married in the Maldives despite their sex. According to the social values and norms, there are certain traits that are expected of a household head. Being married is one such characteristic. Figure 4 shows that a remarkable 82 percent of the household heads in the Republic are married. Interestingly, only 3 percent of the household heads have never been married.

Figure 4 : Marital status of HHH for the Republic, 2006 Census



Divorce is a common social problem in the Maldives. Today, the law criminalizes impulsive and unilateral divorce by husbands. Divorce is possible only through the court system, and is allowed only if the efforts to reconcile undertaken by the arbitrators has failed. Moreover, both parties are allowed to initiate divorce within the existing system and may go through this procedure to affect a divorce (MWASS 2003).

Comparison of marital status by gender of household head

In this part of the analysis, the marital statuses of the household heads are further classified according to their gender. Figure 5 and 6 show the marital status of FHH and MHH for the Republic, for 2006 Census. The overall trend is similar for both FHH and MHH but there are some noteworthy differences. It was found that more MHH are married than FHH. Approximately 90 percent of the MHH are married, while 74 percent of FHH are married. On the other hand, 12 percent of FHH are divorced while only 4 percent of MHH are divorced.

The average life expectancy at birth for males is lower than females in the Maldives. According to 2006 Census, the average life expectancy at birth for a male is 72 years while for a female it is 73 years. According to the figures, 12 percent of the FHH are widowed while merely 3 percent of the MHH are widowed.

Figure 5 : Marital status of FHH for the Republic, 2006 Census

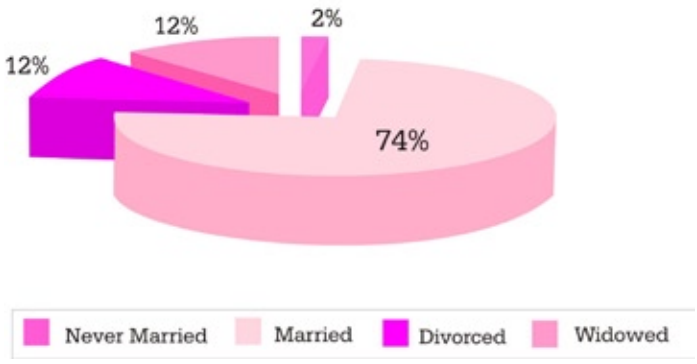
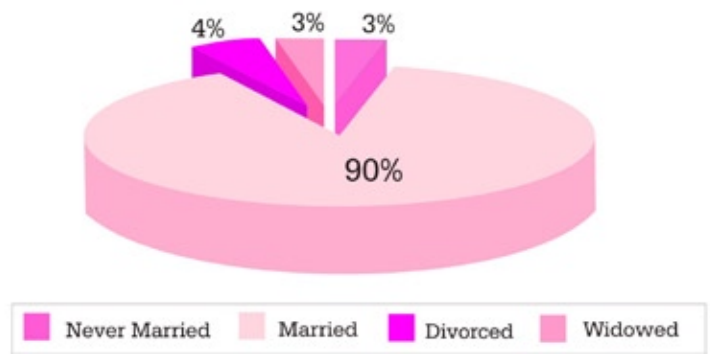


Figure 6 : Marital status of MHH for the Republic, 2006 Census



In line with Maldivian and Islamic traditions and culture, males play a more dominant role in family and in society. In the absence of a father figure, a male member of the household usually takes up the responsibility of looking after the members of the household, including children and the elderly, despite their marital status. In recent times, with changes in educational attainment, lifestyle and enhanced awareness, both females and males are found playing the role of the household head on an equal basis, even though they have never been married. Figures 5 and 6 show that 3 percent of the MHH have never been married compared to 2 percent of the FHH.

4.3 Fertility of female household heads: number of live births for female household heads

In the 2006 Census, female respondents were asked to report the number of live births they delivered throughout their reproductive life. The World Health Organization's definition of a live birth states that "A Live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life such as heartbeat, umbilical cord pulsation, or definite movement of voluntary muscles, whether the umbilical cord has been cut or the placenta is attached"(Geneva Foundation for Medical Education and Research, 2007).

It was found that a majority of the FHH have had a live birth during their lifetime. As seen from Figure 7, exactly 17,866 female heads (92 percent) had given a live birth while 1,028 FHH (5 percent) did not have a live birth.

Figure 7 : FHH who had a live birth, Republic, 2006 Census

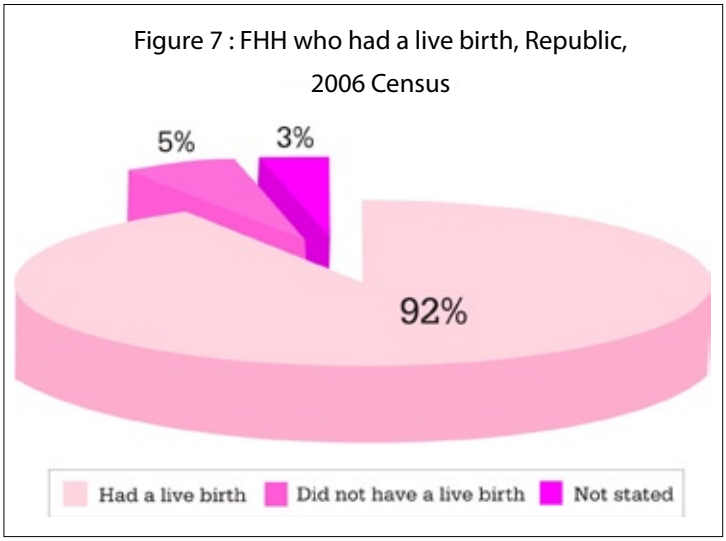


Table 4 shows the classification of household heads that had/did not have a live birth by sex and locality. Of the 19,583 female household heads in the nation 17,866 heads (91.2 percent) had given a live birth. It was found that there are more FHH who have had a live birth in the atolls (92 percent) when compared with that of Male' (88 percent). Similarly, 8 percent of the FHH in Male' did not have a live birth, while in the atolls this figure is at 4 percent. One possible explanation for this could be the difference of education level.

According to the Reproductive Health Survey (2004), the age of first marriage among female respondents who had received education through formal schooling was higher than that of women who had received no education or only non-formal education. Formal education delays age of first marriage, child birth and hence the number of children a woman delivers in her lifetime. With geographical constraints and the widely dispersed nature of the population, challenges are faced in providing secondary education to smaller islands.

Table 3 : Age of first marriage & Education of women (2004)

Education	No. of Women	Age of First Marriage	
		Mean	Median
Primary & Above	1657	19.1	19
None of non-Formal	1034	17.2	17

Source: Reproductive Health Survey, Ministry of Health, 2004

Table 4 : Classification of HHH who had / did not have a live birth by female & locality, 2006 Census

	Republic	Male'	Atolls
Had a live birth	17,866	4,948	12,918
Did not have a live birth	1,028	466	562
Not stated	654	177	477
Not applicable	24,945	7,155	17,790
Total	44,493	12,746	31,747

4.4 Education level of household heads

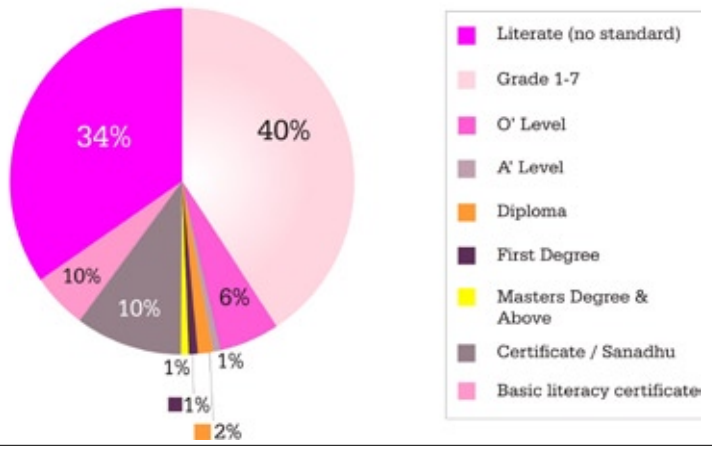
Education level is an important social indicator while analyzing the characteristics of the household heads. Maldives achieved Universal Primary Education in 2002. According to the 2006 Census 98 percent of the children aged 6-12 years were attending school. With this achievement, the government is working towards 10 years of universal basic education by 2010 and improving the quality of education given.

Maldives has traditionally given much emphasis to education. The Maldives has the highest literacy rate among the SAARC countries (SAARC Regional Poverty Profile, 2005). The current literacy rate for the Maldives is 98 percent.

Education level of a person is very likely to influence his/her age of first marriage, number of children, employment status and standard of living. Figure 8 shows the classification of HHH according to their level of education for the Republic during the Census 2006. The majority of the HHH in the nation have completed Grade 1-7. Approximately 40 percent of the HHH have attained an education between grade 1 and 7. The next prevalent majority are those classified as literate

The figure shows that 34 percent of the household in the Republic are able to read and write, but do not have any recognized academic qualifications. Following this group are those heads having a certificate or sanadhu. Approximately 10 percent of the HHH in the Republic have attained a certificate/sanadhu while five percent have attained a basic literacy certificate. Furthermore, there are more HHH who have completed their O'levels than A'levels. While six percent of the HHH report to have completed their O'levels only one percent has completed their A'levels. It is noteworthy that the percentage of HHH who report to have attained higher education decreases as the level of education increases. Only two percent of the HHH reported to have attained a diploma while the percentage for first degrees and masters degree and above are both one percent each.

Figure 8 : Classification of HHH according to education level, Republic, 2006 Census



For further analysis the education level of household heads within Male' and the atolls must be examined. Table 5 classifies the HHH according to their education level by locality and sex. Major findings are noted following the table.

Table 5 : Classification of HHH according to education level, by sex & locality, 2006 Census

	Republic		Atolls		Male'	
	Female	Male	Female	Male	Female	Male
Grade 1-7	8,491	8,571	6,390	6,455	2,101	2,116
O' Level	953	1,370	308	338	645	1,032
A' Level	65	174	8	29	57	145
Diploma	211	459	23	109	188	350
First Degree	44	240	6	39	38	201
Masters degree & Above	48	175	-	20	48	155
Certificate / Sanadhu	1,375	2,815	723	1,760	652	1,055
Basic Literacy certificate	1,207	1,027	1,043	896	164	131
Literate (no standard)	6,149	8,536	4,989	7,389	1,160	1,147
Not stated	321	484	265	438	56	46

- Household heads both male and female, are more educated in the capital Male' when compared with the atolls.

- In the atolls, the majority of the MHH are literate (with no standard). Majority of the FHH have completed primary schooling or Grade 7. There are more FHH with basic literacy certificates when compared with MHH. The number of FHH and MHH who have completed O'levels are almost the same.

- In Male', the majority of the household heads has completed primary schooling, despite their gender. The next largest majority are literate but with no academically recognized standard. MHH in Male' appear to be more educated than FHH thus showing prevalence in most higher education categories. More MHH have attained O'levels, A'levels, diplomas, first degrees and masters' degrees while FHH are more frequent in the basic literacy certificate and literate classification groups.

- There is a significant difference between MHH and FHH in higher education in both Male' and the atolls. While 155 MHH in Male' reported having attained an education level of Masters Degree and above, only 48 FHH in Male' report the same. Similarly, 20 MHH in the atolls have attained a Master's Degree or above while none of the FHH in the atolls has attained such qualifications.

- More FHH appear to have achieved basic literacy certificates both in Male' and the atolls.

4.5 Employment status of household heads

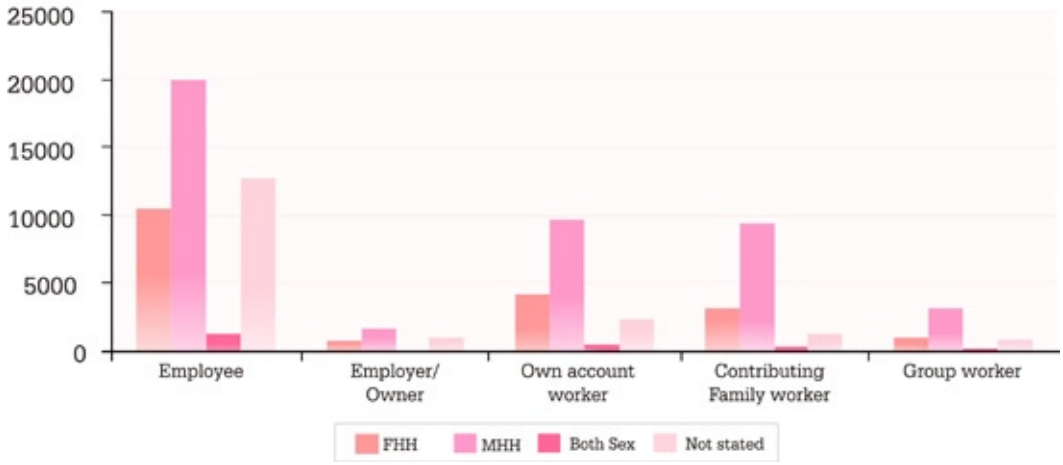
Traditionally, men went out to work and earned a living while women stayed at home and looked after the household. However, with improved access to education and changes in lifestyles and beliefs, more and more women are actively taking part in economic activities.

Many women did not consider themselves as economically active, despite earning money through various income generating activities. Some housewives earned money by sewing, embroidery, baking cakes, making short eats or a similar domestic activity. The money they make from these activities is usually not enough to support the expenses of the entire household. Therefore, these women do not consider themselves as economically active and report as being inactive. On a similar note, some housewives also produced goods such as rihaakuru (local fish paste) or curry powders for domestic use which would otherwise have to be purchased by the household.

Employment Type

Figure 9 shows the employment type of HHH classified by sex for the Republic. According to Figure 9, majority of the HHH in the Republic are employees (52 %). Number of household heads that are own account workers are 20 percent while contributing family workers are 17 percent. Household heads who are owners/employers (4 %) makes the smallest group in the Republic. Moreover, MHH dominate FHH in all the sectors.

Figure 9: Employment status of HHH by sex, 2006 Census

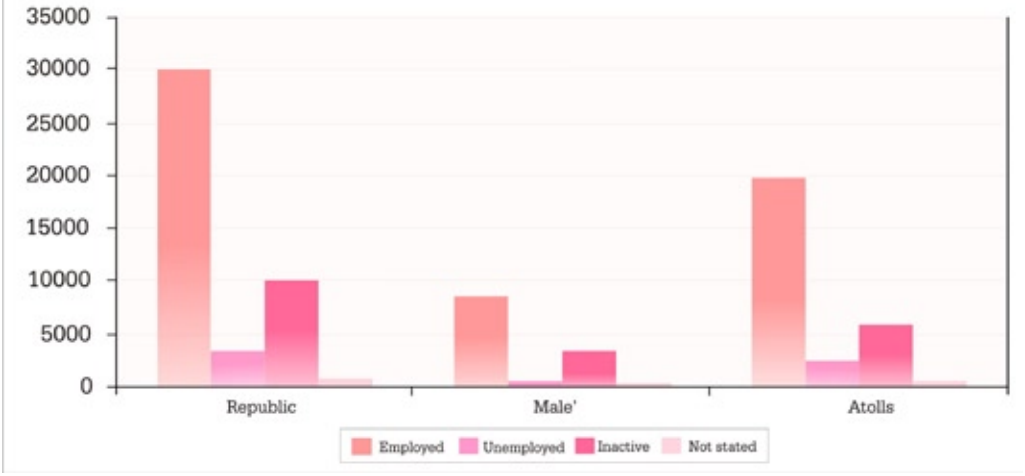


Labour Force Participation Rate and Unemployment Rate of HHH

There is a huge discrepancy between males and females in terms of Labour Force Participation Rate (LFPR). The LFPR for the nation in 2006 is 62.6 percent. Of this males make up 73 percent and women 52 percent.

Unemployment Rate is the percentage of the population that seeks work but is unable to find employment at that given time. The Unemployment Rate for the Republic is 14.4 percent in 2006. The Male Unemployment Rate was 7.9 percent and Female Unemployment Rate was 23.7 percent. Unemployment is a pressing issue in the Maldives. However, majority of the unemployment is voluntary. Figure 10 show the employment status of HHH by locality for the 2006 Census. Over 30,000 HHH in the Republic is employed while 3,510 HHH are unemployed and 10,172 are inactive.

Figure 10 : Employment status of HHH by locality, 2006 Census



For further analysis the employment status of FHH and MHH in the Republic are shown below in Figure 11 and Figure 12.

Figure 11 : Employment status of FHH, 2006 Census

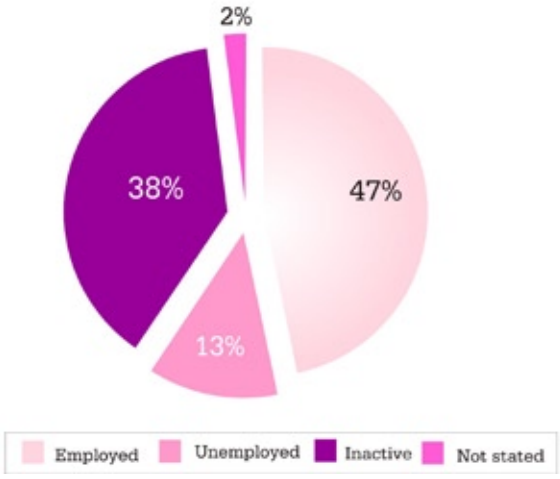
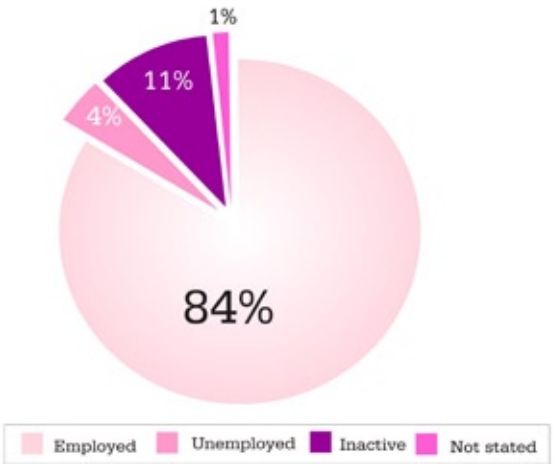


Figure 12 : Employment status of MHH, 2006 Census



As per the figures 10 and 11, majority of the HHH are employed. However, there is a significant gap between the employment status of MHH and FHH. The percentage of employed MHH is 84 percent while this figure for FHH is 47 percent. The percentage of MHH who are unemployed but seeking work is four percent, while this value for FHH is 13 percent. This indicates that there are more female heads who are seeking work but unable to get a job. Although there is no discrimination against gender when giving jobs, the percentage of FHH who are unemployed might be more due to the type of job available. On the other hand, 38 percent of the FHH are economically inactive while only 11 percent of the MHH fall into the same category. This could be due to several reasons. First, a female maybe the head of a household due to the absence of their husbands for reasons of employment. The absence of the breadwinner creates an economically inactive female head that does not face any financial strains. Second, upon divorce women usually move in with their families. In other cases, if a woman gets custody of any children from the marriage, the husband usually provides financial assistance to the woman and children. A divorced woman may therefore head a household, but is financially supported by her family members or ex-husband. Widowed FHH are usually supported financially by her children or other family members. All these reasons may account for the large number of FHH who are economically inactive.

Figure 13 : Employment status of FHH, by locality, 2006 Census

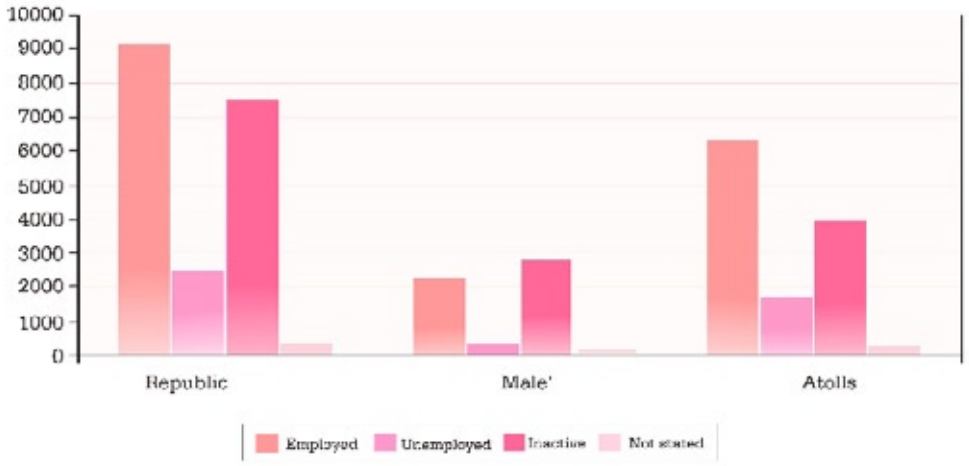
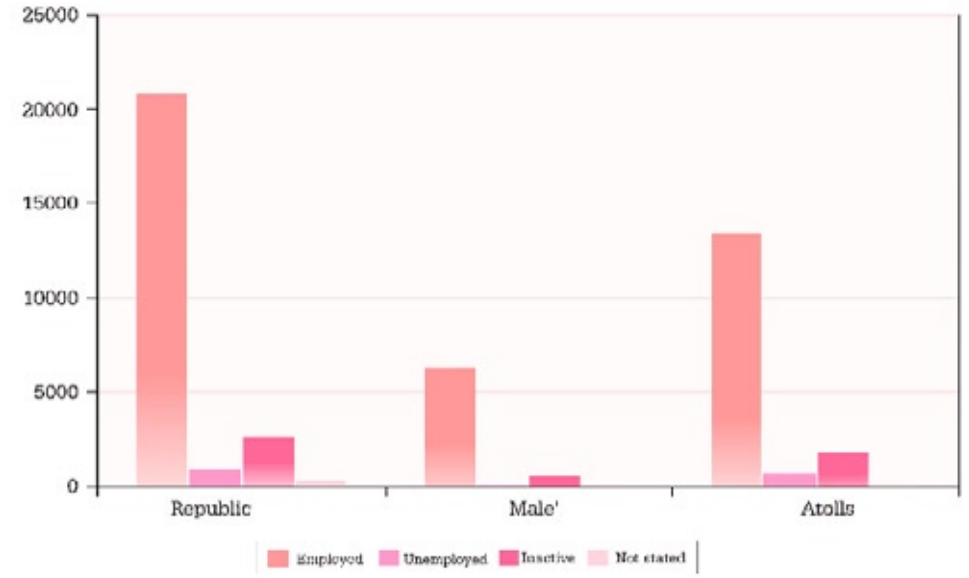


Figure 14 : Employment status of MHH, by locality, 2006 Census



5. Household ownership

Housing is a serious problem that needs urgent attention in the Maldives. More than one third of the population lives in the capital Male' making it heavily congested. The development of Villingili and Hulhumale' brought some relief to the capital but did not solve the predicament. Moreover, a significant proportion of the population lives in rented places. It is quite common to find several households living in a single rented housing unit, thus creating many social problems such as divorce and abuse. The table below gives the household ownership classified by locality and sex for 2006. Ownership is usually held by males throughout the nation. Significant differences can be seen in the proportion of male owners and female owners. For instance, of the 46,194 households in the Republic, 22,949 are owned by males and 10,973 owned by females. Only 1,093 are owned by both males and females.

Table 6 : Household ownership classified by locality & sex, 2006 Census

Locality	Total no. of Households	Ownership			
		Female	Male	Female & Male	Not Stated
Republic	46,194	10,973	22,949	1,093	11,179
Male'	14,107	2,700	3,385	211	7,811
Atolls	32,087	8,273	19,564	882	3,368
Ha	2,425	567	1,633	45	180
Hdh	2,988	592	2,174	34	188
Sh	2,099	372	1,571	40	116
N	1,811	384	1,245	65	117
R	2,538	657	1,360	55	466
B	1,552	311	1,039	70	132
Lh	1,449	331	896	47	175
K	1,526	279	897	55	295
Aa	774	226	449	25	74
Adh	1,060	394	511	41	114
V	260	69	151	7	33
M	793	159	455	22	157
F	567	222	245	57	43
Dh	768	167	421	61	119
Th	1,454	332	718	21	383
L	1,970	449	1,205	57	259
Ga	1,472	329	938	88	117
Gdh	2,145	633	1,289	25	198
Gn	1,332	539	720	17	56
S	3,104	1,261	1,647	50	146

The following figures show the percentage of people living in rented places, housing units owned by members of the household and others by locality. Figure 15 show that 76 percent of the population lives in a unit that is owned by a member of the household. 14 percent lives in rented places while six percent lives in other types of households. There are interesting differences for these figures between Male' and the atolls. In Male', 46 percent of the people live in a unit that is owned by a member of that household while a striking 42 percent live in rented places. On the other hand, in the atolls 90 percent of the people lives in a unit owned by a member of that household and only one percent lives in rented places.

Figure 15 : Household ownership for Republic, 2006 Census

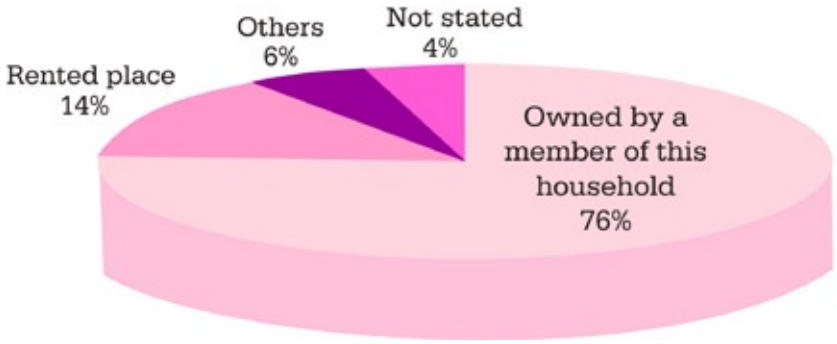


Figure 16 : Household ownership for Male', 2006 Census

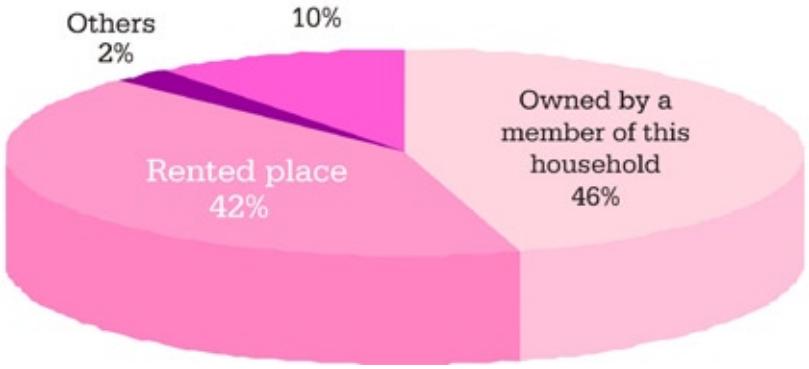
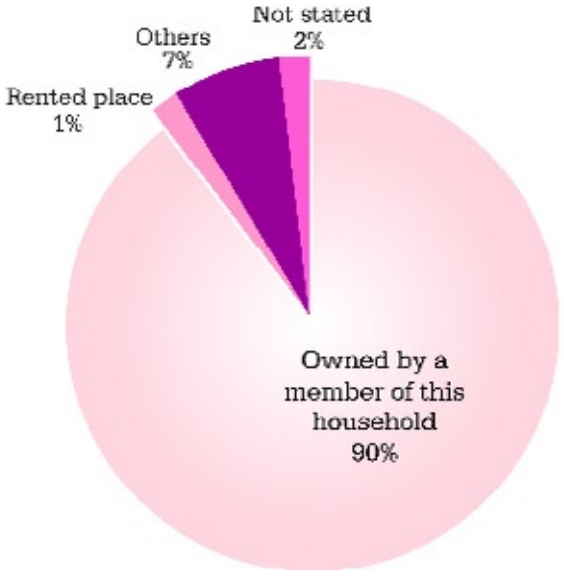


Figure 17 : Household ownership for the Atolls, 2006 Census

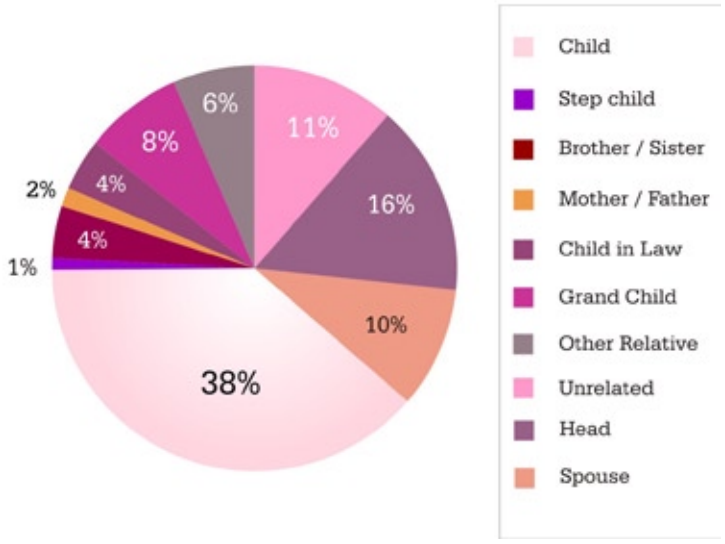


6. Relation to household head

A typical household in Maldives is comprised of the head, spouse of the head, children, brother or sister, sister/brother-in-law, children-in-law, mother or father and other relatives. In a Male' household it is common to find people with no family relationships as members of the household. Male' households usually take in students from the atolls based on friendship. Similarly, many employed people belonging to the atolls reside with friends in Male'.

Figure 18 shows how the population is divided according to their relation to the HHH. The population is divided into ten main classifications. They are unrelated, head, spouse, child, step child, brother/ sister, mother/father, child-in-law, grandchild and other relative. In the Republic, 38 percent are the children of the HHH, making up the majority. People who are unrelated to the head fill up the next majority. While 10 percent of the population is the spouse of the head, 11 percent of the people are not related to the head. Grandchildren make up 8 percent and other relatives make up 6 percent. The least common relation is step children who are only 1 percent.

Figure 18 : Relation to HHH, Republic, 2006 Census



Some notable differences can be identified between Male' and the atolls in relation to the HHH. In Male' 32 percent is the children of the head, while in the atolls this figure is 41 percent. People who are unrelated to the head are more common in Male' than in the atolls. In Male' 14 percent of the people is unrelated to the head, while in the atolls this value is 10 percent. Similarly, other relatives makes up 11 percent in Male' and for the atolls this figure is just four percent. Furthermore, it is more common that the extended family lives together as a single household. Brothers and sisters of the head make up seven percent in Male' while in the atolls they make up three percent.

Figure 19 : Relation to HHH, Male', 2006 Census

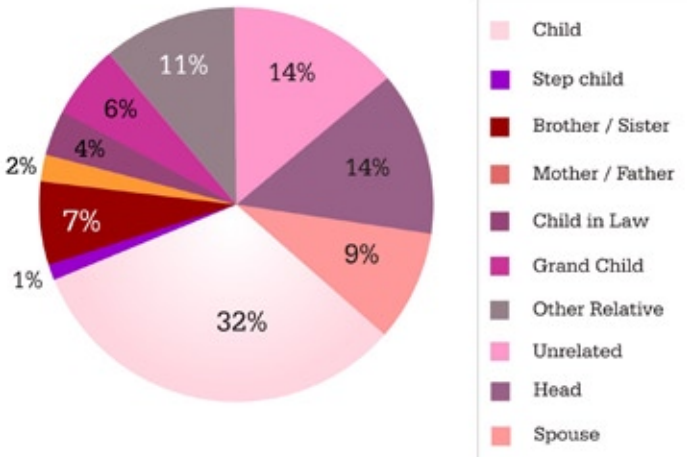
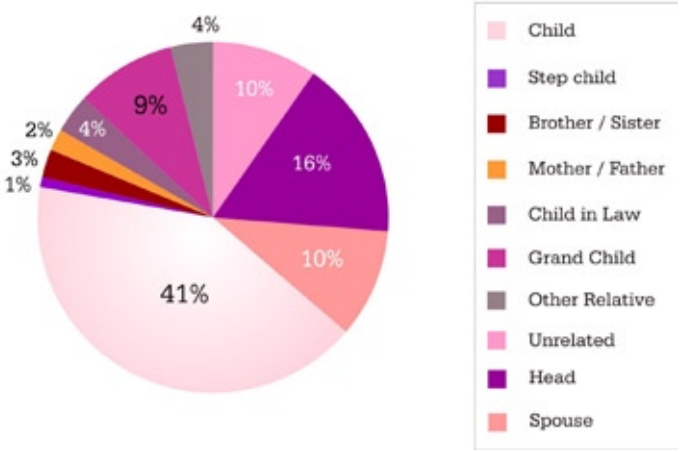


Figure 20 : Relation to HHH, Atolls, 2006 Census



7. Children's living arrangements

The population under 18 years of age is taken as children under the Maldivian Law. The population under 18 years of age is not permitted to get married or have a driver's license. The minimum legal age to vote was decreased to 18 years in 2007. Unlike the west, children do not necessarily leave their families once they complete their education, nor do they move elsewhere seeking job opportunities.

As shown in the table below, the total population under 18 years of age for the Republic is 117,362. This is 39 percent of the total population. Out of this, 33,661 or 11 percent lives in the capital Male' while 83,701 or 28 percent live in the atolls.

Table 7 : Living arrangements of population below 18 years by locality, 2006 Census

	Total	With Both Parents	With Mother & Step father	With Father & Step mother	Only with Mother	Only with Father	Other Relatives	No Family Relationship	Not Stated
Republic	117,362	83,760	2,312	727	7,289	782	5,001	2,075	15,416
Male'	33,661	19,525	557	217	2,346	232	2,846	941	6,997
Atolls	83,701	64,235	1,755	510	4,943	550	2,155	1,134	8,419

Figure 21 below shows the living arrangement of the population under 18 years of age for the Republic according to the 2006 Census. According to the figure, a significant 82 percent of children in the Republic live with both parents, thus conforming to the deep rooted Maldivian traditions. Divorce, as mentioned before, is common in the Maldives and it is common practice that children continue to live with their mother after their parents divorce. According to the 2006 Census, seven percent of the children live only with their mothers, while only one percent lives with their fathers. Similarly, two percent of the children live with their mother and step father while only one percent lives with their father and step mother. Furthermore, children often have to live away from their parents for reasons of education. Some of the islands cater up to grade 10, while some cater only up to grade 7. Therefore, children from the atolls usually has to move to other islands or to Male'in order to continue their education. These children usually reside with a family member or relatives, while other children with no such family connections available reside with friends or even with strangers. According to the 2006 Census, five percent of the children live with relatives while two percent live with people with whom they do not have a family relationship.

Figure 21 : Living arrangement of population under 18 years of age for the Republic, 2006 Census

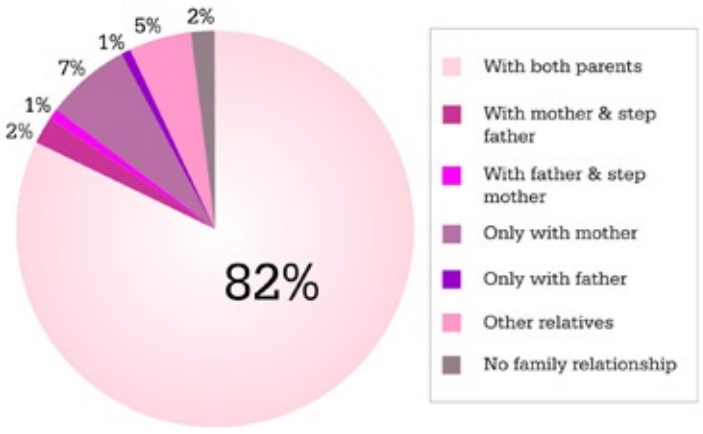
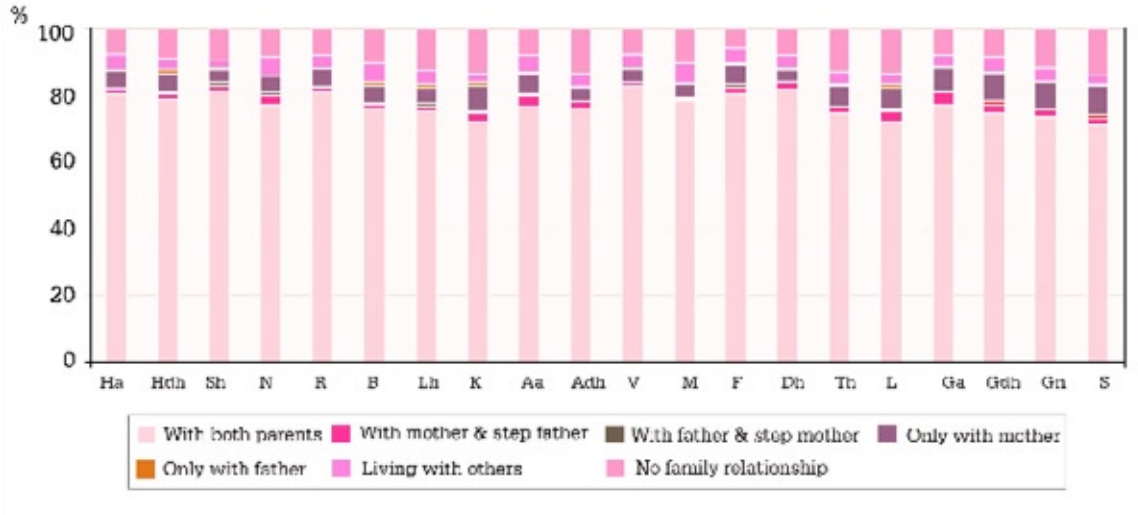


Figure 22 : Living arrangement of popoualtion under 18 years of age by locality, 2006 Census



8. Elderly living arrangements

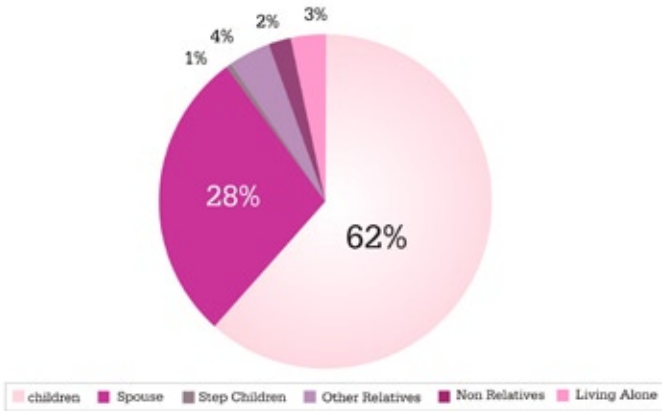
The Maldives has a very small elderly population when compared with the youth population. As shown by the table below, the population aged 65 and above in the Republic is 13,944 or five percent of the total population. There are more elderly men than elderly women. Out of this, only 2,790 elders (1 %) live in the capital Male', while 11,154 elders (4 %) live in the atolls.

Table 8 : Population above 65 years classified by locality & sex, 2006 Census

	Republic	Male'	Atolls
Both Sexes	13,944	2,790	11,154
Male	7,790	1,361	6,429
Female	6,154	1,429	4,725

Figure 23 shows the living arrangements of the elderly population for the Republic. According to the figure, 62 percent of the elders live with their own children. According to the Maldivian traditions and norms, children take care of their parents from a certain age onwards. There are no nursing homes or other such facilities available for the elderly in the Maldives. Therefore, most of the elderly will continue to live with one or several of their children.

Figure 23 : Living arrangement of population age 65 & above, Republic, 2006 Census



It is also quite common for elders to live with their spouses. As seen from Figure 23, 28 percent of the elders in the Republic live with their spouses. The least common living arrangement for elders is with their step children with only one percent.

9. Conclusions

The 2006 Census data shows that there are 46,194 households with a total population of 298,968. There are 14,107 households in Male' and 32,087 households in the Atolls and the average household size for the Republic is of 6.5.

Majority of the population live in living quarters such as houses, flats or apartments. The next majority of the population has their living arrangements in collective living quarters while a considerable number of people still live in temporary shelters after the 2004 Tsunami.

Overall, Male Household Heads are predominant throughout the country. Female Household Heads are usually created due to an absent male wage earner. Divorce is another reason behind this.

The analysis of the marital status of the household heads shows that 82 percent of the heads are married while three percent has never been married. Further analysis showed that more MHH are married than FHH. Interestingly, more FHH were divorced than MHH. It was also found that a majority of the FHH have had a live birth during their lifetime.

The analysis of the education level of the HHH showed that majority of the HHH (40%) has completed their education up to Grade 7. The next prevalent majority (34%) are those classified as literate but without any standard. Further analysis showed that more MHH showed prevalence in higher education while FHH are more frequent in the basic literacy certificate and literate classification groups.

In employment, majority of the HHH in the Republic are Employees (52%). Number of household heads that are own account workers are 20 percent while contributing family workers are 17 percent. Household heads who are owners/employers makes the smallest group (4%) in the Republic. Moreover, MHH dominate FHH in all the sectors.

Overall household ownership is held by males throughout the nation. Census 2006 data shows that 80 percent of the population lives in a unit that is owned by a member of the household, while 14 percent lives in rented places and six percent lives in other types of households. In Male', 46 percent of the people lives in a unit that is owned by a member of that household while a striking 42 percent lives in rented places. Differences can be seen when analyzing the same for the atolls, where 92 percent lives in a unit owned by a member of that household while one percent lives in rented places.

The analysis of the relationship of household members to the household head showed that 38 percent of household members are the children of the household head. Unrelated people make up the next majority followed by spouse of the head. The least common relation is step-children who make only one percent.

The percentage of the population under 18 years of age is 39 percent with 11 percent living in Male' and 28 percent living in the atolls. Census 2006 shows that 82 percent of the children live with both parents, seven percent live only with their mothers and one percent only with their fathers. Similarly, two percent of the children live with their mother and step father while only one percent lives with their father and step mother. Furthermore, five percent of the children live with relatives while two percent live with people with whom they do not have a family relationship.

The elderly makes up five percent of the total population with one percent living in Male' and three percent living in the atolls. The analysis of the living arrangements of these elders showed that majority of the elders live with their own children (62%). The next common living arrangement is with their spouses (28%), followed living arrangements with family members (4%). Only two percent live with non-family members, while three percent lives alone and one percent with their step-children.

10. Recommendations

For further analysis and/or research:

- The Census 2006 does not state the household type of four percent of the population. It is recommended to conduct further research on the type of household to get a more accurate picture.
- Further research on the situation of households headed by a female in comparison with those headed by a male.
- Further research on the situation of the elderly population.

For policy changes

- Two years after the 2004 Tsunami, roughly two percent of the population is still living in temporary shelters built after the tsunami. It is recommended that the Government undertake necessary measures to speed up the processes of building permanent housing for the IDP's.
- Since the Unemployment Rate for females is 23.7 percent, government needs to create more jobs for females. The government can do this by facilitating income earning activities or conduct skill development programs that will enable women to work from home or otherwise.
- The analysis shows that 42 percent of the population in Male' is living in rented places. Therefore, the government needs to take affirmative steps to rectify this.
- The government needs to set up quality nursing homes for the elderly with professional staff.

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1. Introduction

The United Nations has defined "youth" as encompassing the age range 15 - 24. However in the Maldives youth is defined as aged between 18 to 34 years. As this is the most active productive age group, youth plays a major role in controlling the population of a society. Youth analysis is, therefore, equally important for socio economic development of the country.

This is an attempt to analyse the data collected from the Population and Housing Census of Maldives 2006, about the youth in the Maldives. The sectors covered in this study are the demographic composition of the youth population, marital status and fertility, education and employment status of the youth population in the Maldives. A comparison is made between the years 2000 and 2006 and in some cases 1995 as well. Also looked into in this sntudy is the development aspects for the youth in the Maldives.

Although modern census data collection in the Maldives began in 1977, and information about youth has been collected in all these censuses, they have not been fully analysed. This analytical report contains information of youth mostly of the year 2006. This may create difficulties in an accurate comparison of the change in the state of youth from earlier to the present day.

2. Composition of Youth Population

According to the Census 2006 the youth population (ages 18 - 34) comprised 31.9 percent (95,604) of the Maldives total population of 298,968. There were 48,878 young women and 46,726 young men at the time of enumeration. Young women comprised 51.1 percent and young men comprised 48.9 percent of the youth population. The sex ratio are 96 males per 100 females for Maldives, 95 males per 100 females for Male' and 96 males per 100 females for the Atolls.

In the year 2000, the youth population was 27.4 percent of the total population. Young women comprises 50.8 percent and young males comprises 49.2 percent of the youth population.

Even though there were no difference in the share of men and women within the youth population in Male' or atolls, the concentration of youth among the Male' population is much higher than that of the Atolls. Youth comprises 39.4 percent of Male' population while youth were only 28.1 percent among the atoll population, in 2006.

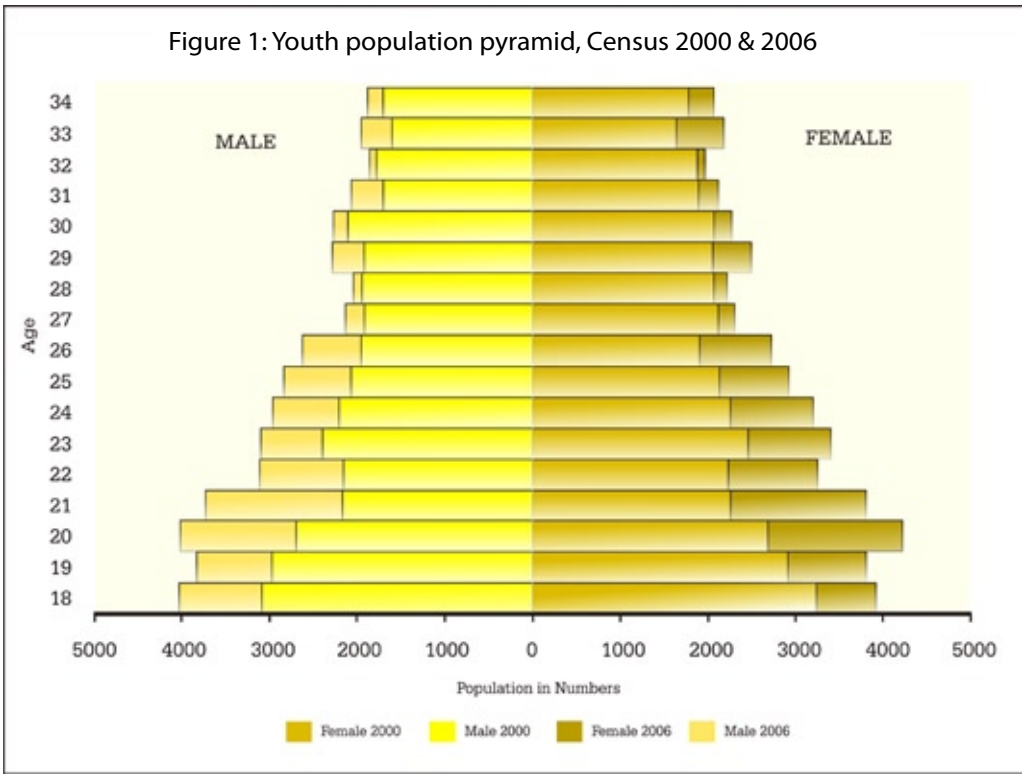
Table: 1 Youth population, Census 2000 & 2006

Region	Youth Population						Sex Ratio for 2006
	2006			2000			
	Total	Male	Female	Total	Male	Female	
Maldives	95,604	46,726	48,878	73,972	36,373	37,599	96
Male'	40,807	19,850	20,957	26,942	14,155	12,787	95
Atolls	54,797	26,876	27,921	47,030	22,218	24,812	96

3. Age distribution of youth population

For the year 2006, majority of the youth population is at the age of 20 years with 8.6 percent of the youth population. In the year 2000, 8.2 percent of the youth population was 18 years of age and in the year 1995, majority of the youth population was 18 years, with 7.7 percent of the total youth population. This is due to the movement of those aged 14 years in the year 2000, which was the highest number in a single age at that time, into the 20 year age in 2006. A small population of youth in 2006 is noted as age 32, with 3.9 percent. This was 33 years in 2000 and 31 years in 1995, at 4.2 percent and 3.3 percent respectively. Not much difference is seen between the genders of these age groups.

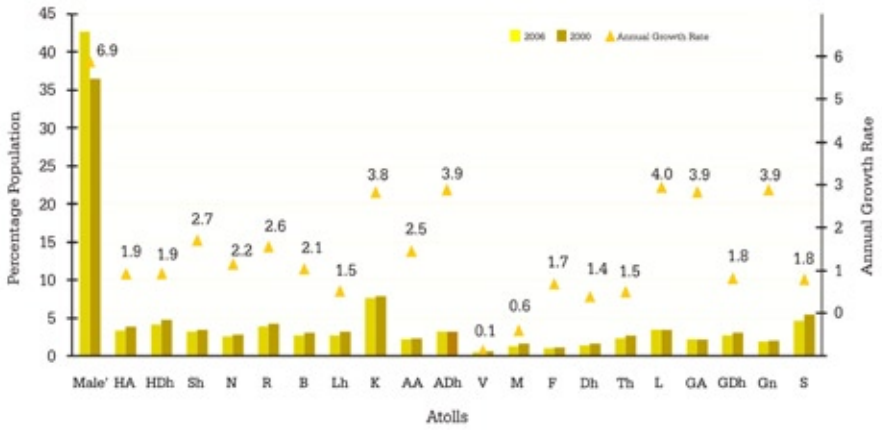
Figure 1: Youth population pyramid, Census 2000 & 2006



4. Growth rate and projections

The proportion of the population in this age group is grown at an annual rate of 4.26 percent. The percentage change of youth population from the year 2000 to 2006 is 29.24 percent, while this value for Male' is 51.5 percent and for the Atolls it is 16.5 percent. The overall distribution of youth across Male' and Atolls shows a vast difference in the percentage of youth in Male' with that of the Atolls (figure 2). Annual growth rate of 6.9 percent in Male' is seen to be the highest growth rate as compared with the other atolls. In the meantime a decrease can be observed in the percentage distribution of youth population in Atolls. This may be due to migration of youth from Atolls to Male' to obtain better education and employment etc. since Male' is the urban centre of the country. This may have eventually led to the rise of the youth population of Male'.

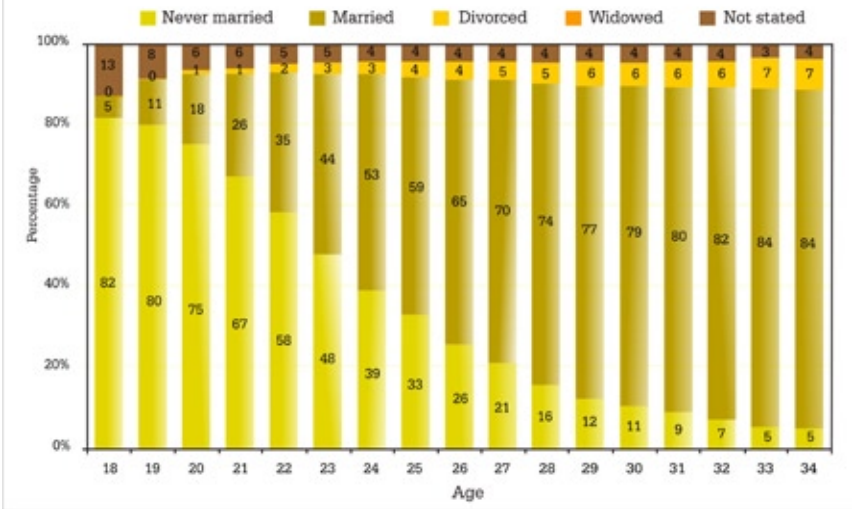
Figure 2: Percentage distribution of youth population and annual growth rate, Census 2000 and 2006



5. Marital Status and Fertility

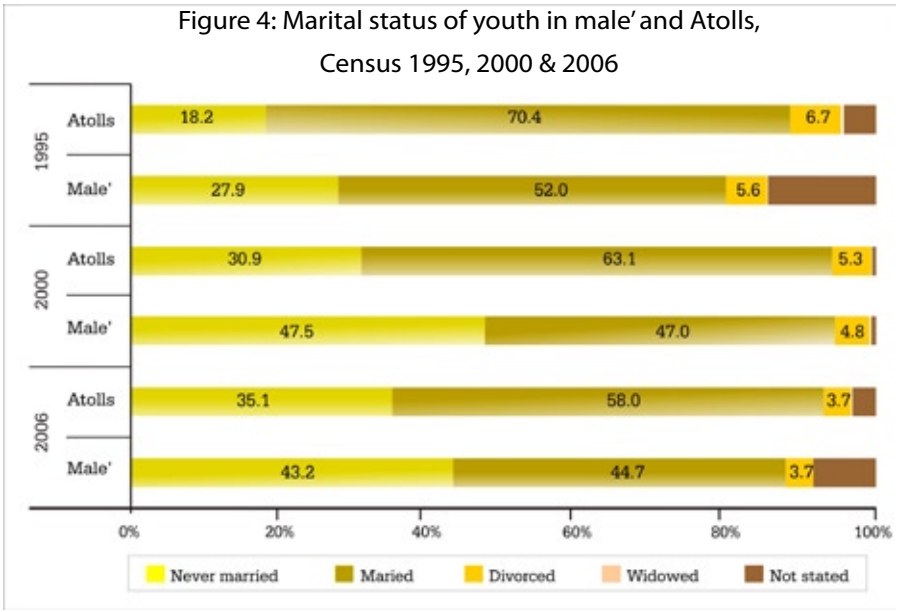
5.1 Marital Status

Figure 3: Marital Status of youth population, Census 2006



Census 2006 data on marital status of the youth population shows a steady decrease of never married people from the age 18 onwards. While for the married youth, this goes on increasing gradually. The proportion of youth that are married becomes higher than those never married by ages 24 years and beyond. A very low percentage of the youth population is widowed throughout this age group.

Figure 4: Marital status of youth in male' and Atolls,
Census 1995, 2000 & 2006

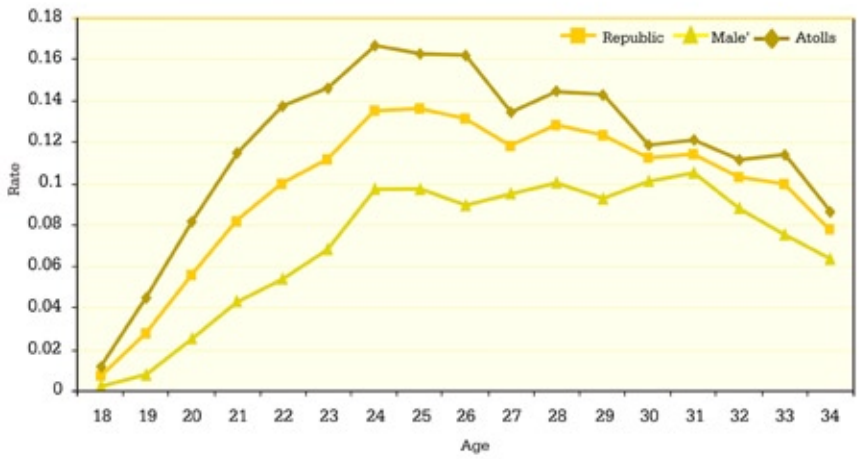


The graph above represents a comparison of marital status of youth, between the Atolls and Male'. Compared to Male', atolls population who has never married remains lower throughout the Censuses 2006, 2000 and 1995. Also the high rate of non-response in 1995 in Male' seems to distort the figures for this year. As of the Census 2006, youth population who has never got married in Male' is 43.2 percent while the figure for the Atolls stand a little lower at 35.1 percent. The figures for the year 2000 stands at 47.5 percent of never married for Male' population, while in the atolls it was 30.9 percent, and for the year 1995 the figure for Male' was 27.9 percent while for atolls it was 18.2 percent. The percentage of married youth in Male' in 1995 was 52.0 percent, in 2000 it was 47.0 percent and in 2006 it was 44.7 percent. This shows a significant decline in the percentage of married youth in Male' through the years 1995 to 2006. The same trend is seen at atolls throughout these years. The percentage of divorced youth for Male' in the year 1995 was 5.6 percent and for the Atolls it was 6.7 percent. For the year 2000, the figures were 4.8 percent and 5.3 percent, respectively for Male' and Atolls. But for 2006 the percentage of divorcees is the same for Male' and Atolls at 3.7 percent. The percentage of never married youth keeps on increasing through these years, while percentage of married youth and divorced youth keeps on decreasing. The shift in age at first marriage maybe due to increased time spent in school and in education.

5.2 Fertility

Fertility rate is the average number of children that a woman gives birth to in her lifetime assuming that the prevailing rates remain unchanged. Age specific fertility rate is obtained by dividing the number of births to mothers of each age by the total number of females of that age in the population. From graph 5, fertility rate is highest for the Maldives for ages 24 and 25 at the rate of about 0.14, this age is same for Male' with the rate of about 0.1 and for the atolls the highest fertility is at the age 24 with the rate of 0.17. Fertility rate is prominently higher in the Atolls than in Male', mainly between the ages 23 and 26. Among the youth in each and every age the fertility remains higher in the Atolls than in Male'. Differences in lifestyles in Male' and Atolls may be the reason for a higher fertility rate in atolls.

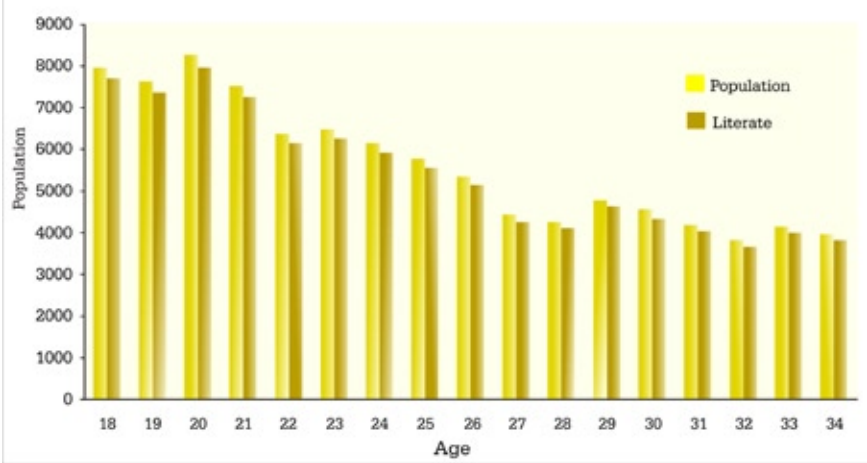
Figure 5: Age specific fertility rate, Census 2006



6. Education

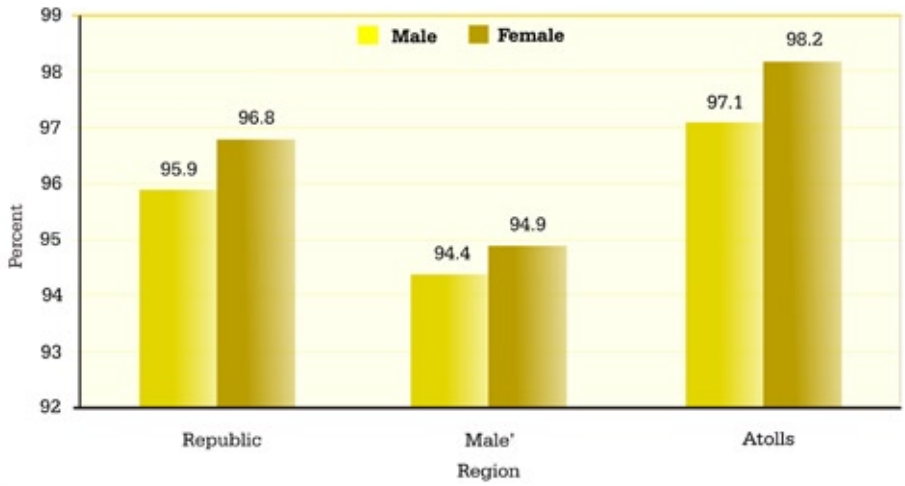
The section on education looks into the literacy rate and level of education achieved by youth across the Maldives.

Figure 6: Youth population and youth literacy, Census 2006



The number of young people who are literate is very high as compared to the total youth population of the age category. The peak age for literate youth was 20 years for Maldives for the year 2006.

Figure 7: Youth literacy rate by sex, Census 2006



Youth literacy rate is very high in the Maldives. This is true for Male' as well as for the atolls. The overall literacy rate for Maldives for the youth age group is at 96.4 percent, while it is 94.6 percent for Male' and 97.7 percent for the atolls. Female literacy rate is slightly higher than male literacy rate for all parts of the country. For the republic female literacy rate is at 96.8 percent while for males it is 95.9 percent. For Male' these figures are 94.9 percent for females and 94.4 percent for males. For atolls it is 98.2 percent for females and 97.1 percent for males.

Figure 8: Educational attainment of youth by highest certificate, Census 2006

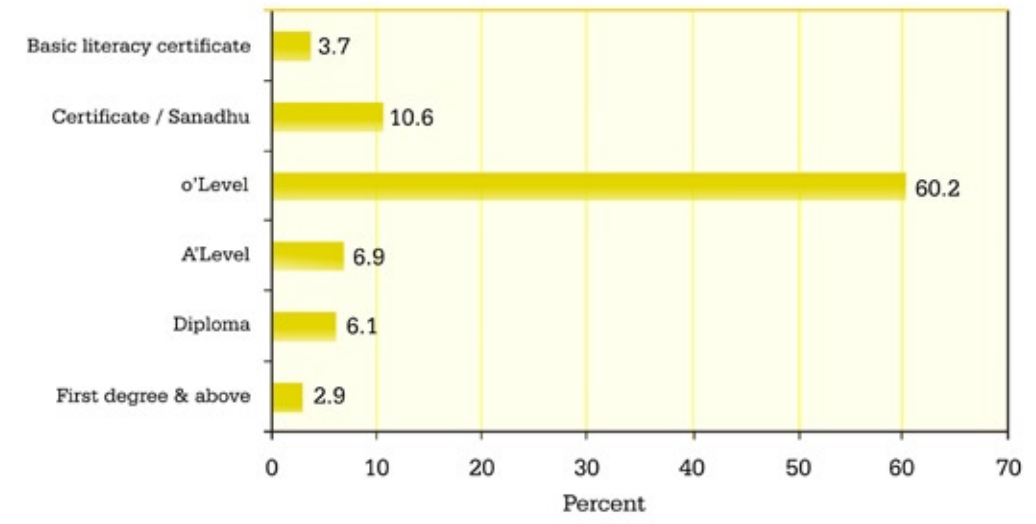


Figure 8 shows that only 3.7 percent (1,944) of youth have basic literate certificate. The number of youth who have achieved a sanadhu / certificate is 10.6 percent (5,583). The highest number of youths has attained O'Level standards which accounts 60.2 percent.

There is a significant number of 31,660 youths with the O'level standard. But only 3,651 youths (6.9 percent) had completed A'level. There may be different reasons for such a small number of youth with A'Level education. The main reason is that there is a limited A'level centers and in these centres there are limited seats available. And very few get the opportunity to go abroad for higher education. Number of youth who have studied up to Diploma standard is 6.1 percent (3,205) of youth. Out of the total 95,604 youths, only 1,513 youths (2.9 percent) have attained first degree and above.

Youth who have completed primary level education (grade 7) is 20.2 percent. The completion rate of secondary level education (grade 10) amongst the youth is 40.3 percent. And 5.6 percent of the youth have completed higher secondary education (grade 12) as seen from the census 2006 data. The data shows that a good population of youth attains secondary education. An observation can be made on difficulties in reaching tertiary education. An obvious reason is the limited number of opportunities for higher education in Atolls, even in Male'.

7. Employment

7.1 Labour force participation rate

Labour force participation rate for any age is the proportion of population of that age who are classified as being members of the labour force or the economically active population.

Table: 2 Labour force participation rate and unemployment rate for youth population
Census 2006

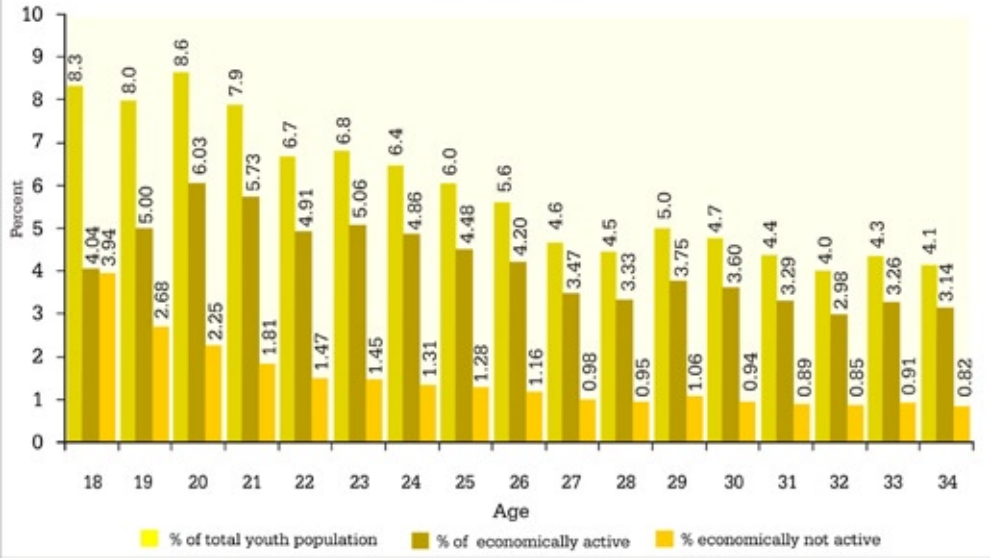
	Youth population	Labour force participation rate	Unemployment rate
Republic	95,604	71.13	16.17
Male'	40,807	64.56	12.15
Atolls	54,797	76.02	18.71

Labour force participation rate for the youth population is 71.1 percent, which is a very high percentage. The unemployment rate amongst the youth population for the Maldives is 16.2 percent in 2006. The highest unemployment rate is between the ages 18 – 20 amongst the youth.

7.2 Economically active youth population

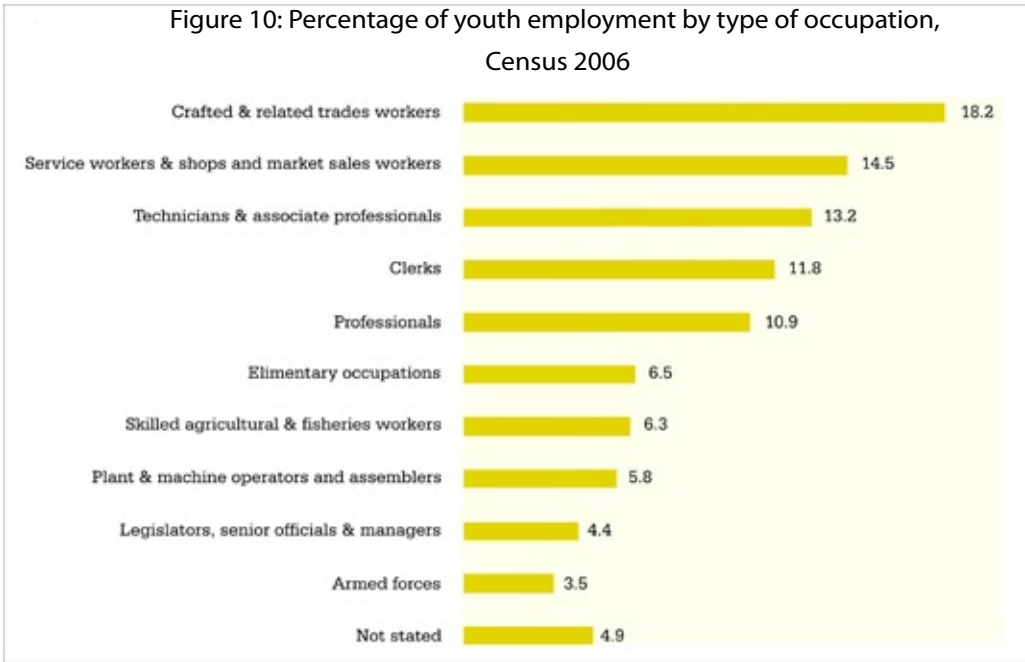
This section focuses on the employment status and the involvement of youth in the country's economy. Youth population has been compared with the number of youth economically active, where economically active population comprises of youth who are employed and unemployed. Youth population who are not economically active by reason for not working is also looked into, along with sex specific analysis into being economically inactive.

Figure 9: Percentage of total, economically active & inactive youth population, Census 2006



Majority of the youth, who are not economically active are of the age 18 with 3.9 percent of the youth population. As the age increases the number of inactive youth decreases gradually. The age of 20 is noted to be when youth is most active. The percentage of youth economically active at this age is 6.0 percent of the youth population category.

Figure 10: Percentage of youth employment by type of occupation, Census 2006



The majority of the youth population's occupation is craft and related works with 18.2 percent. This category comprises mainly those engaged in manufacturing and employed in the construction. A comparatively high percentage of the youth population works as service workers and shop and market sales workers. In this category comprise mainly those engage in jobs in the industries providing services such as trade, tourist resorts, restaurants and those in government administration. Minority of the youth population work in the armed forces.

Figure 11: Percentage of youth employment for selected industries, Census 2006

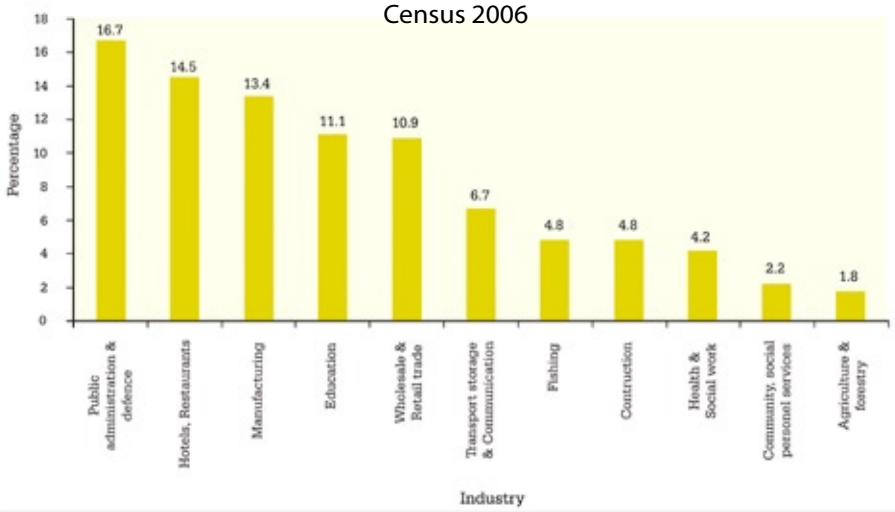
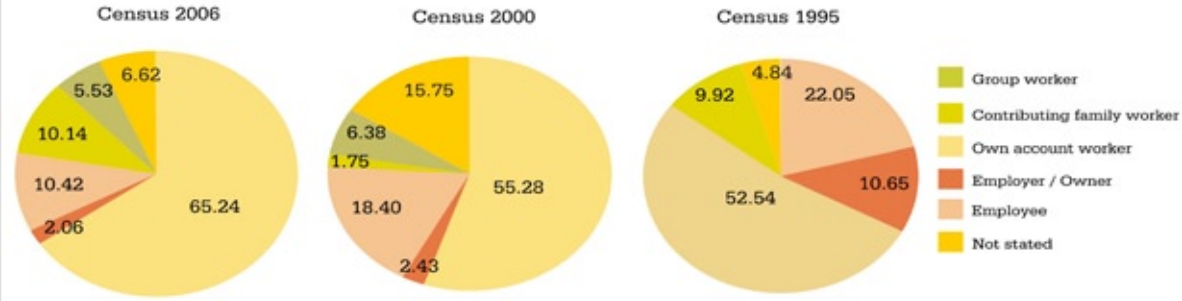


Figure 11 indicates that majority 16.7 percent of youth is working in public administration and defense, while minority of the youth is working in agriculture & forestry sector with 1.8 percent of the working youth population. The vast difference between the interest given by youth for the hospitality and fisheries industries should be noted here.

7.3 Employed youth population

Figure 12: Percentage of employed youth population by job status, Censuses 2006, 2000 & 1995



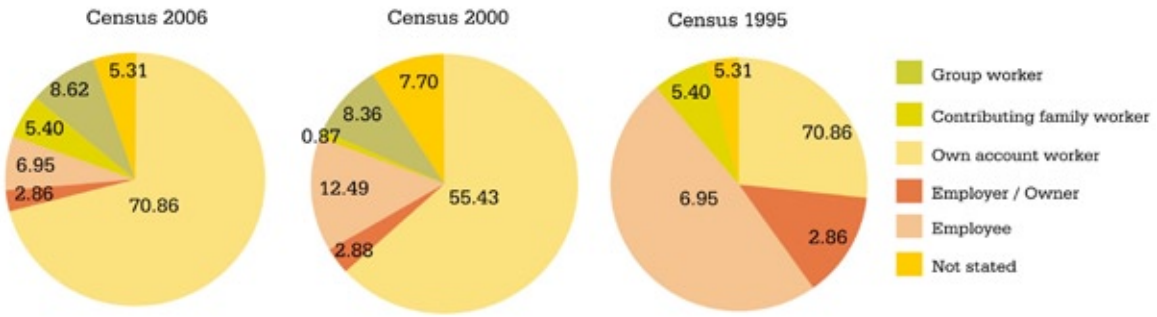
There is a high rise in the percentage of employees when comparing data from 2006, 2000 and 1995. Although there were 22.1 percent of youth working population as employees in the Republic in the year 1995, this percentage increased to 55.3 percent in 2000, and furthermore to 65.2 percent in 2006.

In the meantime, a decrease in the percentage of own account workers is seen from the year 1995 through 2006. In 1995, 52.5 percent of the youth working population was working at their own account. This percentage decreased from 18.4 in census 2000 to 10.4 in 2006.

Unlike own account workers, percentage of contributing family workers were 9.9 percent in 1995 which decreased to 1.8 percent in 2000. But contributing family workers again rose to 10.1 percent, as par Census data of 2006. The tsunami disaster of December 2004 may have led to this observation.

Employers or owners in the youth population have decreased from 1995 to 2006. Census 1995 data showed that 10.7 percent of youth working population were employers or owners. But there has been a remarkable drop in youth working population, as employers/owners with 2.4 percent in the year 2000 and 2.1 percent in 2006.

Figure 13: Percentage of employed male youth population by job status, Censuses 2006, 2000 & 1995



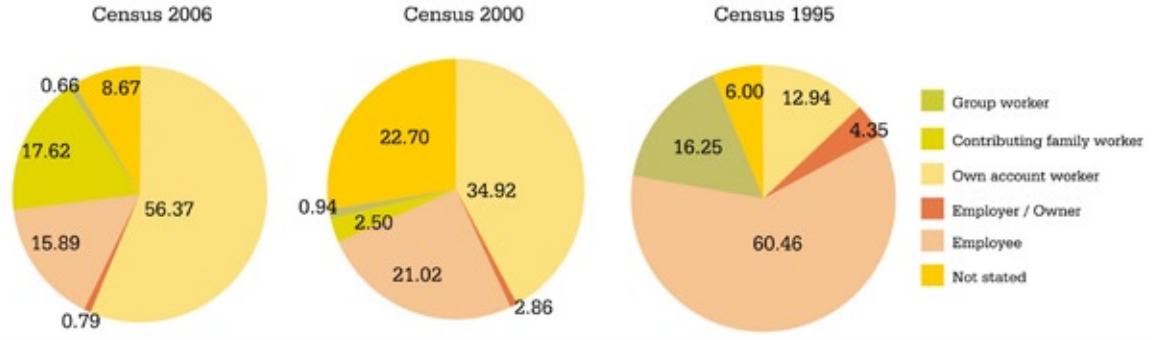
A considerable increase in the percentage of employees amongst economically active males is seen when comparing data from 2006, 2000 and 1995. Male employees working in 1995 were 26.6 percent of the employed youth population. This was 55.4 percent in 2000 and it rose up to 70.9 percent in the year 2006.

The percentage of male workers who work on their own account decreased from 48.6 percent in 1995 to 12.5 percent in 2000. This further declined to 6.9 percent in 2006.

Male contributing family workers were 6.8 percent in 1995. This decreased to 0.9 percent in 2000. But contributing family workers again rose to 5.4 percent in 2006.

Employers or owners in the male youth population have also decreased from 1995 to 2006. 1995 census data showed that 13.8 percent of male youth working population was employers or owners. Data of the 2000 Census showed 2.9 percent of males in this category, while the percentage had already decreased to 2.9 percent as of the year 2006.

Figure 14: Percentage of employed female youth population by job status, Censuses 2006, 2000 & 1995



There is a significant rise in the percentage of employees amongst economically active females, when comparing data from 2006, 2000 and 1995. In 1995, 12.9 percent of the female youth were working as employees which increased to 34.9 percent in 2000 and further increased to 56.4 percent in the year 2006.

A decrease in the percentage of female own account workers can be observed through the years 1995 to 2006. In 1995, 60.5 percent of the female youth working population was working as own account workers. This percentage decreased to 21.0 percent in 2000. In the year 2006 it further decreased to 15.9 percent.

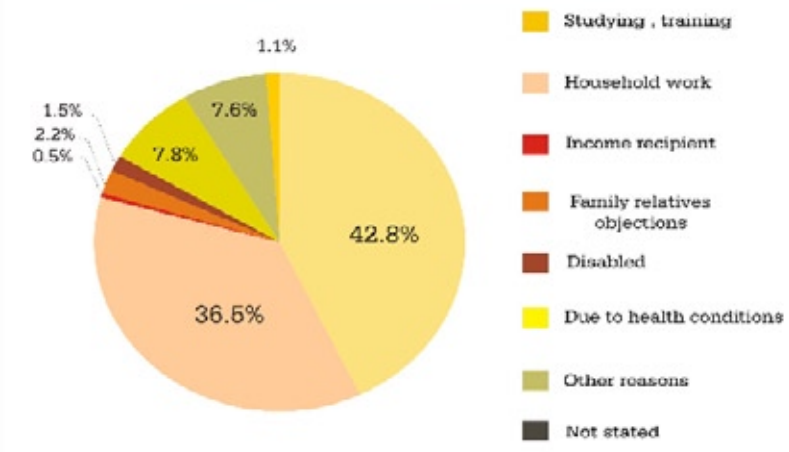
Female contributing family workers were 16.3 percent in 1995. This decreased to 2.5 percent in 2000. But it rose to 17.6 percent, in the year 2006.

Employers or owners in the female youth population have also decreased from 1995 to 2006. 1995 Census data showed that 4.4 percent of female youth working population was employers or owners. In the year 2000, it decreased to 0.8 percent of females in this category, and the percentage further decreased to 0.8 percent in 2006.

7.4 Economically inactive youth population

Amongst the total youth population 24.7 percent are economically inactive youth. The reasons taken into account for youth not being economically active are; studying/training, engaged in household work, being an income recipient, objection of family and relatives to work, is disabled, due to health condition, other reasons. The pie-chart below shows the percentage of youth who are not economically active in the Maldives, by reason for not working.

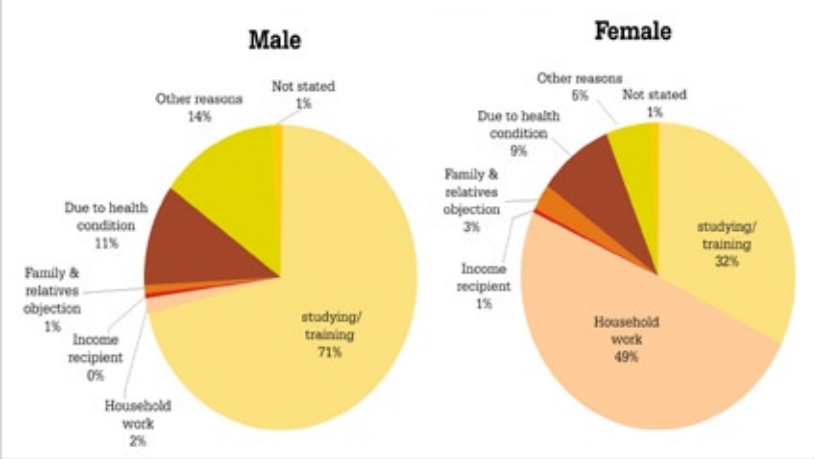
Figure 15: Percentage of youth not economically active, by reason for not working, Census 2006



Most of the youth about 43 percent does not work because either they are studying or training. About 37 percent involved in household works (36.5 percent).

Few percent of the youth population do not work due to health conditions and other reasons (around 8 percent). And a very minor percent of the youth population does not work because of a disability and because their family restricts them to work. And less than 1 percent of the population is supported by others in the form of an income. This situation is for both male and female population, the scenario for males and females separately are very different.

Figure 16: Percentage distribution of males and females, not economically active by reason for not working, Census 2006



When we look into the male and female composition of the youth population for reasons of not working, majority of the males does not work because they are studying or in a training. On the other hand most of the women doesn not work because they are involved in household activities and also studying/training. Less than half the percent of females are studying/trainning (32 percent) when compared to the male youth population who are studying/training (71 percent) which could be an explanation for the 49 percent of females involved in household activities as seen in chart 5.

8. Youth Development

Youth Strategy 2005 initiated by the Ministry of Youth and Sports is the strategic framework for youth development in the country. Since then youth development strategies have focused on developing holistic and gender-inclusive national youth policies; skills development; capacity building and institutional strengthening; youth advocacy and collection and dissemination of information. Specific issues commonly addressed during this period include education, employment, health, and environment.

Based on current socio-economic trends, the main issues of priority concern for young people in the Maldives over the next decade and beyond are most likely to be education, youth participation in economic development, development of young women, law and order amongst young people, environmental sustainability and information and communication technology.

It can be argued that no growth and sustainable development could take place without the active and constructive participation of young people in the process of national development.

However, the biggest challenge currently facing the youth development sector is inadequate financial resources to build institutional and human capacity in the Maldives to effectively design and implement innovative strategies for addressing the critical issues impacting on young people. Realistically, these challenges need to be addressed in National Development Plans taking into account the constraints and limitations of available financial resources and the current state of institutional, human and technological capacity in the Maldives. This would be the most feasible method of aligning youth development strategies to the focus areas of economic growth, sustainable development, good governance and security.

9. Conclusion

Highlighting the key features of the analysis, youth population has increased in the Maldives from the year 1995 to 2006 and specially the youth population of Male' has risen significantly through these years. This confirms the increasing amount of people migrating to Male' from islands for better employment, education and health services.

As females are slightly more than males in the youth population, importance still needs to be given to balance opportunities for both sexes. However, employment and education opportunities for females in the Maldives have increased as the number of educated and employed females grows.

Fertility in the youth age group has decreased over the years. Fertility rate for Male' is lower than that of the Atolls, which may have resulted from the increase of education and employment opportunities in Male'.

Most of the economically inactive youth are studying or undertaking training either in the country or abroad.

Rapid rise in the number of young people will increase demand for essential social services such as education, health and employment opportunities. As a result, government budgets and services directed at young people will be under pressure.

Allied with these population pressures is a set of new problems resulting from rapidly changing societies and the introduction of values that clash with traditional and cultural norms. In addition, inadequate educational opportunities leave many young people in the islands with limited skills and life choices. These limitations in turn can undermine self-esteem and lead to anti-social and risky behaviour that create burden in the society. In this regard, crime; especially committed by young people is reported to have risen within the country.

1. Introduction

Gender is defined as the attributes, behaviors, personality, characteristics and expectancies associated with a person's biological sex in a given culture. Gender differences can be based on biology, learning, or a combination of the two. (Robert & Baron) Gender roles are learned and can be affected by factors such as education or economics. They can vary widely within and among cultures. Gender roles are socially determined and can evolve over time.

Traditional gender roles continue to exist in Maldives and hinder men and women from fully enjoying the benefits of a gender equitable society. However, when taking this issue from a regional perspective, Maldivian Women are less constrained by the social norms and taboos, which affect them primarily because of their gender.

The collection and utilization of gender sensitive statistics is crucial for the formulation of gender sensitive policies, plans and projects. As almost all the UN conferences, particularly the International Conference on Population Development (ICPD) and Beijing conferences urge the national statistics agencies and other state parties to engage in the process of gender sensitive policy formulation and programme planning. The Statistics Division of the Ministry of Planning and National Development (MPND) in collaboration with the Ministry of Gender and Family (MGF) and the United Nations Population Fund (UNFPA) undertook the vital task of engendering the Population and Housing Census of the Maldives 2006, which is the major source of data for national developmental planning in the country.

As census data in most of the countries in the South Asia region is not very gender sensitive particularly due to the large underestimation of women's contribution to the national economy, a serious effort was made to accurately capture information related to the economically active women in the country, including those engaged in small income generating activities, and other home based activities that generate an income for the family. Furthermore, all stages of the 2006 census operations including the review of the questionnaire, sensitizing of the census officials, training of the supervisors and enumerators, public awareness campaign and the data collection process ensured that gender perspective was incorporated.

This chapter includes a gender analysis of the Population and Housing Census (2006) based on the Maldivian context. The evaluation is primarily based on the social dimensions, analysis of the comparative position of the households, and individual analysis including economic dimensions and educational status of both women and men from a gender perspective.

In addition, gender sensitive indicators such as sex ratio, educational attainments, employment rates and living conditions of male and female from the data of 2006 would be compared with that of 1995 and 2000 in order to establish trends. These indicators could be used to assess progress in achieving gender equality by measuring the changes in the status of women and men over a period of time.

It is envisioned that the attempt to incorporate gender concerns into the Population and Housing census of 2006 and the present analysis will provide sex-disaggregated data which will be utilized

2. Individual Analysis

2.1 Social Dimensions (SD)

2.1.1 Sex Ratio

Sex ratio is the ratio of males to females in a population, a sex ratio above 100 indicates the men to women whereas a low sex ratio indicates the opposite. Sex ratio is an overall indicator of women's socio-economic status, but is also affected by migration in an out of the country and locality. The overall sex ratio in the Maldives as per the Census 2006 is 103, which means there are 103 men for every 100 women. The excess of men in the country has been declining from as high of 119 in the year 1911 indicating an improvement in women's survival chances which can be associated to declining Infant mortality rate, Under five mortality rate for girls and Maternal mortality rate.

Figure 1: Comparison of sex ratio according to age group, 2000 & 2006 Census

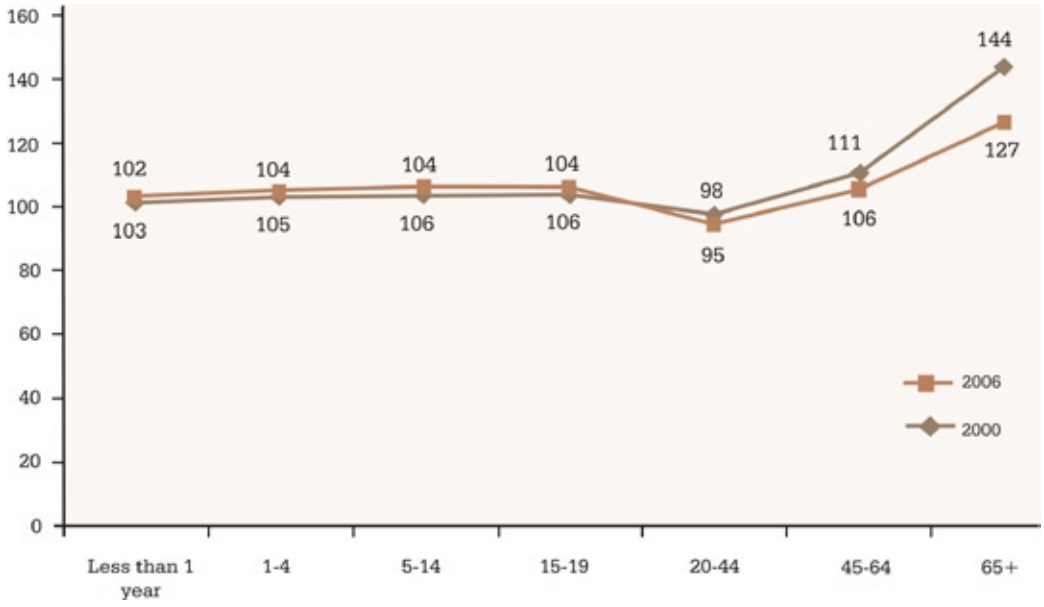


Table 1: Sex ratio for Republic, Male' Atolls & Administrative islands

	Year			
	1990	1995	2000	2006
Maldives	105	104	103	103
Male'	121	115	109	101
Atolls	100	100	104	101
Administrative Island in Atolls	101	94	93	93

Figure 1 shows the sex ratios by age groups for years 2000 and 2006. Sex ratio increases up to 19 years and declines up to the age 44 substantially. However the reason for the increased sex ratio up to 19 years is not clear. The decline observed for the age group 20-44 is due to lower survival ratio for men. Since a larger proportion of males are engaged in risky and unsafe work which causes accidental deaths. Also it can be observed that in 2006 the ratio is slightly lower than in the year 2000. This decline could be attributed to the fact that drug users among youths have increased during this period. The age group that has the highest sex ratio is the above 65 years and above having a sex ratio of 127 in the 2006 census, which is a low ratio compared to the 2000 figures which reveals a sex ratio of 144. The ratio at this age group is high due to high maternal mortality rate in the past.

2.1.2 Educational status

Ensuring that girls and boys have the equal educational opportunities is one of the most powerful steps in combating gender inequalities. Parity in primary education has been reached and the educational system in Maldives continues to be improving. Education is also an essential component of the empowerment of girls and women. Further better quality education helps to seize opportunities in the public and private fields in the community for both girls and boys.

2.1.2a Literacy levels

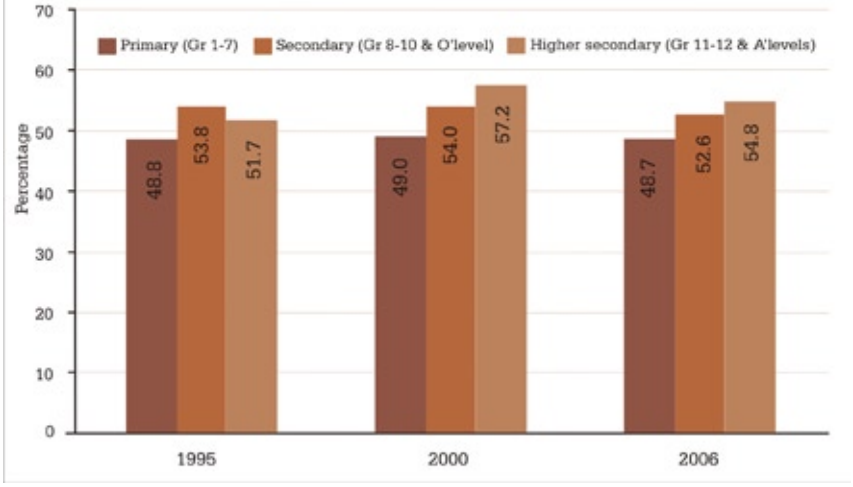
Maldives being a Muslim nation is liberal and is a privilege that girls have the opportunity to go to schools where most of the schools are combined with both girls and boys. Although in some Islamic nation's women and girls are strictly forbidden from attending universities and schools, but slowly the situation is changing. Without expanding and improving educational opportunities for both men and women, political, social and economic development cannot be reached.

Table 2: Literacy level by gender for Republic, Male' & Atolls

Locality	1995		2006	
	Female	Male	Female	Male
Republic	96.6	96.1	98.4	98.1
Male'	98.3	98.2	99.1	99.1
Atolls	95.9	95.1	98.0	97.5

Today the overall literacy rate in the Maldives is very high and is about 98.2 percent for both male and female. In 1995 the female literacy rate 97 percent was increased to 98 percent in 2006. Similarly for males it increased from 96 percent to 98 in 1995 and 2006 respectively. Both in the year 1995 and 2006 literacy rates were higher for female when compared with male. This position has been observed since 1960's. The scenario is same for Male' and also in Atolls. Literacy rates have increased significantly for both Male' and in the Atolls in 2006.

Figure 2: Percentage of Female school enrollment by level of school education, 1995, 2000 & 2006

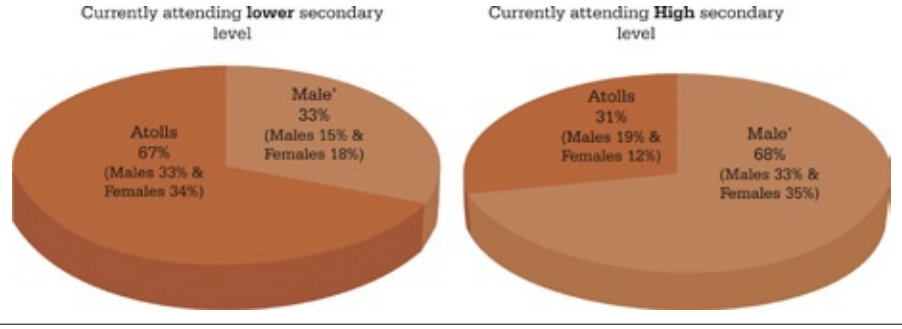


There was no evidence of disparity at any time in the school enrollment rates between girls and boys in the country. But parents had fear of sending their daughters alone outside their home island where boys get the chance for further studies in Male' or abroad. Hence after completing primary level girls spend most of their time in household chores specially taking care of siblings. While some of them tend to go for marriage and start life with not less than two children. Access to educational facilities within the island and in the atolls is the main reason where girls started continuing education at higher levels.

From 1995 onwards the school enrollment rates for both girls and boys have been increasing. When looking at the percentage of girls getting enrolled each year 1995, 2000 and 2006 it can be seen that girls have a higher school enrollment rate compared to boys.

Gender parity3 has been achieved among the 8-10 class finishers, due to the same fact that atoll education centres and some atoll schools provide an opportunity to attend lower secondary schooling within the atolls. But the problem arises when it comes for higher secondary schooling within the islands where it is available only in very few islands apart from Male'. The pie chart below (figure 3) shows percentage of students who have attained higher secondary schooling in Male' and in the Atolls in the year 2006.

Figure 3: Percentage of students who are currently attending lower secondary schooling & higer secondary schooling in Male' & in the Atolls in 2006



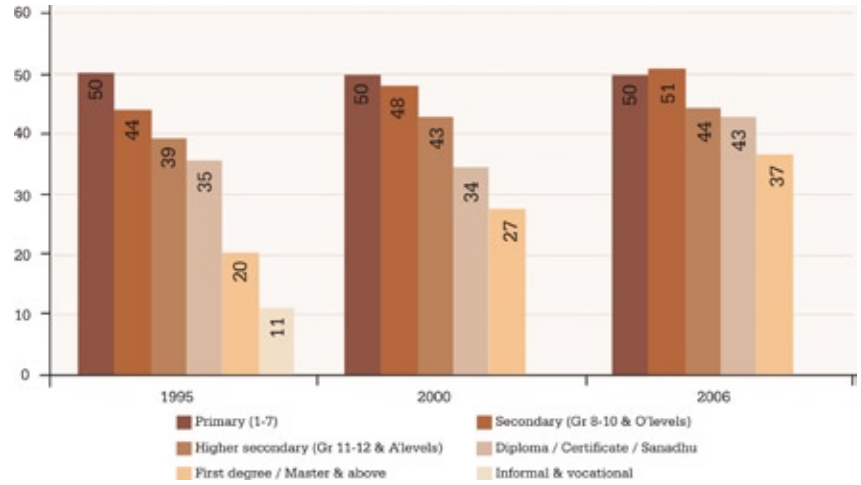
Gender parity3 gender parity in education is about giving every individual, boy or girl, the opportunity to go to school, because education is a fundamental right for all.

Although universal primary education has been achieved, providing lower secondary schooling and higher secondary schooling in the islands is vital. Figure 3 shows that the level of higher secondary schooling disparities between Male' and Atolls is significant. This is due to the fact that few islands have access to higher secondary schooling in the atolls.

Differences can be observed among boys 19 percent and girls 12 percent in the formal educational system in Atolls', it has been reviewed that a significant amount of lower secondary school leavers tend to join the informal private institutions for higher secondary education. The Census 2006 data reveals students who were currently attending higher education of which about 23 percent were attending informal classes. There were 251 boys and 254 girls.

There could be number of reasons why more girls join these informal classes. Especially girls coming from the islands might not get a chance in the formal schooling due to ineligible age and lower results. Since in the islands informal higher education is not available and in Male' due to limited seats parents who are affordable and girl's taking interest for further studies for their future carrier may oblige to join rather staying in the islands or joining unsuitable job. However, women may become vulnerable and less empowered if inequity in higher educational schooling between Male' and the in Atolls remains the same.

Figure 4: Percentage of Females classified according to the level of education attained



At levels, Degree and above, disparity still exists due to the fact that the country lacks university institutions and if available, mostly they are located in the capital Male'. While these institutions have seats opportunities are available only to those who achieve the higher results. Even if girls get better results their anxiety of leaving there own home island, leaving behind their parents and the risk of being alone may be an issue of mislaying opportunities for higher and qualified education. Even then educational attainment of women has increased substantially. In 1995, only 20 percent of the female population completed first degree or above which increased to 37 percent in the year 2006.

Educational differences between men and women of the older age groups still exists, this is mostly because men were able to go to other islands and abroad for higher education.

Women had less choices of leaving their own island due to parents influence and some parents did not want their daughters to go for further studies. The reason behind believed to be that girls getting married had benefited the parents, getting more finance and support from there son-in-laws. However, over the years as succeeding generations are educated these differences are likely to disappear.

2.1.3 Marital status

Marriage is an interpersonal relationship with governmental, social, or religious recognition, usually intimate or sexual, and often created as a contract through custom, ballot or civil process (Sheri & Bob.S 2007). When a person gets married there are certain expectations from the society on the responsibility of the person. These expectations are more profound for women than men in the Maldives. As such, women who get married in their earlier years are more likely to be prone to divorce and other marital problems.

Figure 5: Marital status of Male & Female by age group

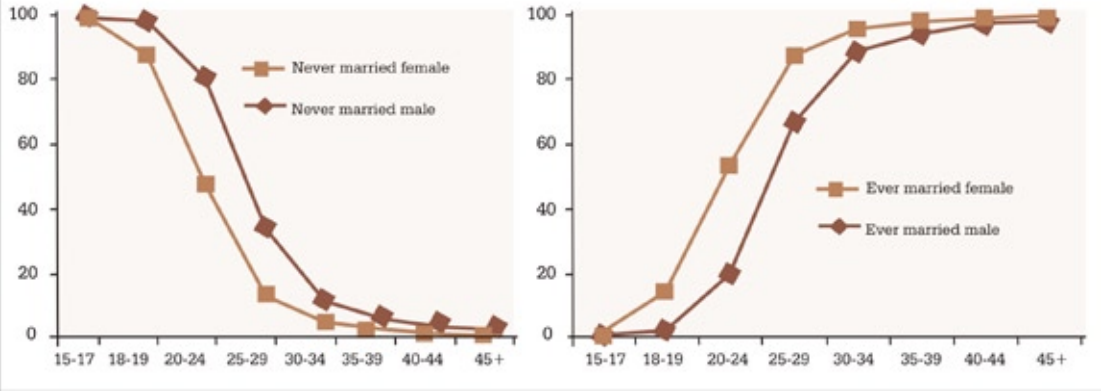


Table 3: Marital status as married, divorced, widowed & never married for Female and Male

Marital status	Female			Male		
	1990	2000	2006	1990	2000	2006
Never married	26.2	26	27	38	36.9	35.5
Ever married	73.7	73.5	66.8	61.8	62.2	55.8
of which: Married	60.2	60.8	55.5	53.3	55.5	50.6
Divorced	8.5	7.3	6.2	6.3	4.6	3.5
Widowed	5	5.4	5.1	2.2	2.1	1.7
Not stated	0.1	0.5	6.2	0.4	1	8.7
Total (1+2+3)	100	100	100	100	100	100

The above graph presents data on marital status of people aged 15 years and over by age and sex. The following features of marital status could be identified.

The total population of 15 years and over, 61 percent have married sometime in their life. The female population of age15 years and over, 66.8 percent have married and 27 percent have never married. In the male population, 61.8 percent have married and 38 percent have never married.

An overwhelming majority of men, 63 percent and women 84 percent are married by the age of 29. The proportion of girls who are married starts to increase rapidly by 18-19 years and reaches 51 percent in the 20-24 age groups. This means that half of the population of women tends to get married before 25 years.

It is worth noticing the fact that divorce rate is also much higher among females than males. In 2006, 6.2 percent of the female population of 15 years and above was divorced, while only 3.5 percent of the male population was divorced. This could be attributed to the fact that men tend to get re-married earlier than women.

However, from 1990 onwards the divorce rate is declining. In 1990 the proportion of people who have been divorced was 8.5 percent and 7.3 percent in 2000 and a further decline to 6.2 percent in 2006. The falling divorce rates could be attributed to the increasing awareness among people and the revised laws in Maldives regarding divorces.

2.1.4 Living arrangements of children below 18 years and elderly people 65 and above

Table 4: Living arrangements of children below 18 years by sex

Arrangement	Total		Age group					
			Under 10		10-15		16-17	
	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
With both parents	66.8	66.5	79.2	79.1	70.3	70.8	35.7	37.0
With mother & step father	2.2	2.3	2.2	1.9	2.7	2.6	1.9	1.8
With father & step mother	0.9	0.9	0.5	0.6	0.8	1.0	0.8	0.6
Only with mother	6.4	6.5	6.9	6.8	7.1	7.2	4.3	3.7
Only with father	0.9	0.8	0.6	0.7	0.9	0.9	0.5	0.8
Other relatives	5.2	5.5	2.6	2.6	6.6	6.0	7.9	6.9
No family relationship	2.2	2.7	0.4	0.4	2.8	2.7	4.7	3.9
Other relatives	15.4	15.3	7.5	7.7	8.8	9.0	44.3	45.3
No family relationship	100	100	100	100	100	100	100	100

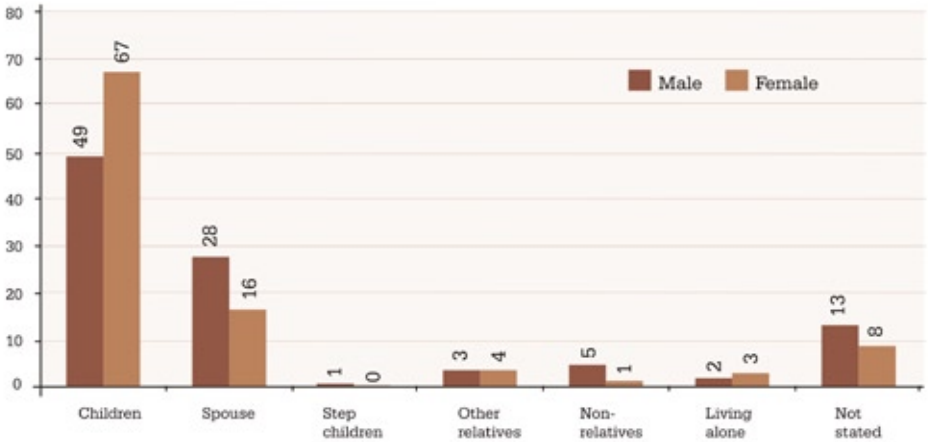
Children live in a variety of family arrangements that usually reflects the marriage, divorce and re-marriage patterns of their parents. In addition there may be children who are born out-of-wedlock[2] and may grow up in single parented families or may spend their life with other relatives or stepparents.

In the census 2006, detailed information was collected on each person's relationship with head of the household, permitting the identification of various types of relatives and parent child and sibling relationships. Following are the major findings in relation to the living arrangements of children.

[2] Out-of-Wedlock births: are births occurring to women who were currently divorced, widowed, or never married at the time of the census or survey.

In Maldives, those children who do live with both of their parents are about one third of the whole children population. There is however, no noticeable difference between girls and boys when it comes to living arrangements. A total of 66 percent children live with both parent. When comparing the number of children living with single parents it has been found that six percent of children are living only with mothers, while only less than one percent of children live only with their father. It is also worth noticing the fact that from the age of 10-17 years, the number of children both girls and boys, living with other relatives and those with which they have no family relationship increases. However it is noteworthy that there is no significant difference between girls and boys living with other relatives. This could be due to the fact that children move away from their homes mainly to the capital island or to nearby island for further education or in search of job opportunities.

Figure 6: Living arrangements of elderly people 65 & above



The living arrangements of the elderly, defined as of age 65 and above, varies significantly according to gender. The largest proportion of the elderly population lives with their children and is most of the time dependent upon them for financial support. Among the elderly living with children are mostly females which amount to 67 percent, while only 49 percent of males live with their children. However, only 16 percent of the women of this age live with spouse compared to 28 percent of the male of this age.

The reason behind the high proportion of women choosing to live with children might be because women when widowed are more likely to fall into poverty than men. This is because women's economic well-being does tend to be more influenced by their husbands than vice versa. The distribution of living arrangements for the rest of the population of this age group does not differ considerably.

2.2 Economic Dimensions (ED)

According to the Census 2006 the definition of economically active are those persons who spend more than one hour on the reference week engaged in an economically productive activities. Also substantial categories are also considered to be economically active.

Household chores such as preparing the food, cleaning the house, taking care of children, or collecting firewood for the use of the household, were not considered to be productive activities unless they were performed for pay.

Women have a high economic activity rate in 2006, at 52.0 percent compared to the Censuses of previous years 2000 at 45.3 percent and 1995 at 28.1 percent. Better recording of data and actual increase in economic activity of women can be the two reasons behind the increase in the economic activity of women. In the Census 2006, more emphasis was given to capture small productive activities carried out within the household especially by women such as sewing, making local products, etc.

Census data provides critical information to show how women's lives are changing and evolving in Maldives. In contrast to the earlier years, now more women are delaying marriage and child birth in order to pursue education and to build careers. Men enjoy an economic advantage over women, mostly because women move in and out of the labour force in order to give birth, care for children and engage in other domestic activities. Women participating in economic activities are more likely to have economic independence, social security and social and individual development.

In addition, the livelihoods of many women in atolls were affected by the tsunami. A lot of equipments, tools and materials used for income generating activities were washed away and many women are experiencing loss of income. As there are limited job opportunities in islands, this would have a long term implication for women. At the same time some women were able to continue their work attributable to the aid provided by NGO's and other agencies.

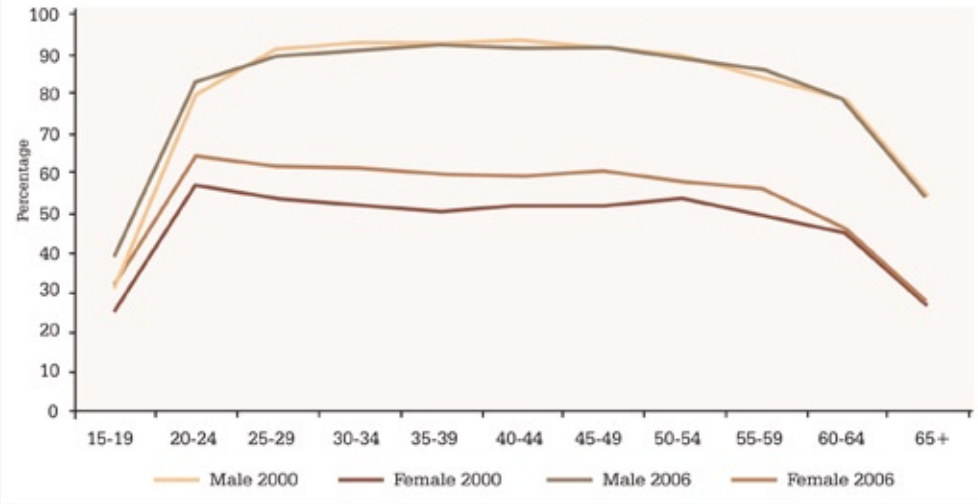
Table 5: Economic activity rates of men and women classified according to Republic, Male' and Atolls for 1995, 2000 and 2006

Census years	Women Economically		Not stated	Men Economically		Not stated
	Active	Inactive		Active	Inactive	
Republic						
1995	28.1	70.8	1.1	73.8	24.9	1.2
2000	37.3	61.4	1.3	71.4	27.3	1.3
2006	51.9	42.0	6.0	73.3	19.9	7.0
Male'						
1995	29.7	68.5	1.7	69.1	69.0	1.4
2000	37.5	60.6	1.9	69.2	28.8	1.9
2006	42.8	47.3	9.9	68.5	19.6	11.9
Atolls						
1995	27.4	71.8	0.9	76.3	22.6	1.1
2000	37.2	61.8	0.9	72.5	26.6	0.9
2006	57.7	38.7	3.6	75.8	20.1	4.1

During 1995 to 2006, the male economic activity rate has slightly increased from 74.0 percent to 75.4 percent respectively. Simultaneously there is an increase in the female participation rates, but there is still a male/female gap of about 22.5 percent in 2006.

Even though the economic activity rates of females are increasing, there are still a large number of females who are economically inactive. This consists of 42 percent of the whole female population of working age in the census 2006, which is a low figure compared to the Census results of 1995 and 2000, with the former revealing an inactive female population of 70.9 percent and the later 42.8 percent. Economic inactivity of women is closely related to women's role in household tasks and child caring. It is also attributed that women continuing their education for higher studies or training is also another reason being inactive but is positive approach that these women most probably will join the labour force later.

Figure 7: Labour force participation rate by age group & sex



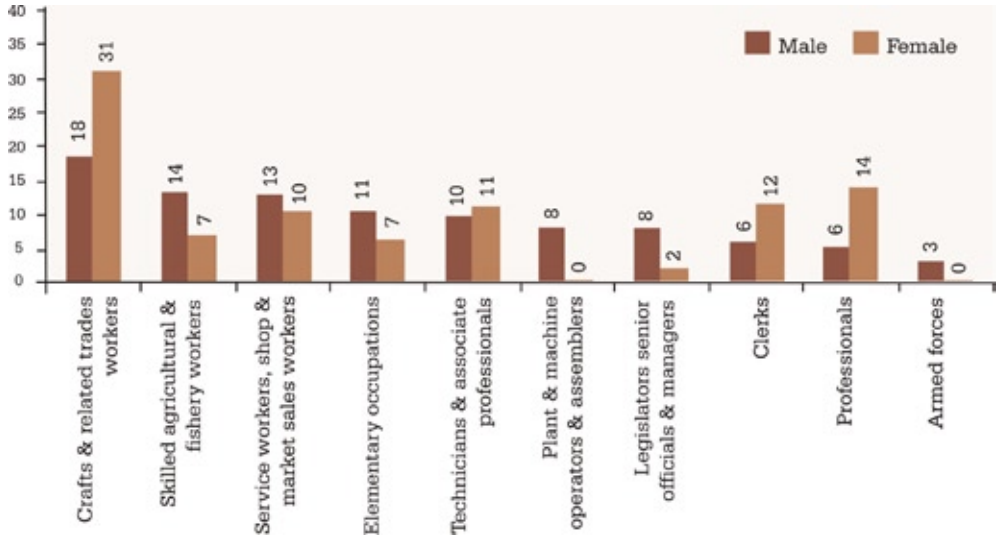
In 2000, the labour force participation rate of women of age 15-19 was 19 percent and this figure has increased to 32 percent in 2006. For men of this age the participation rate was 71.70 percent in 2000 and 38.40 percent in 2006. However, these new labour market entrants have the lowest labour force participation rates.

2.2.1 Employment status

In the Census 2006, employed refers to all persons above the age of 15 years who during the reference week were at work or with a job but not at paid employment or self-employed.

Figure 8 shows the Occupational distribution of Male and Female in 2006. The highest proportions of women are concentrated in craft and related trade worker. This accounts for 31 percent of the total employed female population. The majority of the above mentioned women are self-employed. The distribution of self-employed between men and women are not equal. The reason behind the high concentration of female workers in this field is the fact that they could stay at home and take care of the family while earning a sustainable income. It should be however noted that the highest proportion of men are also concentrated in craft and related trade workers. This could be attributed to the fact that lots of men are engaged in self-employed construction workers and trade workers.

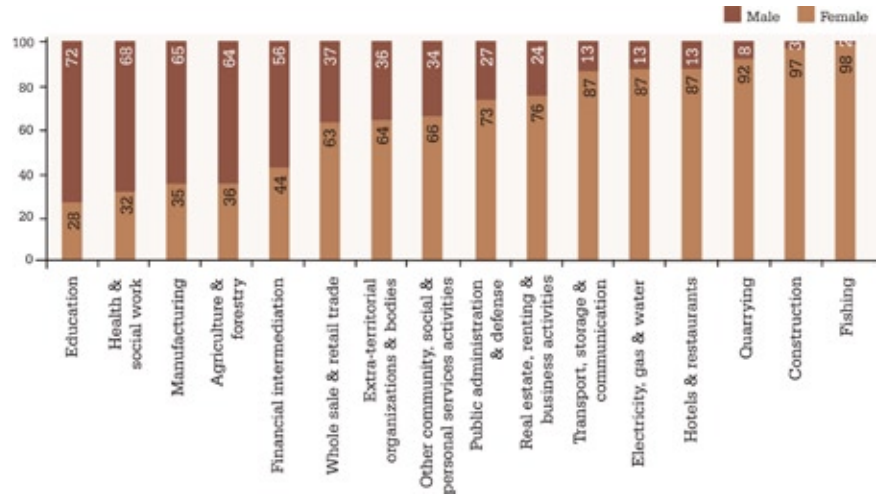
Figure 8: Occupational distribution by gender



It is also worth noting the fact that the percentage of women working as professionals is higher than the percentage of men working in the same field. In fact, 14.3 percent of women are professional workers in the 2006 census while only 5.6 percent of the men were employed as professionals during the same year. The high proportion of women as professionals is accounted for mostly by their overwhelming majority among teachers and health professionals as shown in figure 9.

It should be noted however though there are a high proportion of women in the professional occupations the proportion of women as legislators, senior officials and managers is low compared to men accounting 2 percent for women and 8 percent for men.

Figure 9: Female proportion in non-agricultural & fishing industry in 2006



When looking at the different sectors of the economy, 72 percent of the employed persons in the educational sector are women, followed by health and social work which consists of 68 percent women and manufacturing sector which consists of 66 percent. The least proportion of women are employed in the fishing industry about 2 percent and contruction sector 3 percent followed by 8 percent in Quarrying.

This high concentration of female employee's service sector such as education, health and social work could be because of the nature of these kinds of jobs.

Table 6: Distribution of labour force by institution of employment

Establishment	Female			Male		
	1995	2000	2006	1995	2000	2006
Government administrative	25.9	23.9	28.2	15.9	18.6	21.1
Public enterprise	3.6	-	-	6.7	-	-
NSS	-	-	0.6	-	-	4.2
Foreign establishment	0.9	-	-	4.7	-	-
NGO's & Private establishment	9.1	13.0	18.9	32.8	42.0	39.8
Living quaters/ no fixed place of work	55.4	32.3	45.6	34.5	31.0	29.1
Not stated	5.0	30.8	6.6	5.7	8.4	5.8
Total	100	100	100	100	100	100

It can be seen from the above table that there are more female workers (28.8 percent) than male workers (25.3 percent) employed as government administrative in 2006. Most of the females employed about 45.6 percent were found out to be working from no fixed place of work or from their living quarters. The high percentage of female employees working in living quarters or no fixed place could be that they are engaged in craft and related work.

Table 7: Hours of work by employment status of men & women

Sex/ Kind of work	Employed	Unemployed	Econ.inactive
Female			
Regular economic work	6	-	-
Subsistence work	2	3	3
House work	6	8	7
Average work hours on all activities	**11**	**8**	**8**
Male			
Regular economic work	9	-	-
Subsistence work	3	5	3
House work	3	4	3
Average work hours on all activities	**11**	**5**	**4**

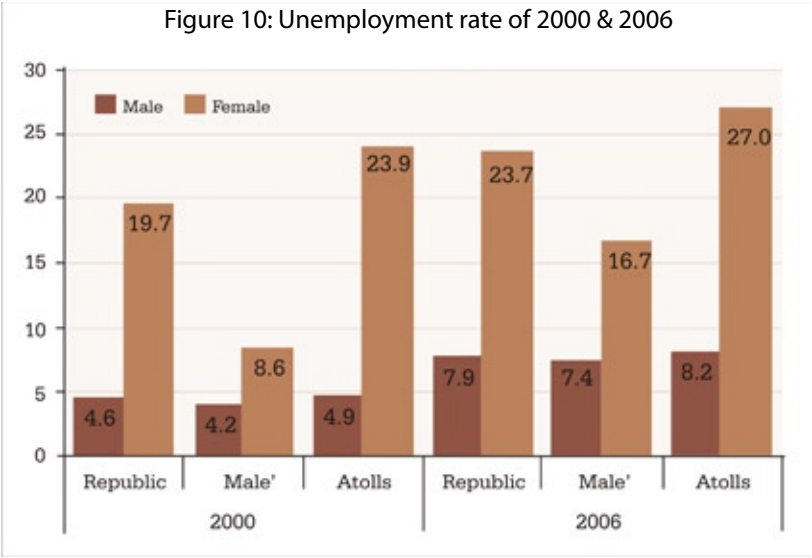
For many women, unpaid work like house work and subsistence work take much of their working hours. Even when women participate in the labour market for paid employment, they still perform the majority of the housework. Although housework is not considered as an economic activity, it adds to the employed women's workload. On average working women spend 8 hours doing house work and subsistence work while spending 6 hours doing regular economic work.

The absence of convenient and affordable childcare facilities is one main reason why a large number of women with children are unable to work for extended periods as men, who spend on average 9 hours a day in regular economic work. The absence of childcare facilities means that most of the women have to leave their children with extended family members or siblings and most of the time the elderly children and family members who are able to take care of children are females, and this in turn can limit women's ability to do other economically productive work.

2.2.2 Unemployment rate

Unemployed is defined in the Census as all persons above the age of 15 years who, during the week of reference were without work but however were actively searching for work in paid employment or self-employment.

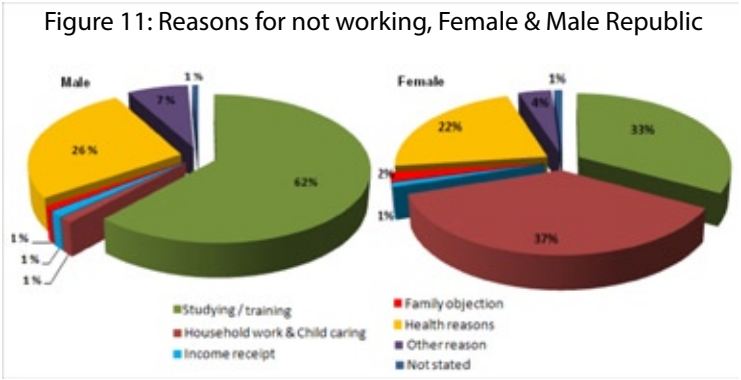
Figure 10: Unemployment rate of 2000 & 2006



The unemployment rate varies to a great extent among males and females. Unemployment is widespread among females, and this problem is most profound in the atolls, with the figure totaling to 27 percent in 2006. In Male' the unemployment rate is 16.7 percent, and when comparing to the rate of growth of unemployment, it is noticed that unemployment is growing at a much faster rate in male' than in the Atolls.

2.2.3 Reason of Inactivity

Figure 11: Reasons for not working, Female & Male Republic



In the census 2006, 38 percent of the women reported household obligations and taking care of children as the reason for being economically inactive while 63 percent of men reported attending a training or studying as the main reason for non participation. Studying and attending training remains to be the main reason for not participating in the labour force for both men and women of age group 15 to 24. At the age of 25 to 34, 40 percent of the men say that the reason for not participating in the labour force is education and training, while at this age group 76 percent of the women put forward household work and child caring as the main reason for non-participation. This is not surprising as this is the age at which women tend to get married and have children.

Therefore, at this age most women take long breaks from work while others permanently leave the labour force. This remains to be the main reason for women not participating in the labour force up to the age group of 35-49.

The educational status does not differ significantly across gender, the enrollment rates for both girls and boys in primary education is almost equal at 87 and similarly there are an equal accesses to job opportunities, however women because of their household obligations gives less commitment to their career and this is reflected in the Census 2006.

Economic inactivity of women is found to be a debatable issue among many people. For instance, if women do not stay at home to take care of their children it may give rise to more serious social problems. Somehow, the household work and looking after children must be taken care of. One way of taking care of this kind of work might be hiring an outside helper, but the cost of this might be much higher in both economic and social terms.

The burden of unpaid domestic work for women is higher in developing countries, and such is the case in Maldives too. Particularly in Atolls where the way of living compounds the demands of simple household task that would otherwise be minimal.

3. Analysis of the comparative position of the households

A household is defined in the Census 2006, as a person or group of persons that usually live and eat together. A household is focused around the management of the resources of its head, together with those of a spouse where one exist, and the care and maintenance of any children and the elderly (Walsh, 2004). A household consists of more than one family or a group of related or unrelated persons and can consist of more than one family. In Maldives households are arranged in more of an extended family system.

Table 8: Percentage of female headed households in Male', Atolls & the Republic

	Total Households	Total Female headed household	Female heads (Percentage)
Male'	14,107	5,603	40%
Atolls	32,087	13,980	44%
Republic	46,194	19,583	42%

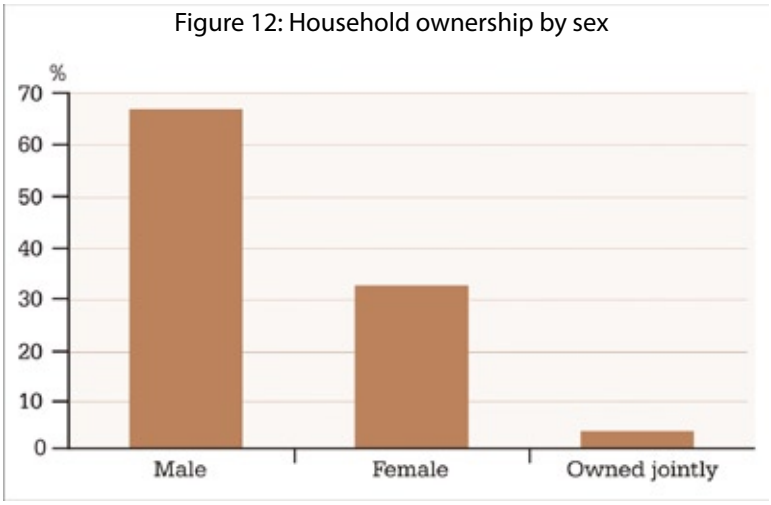
According to the 2006 Census 42 percent of the households in Maldives are headed by females. The percentage seen in the 2006 Census however, is a slight decline from 46 percent recorded in the 2000 Census. The proportion of female headed households in Male' is 40 percent and the percentage for the atolls is 44 percent which can be attributed to the fact that most men in the atolls work outside the island for the fact of not having an adequate job in the native island.

As can be seen in the above table, a high proportion of households in the Maldives are female headed. This is due to the fact that in the censuses the household head is considered as a person who makes the day to day decisions and should be present in the household at the time of enumeration. In the Maldives, as men are considered to be the major bread winners in the families, with the difficulty in finding job opportunities in the home islands, they are forced to work in resorts or in other islands leaving the responsibility of running the households to women. This results in a higher proportion of female headed households being recorded in the censuses

The relative position of the female headed household compared to that of male headed households can be used to show the economic, social and cultural standing of women in any country.

3.1 Ownership of house

Figure 12: Household ownership by sex

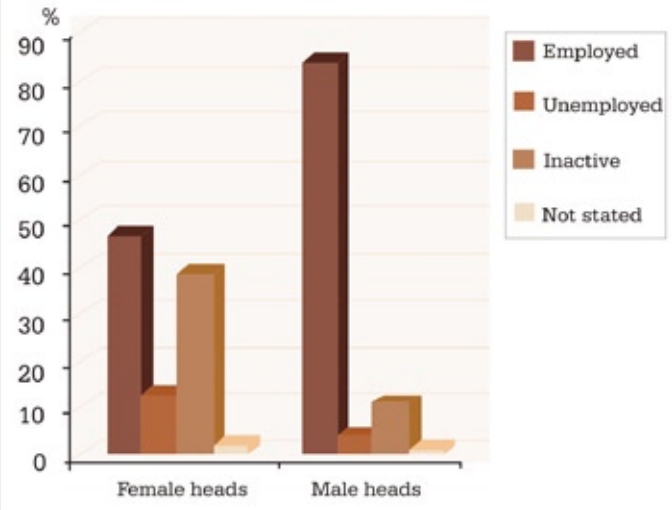


In the 2006 Census, the percentage of the population of owner occupied households is 76.2 percent. The ownership of houses classified according to houses owned by men and women reveals that only 31.3 percent of the houses are owned by women only while 65.5 percent are owned by men only. Houses owned jointly are 3.1 percent, which is very low.

In the Maldives, ownership of households is one of the main indicators of property ownership. As can be seen from the above figure, houses owned by men only is more than double that of houses owned by women only showing a huge gender difference in property ownership. This could increase women's vulnerability as quite a large number of women in the Maldivian population does not own a house themselves.

3.2 Employment status of female and male heads of households

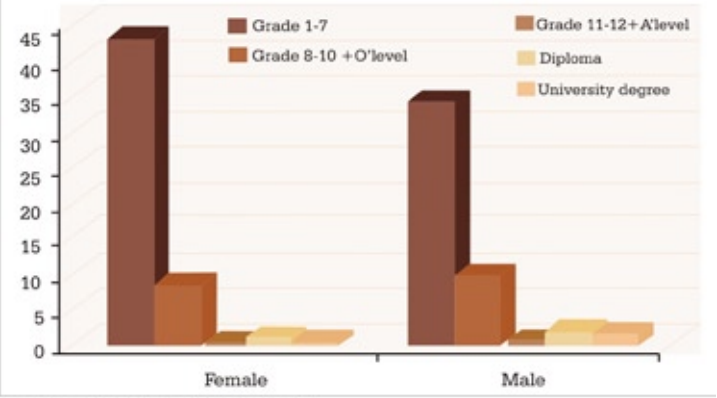
Figure 13: Percentage of Female & Male headed households by employment status



The employment status of male heads of households and female heads of households are very different. About 84 percent of the male heads are employed while only 47 percent of the female heads are so. Similarly it can be observed that a large proportion of female head being unemployed and inactive compared to male heads. The lower proportion of female heads being employed and a large proportion of female head being unemployed and inactive increases the vulnerability of women.

3.3 Educational status of men and women heads of households

Figure 14: Percentage of Female & Male headed households by educational attainment



**Includes first University degree & above*

Note: Excludes 46.2 % of women and 51.5% of men with basic literacy certificates, literate with no standard and those who did not state the level.

A higher percentage of the female heads of households have completed primary education (Grade 1-7) compared to male heads of households. The household heads of both sexes who have completed secondary, higher secondary and tertiary education is very low. However it is noteworthy that there are more men headed households who have attained secondary level and above.

3.4 Housing structure and facilities

According to the tables 9 to 12 below, both male headed and female headed households have access to good quality housing in terms of flooring, roofing and walls. Both female and male headed households have equal access to good quality drinking water and cooking water. Similar observations are seen for both male and female headed households when focusing on the availability of toilet facilities and garbage disposal.

No considerable difference was noted in the ownership of appliances and media facilities between male and female headed households. This includes refrigerators, air conditioners, motor cycles and such consumer durables. However, availability of washing machine is much higher in female headed households at 86 percent, while it is only 41 percent for male headed households.

Table 9: Cooking fuel consumed by female & male headed households

Categories	Firewood	Oil	Gas	Others	Not stated
FHH%	14.3	5.1	78.8	0.3	1.5
MHH%	13.9	4.1	78.2	0.7	3.2

Table 10: Waste disposal of female & male headed households

Categories	Garbage compound	Seaside	Land reclamation site	Into the bushes	Bury in the living area	Burn in the living area	Use a waste disposal machine	Not stated
FHH%	71.7	7.0	0.4	8.5	0.4	10.1	0.3	1.7
MHH%	70.4	7.6	0.4	9.4	0.4	8.17	0.2	3.4

Table 11: Toilet type used by female & male headed households

Categories	Toilet connected to sea	Toilet connected to septic tank	Reserved compound of the house	Others	Not stated
FHH%	38.3	52.5	3.1	5.3	0.9
MHH%	38.7	51.5	2.4	4.4	3.0

Table 12: Appliance ownership & media facilities of female & male headed households

Categories	Washing machine	Refrigerator	Air conditioner	Motor cycle	Bicycle	TV	Satellite/ Cable TV	Computer	Mobile phone	Phone Line
FHH%	86.0	60.7	5.2	22.7	39.5	87.0	50.1	26.9	83.6	26.4
MHH%	41.0	61.1	7.1	27.1	44.2	86.8	52.4	28.7	85.7	25.6

4. Conclusion

The overall sex ratio in the Maldives as per the Census 2006 is 103, which means there are 103 men for every 100 women. The excess of men in the country has been declining from as high of 119 in the year 1911 indicating an improvement in women's survival chances.

In the Maldives, the female headed households form a large proportion of the total households and there are no considerable differences in their quality of living, measured in terms of amenities used in the houses, building materials used, etc.

In the Maldives there is no institutional discrimination along gender lines in access to education and health services and for jobs in the public sector. School enrollment rates for girls and boys are almost the same. Nonetheless, women's access to higher education, necessary to respond to the new employment opportunities is limited especially in the islands. The limited access to higher secondary schools in some of the islands and the absence of university level education in the country limits the educational opportunities available to women.

About 83% of active women are employed in manufacturing, wholesale and retail trade, public administration and defense, education, health and agriculture sectors. Family obligations and objections remain a major obstacle to women when considering leaving their home island in search for educational and employment opportunities. Unemployment is widespread among females, and this problem is most profound in the atolls.

Economic inactivity of women is found to be a debatable issue among many people. For instance, if women do not stay at home to take care of their children it may give rise to more serious social problems.

According to the 2006 Census 42 percent of the households in the Maldives are headed by females. In the Maldives, as men are considered to be the major bread winners in the families, with the difficulty in finding job opportunities in the home islands, they are forced to work in resorts or in other islands leaving the responsibility of running the households to women.

5. Policy Implications

Gender roles and expectations are often identified as factors hindering the equal rights and status of women with adverse consequences that effects life, family, socioeconomic status, and health (Neal.S, Stephen.N, Jennifer.J & William.E). In order to overcome these boundaries, some pressing issues need to be taken into consideration at the policy making level.

First and foremost, a special focus should be given in increasing the labour force participation rate of women.

The major factor hindering the women's ability to find paid employment remains to be household work, taking care of children and the objections by employers in hiring women. In order to address these issues, flexible working practices need to be adapted.

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1. Introduction

The tsunami generated from the earthquake off the coast of Sumatra, Indonesia, on 26th December 2004, reached Maldives at 9:20am. Tidal waves ranging from 4 to 14 feet were reported in all parts of the country with only nine inhabited islands escaping flooding. More than 1,300 people suffered injuries, 83 people were confirmed dead and 25 people were reported missing initially[1]. Over all, 29,000 people, or 10% of the population, were displaced and around 8,000 homes were damaged[2]. Although these figures are minor compared to the death tolls of the other affected countries, the proportionate damage to the infrastructure and economy is much greater in the Maldives. Furthermore, the disaster was not localized in a specific area of the country, as in the other affected countries. The fourteen worst affected islands in the Maldives were spread from Haa Alif atoll in the north to Laamu atoll towards the south.

The tsunami also caused a delay in the Census enumeration which was originally planned for 2005, in accordance with a five-yearly schedule. The decision was taken to postpone the Census by one year to March 2006.

However, during mid-2005 a Tsunami Impact Assessment Survey (TIAS), for social assessment, was carried out on all inhabited islands, and a survey of psychological impact done on the fourteen most-affected islands. The TIAS study provides a useful base to compare with the census results, in order to analyze improvements and highlight areas for concern.

Island classification used for analysis

The impact of the tsunami is analyzed in this study by classifying all the administrative islands in two different ways.

1. Displacement Classification: This analysis separates the Host islands (islands hosting displaced people from other islands) and Persons Internally Displaced (PDI), where the people are displaced on their own islands. Thus there are 17 host islands, 37 PDI islands, and 141 other (total 195 islands)[3]

2. Impact Classification: This classification categorises all the administrative islands to five impact levels based on the initial damage. For this classification the islands are categorised into Very high impact (13 islands), High impact (24 islands), substantial impact (33 islands), limited (121 islands) and nil i.e. no impact (9 islands)[4].

[1] Tsunami Impact and Recovery - Joint Needs Assessment by World Bank, Asian Development Bank, UN 2005

[2] The Maldives – One year after the Tsunami, MPND, 2005

[3] Displacement classifications given by author (Refer to annex 1)

[4] The impact classifications were given to all inhabited islands by the National Disaster Management Centre (NDMC) immediately after the tsunami, based on initial damage assessments. The number of inhabited islands was 200 at the time

2. Displaced Population

The internally displaced persons (IDPs) can be categorized into two groups based on their location:

1. Those displaced on their own islands
2. Those displaced on other islands

Another way of classifying the displaced population is based on their type of residence:

1. Those living in tents
2. Those living in temporary shelters
3. Those living in other people's houses
4. Those living in their own damaged houses

2.1 Total number of Internally Displaced Persons (IDPs)

Since the tsunami, the displaced population has been carefully monitored by the Management of Internally Displaced Persons (MIDP) Unit of NDMC. Their monthly records show the number of people living in tents, living in shelters, living in own damaged houses or in other islands. The numbers of IDPs in the respective categories for the month of Census enumeration, according to MIDP monthly records for March 2006 is given below.

Table 1: Number of IDPs by categories as at March 2006

IDP Classification		No. of IDPs	% Share
Category 1:	Location of IDP		
1.1:	On own island	4598	41.9
1.2:	On other island	6372	58.1
	Total	**10970**	**100.0**
Category 2:	Residential type		
2.1:	In own damaged house	2169	19.8
2.2:	In others house	3150	28.7
2.3:	In shelter	5596	51.0
2.4:	In tents	55	0.5
	Total	**10970**	**100.0**

Source: MIDP, March 2006

The census questionnaire does not clearly identify all IDPs by either category since it is not asked if the individual is an IDP or not.

2.2 IDPs identified by Census results

IDPS that can be identified in the Census results are only the following groups:

1. Those who migrated temporarily due to the tsunami
2. Those who are living in temporary shelters
3. Those IDPs living in tents or other mobile units[5]

The groups of IDPs that are not identifiable in the Census are those who are:

1. Living in their own damaged houses
2. Living in other people's houses on their own island.

Thus out of the total 10,970 of IDPs in March 2006 only 6,075 (55% of total IDPs) are identified in the census. This group will be referred to as CIDPs hereafter in this analysis.

2.3 Current number of IDPs

Since this report is being published two years after the Census enumeration, the status of IDPs as at March 2008 is given below.

Table 2: Current status of IDPs

Number of People	Mar-06	Mar-08	% Change
In own damaged house	2,169	1,354	-37%
In others house	3,150	1,639	-48%
In shelter	5,596	4,753	-15%
In tent	55	0	-100%
IDPs TOTAL	**10,970**	**7,746**	**-29%**
IDPs returned to homes	635	3,989	

Source: MIDP, December 2006, March 2008

Therefore the total number of displaced persons in the country has reduced by nearly 30 percent in the past two years although 7,746 people or 2.5% of the population are still displaced.

As of December 2007, 2,558 houses in 83 islands were repaired and another 180 were in progress. Of the total 2,791 houses needing reconstruction, 584 new houses are now finished and construction of 1,235 is on-going. However 927 funded houses are yet to start and another 47 houses are still unfunded[6].

[5] *In March 2006, the only people residing in tents were 55 residents of K.Guraidhoo*

[6] *Maldives – Two years after Tsunami*

2.4 Type of residence of CIDPs

Housing was one of the sectors that suffered the most damage from the tsunami. The waves damaged structural and non-structural elements of houses, breaking boundary walls and facades, leading to the collapse of houses.

The following table gives a breakdown of the type of residence of the CIDPs. Nearly 90% of the CIDPs are living in the temporary shelters built by the government.

Table 3: CIDPs by type of residence

	Female	Male	Total	%
Living quater (house, flat, appt, rooms)	291	233	524	8.63
Collective living quarter	6	10	16	0.26
Establishment	1	2	3	0.05
Temporary shelter	2,814	2,616	5,430	89.38
Permanent new housing (tsunami)	18	20	38	0.63
Mobile units	26	37	63	1.04
other	0	1	1	0.02
Total	**3,156**	**2,919**	**6,075**	**100**

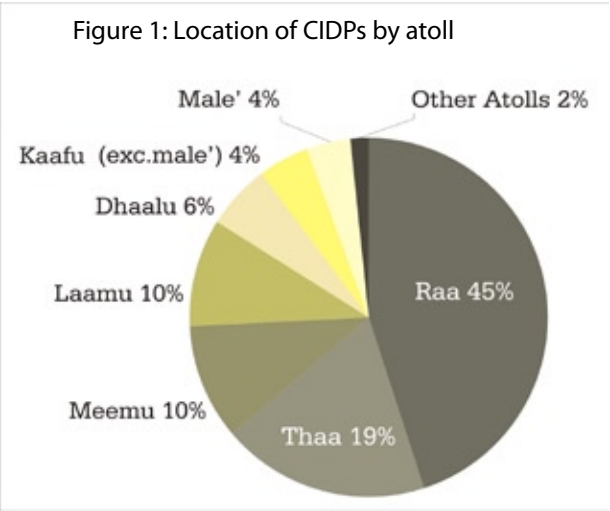
*appt - appartment

2.5 Distribution of Internally Displaced People

In March 2006, CIDPs were spread across 14 atolls, with 83% concentrated on four atolls: Raa, Laamu, Thaa and Meemu atolls.

FIgure 1 below illustrates the distribution of the CIDPs by residence during enumeration. The largest groups of CIDPs is located in Raa Atoll. The residents of R.Kandholhudhoo, Th.Villufushi and M.Kolhufushi make up the largest share of their respective atolls' CIDPs as they await the complete reconstruction of their islands.

Figure 1: Location of CIDPs by atoll



3. Migration due to the Tsunami

In the 2006 Census, people who had migrated to the place of enumeration were asked if they moved due to the tsunami, and if so, whether on a permanent or temporary basis. In total, 3,791 respondents said they moved had temporarily due to the tsunami and 1,067 said they had moved on a permanent basis. They contribute to 1.3% and 0.4% of all migrants, respectively. For this analysis, temporary population movements and permanent migration to administrative islands only are considered, and yields figures of 3,787 and 1,044 respectively.

3.1 Permanent Migration

To analyse the origin of the tsunami-related migrants, the place of registration is considered in the following table. The table shows that, as expected, a clear majority of the people who moved permanently due to the tsunami are registered in the group of islands classified as "very high impact".

Table 4: Origin of tsunami related permanent migrants

Place of Registration		No. of permanent migrants
Impact group	Very High	903
	High	46
	Limited	34
	Substantial	23
	Nil	4
Not stated		20
Male'		14
Total		**1044**

Large-scale permanent movements reflect policy and community decisions to relocate. Populations of five islands have been relocated since the tsunami[7]. The vacated islands are Dh.Gemendhoo, M.Madifushi, R.Kandholhudhoo, Th.Villufushi and Ha.Berinmadhoo.

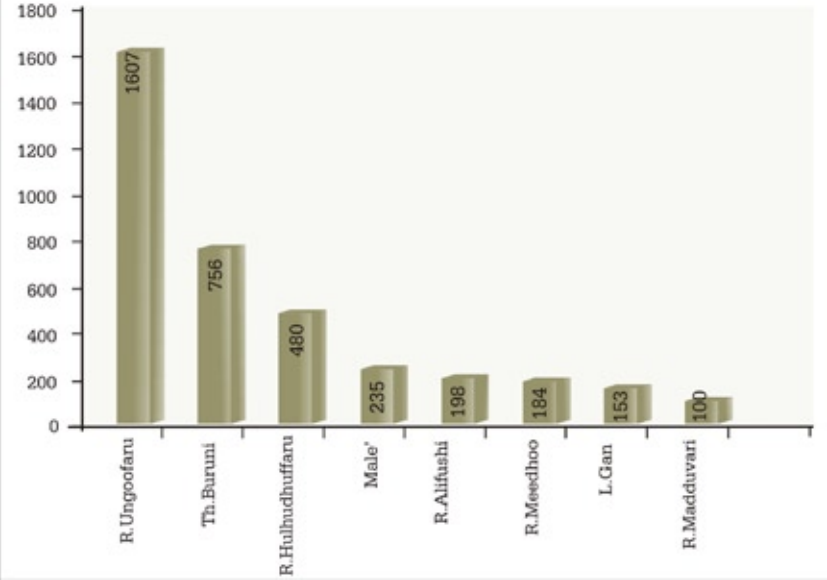
Dh.Gemendhoo and M.Madifushi were permanently relocated to Dh.Kudahuvadhoo and A.Dh. Maamigili respectively. The population of R.Kandholhudhoo will be shifted to the uninhabited island of R.Dhuvaafaru which is now being reconstructed. They are currently displaced in other islands, with the majority in Raa atoll. Th.Villufushi is being reconstructed for the residents who are now residing in Th.Buruni. Ha.Berimmadhoo was relocated to HA.Hoarafushi under the Population and Development Consolidation Programme.

3.2 Temporary Migration

In total, 33 administrative islands, including Male', hosted the 3,787 migrants who moved temporarily due to the tsunami. Of this, eight islands together hosted 98% of the CIDPs. The figure 2 below shows the number of CIDPs on these eight islands.

[7] *The current number of inhabited islands in the country, as at March 2008, is 194 (including Male')*

Figure 2: Location of temporary tsunami migrants
(most concentrated areas only)



4. Education

Damages to the education sector in the tsunami were substantial with 35% of the nation's schools (116 schools) being either damaged or destroyed. Eight required complete reconstruction. Nearly 200 expatriate teachers working in the atolls chose not to return for the new academic year starting in January 2005 after the tsunami and thus 180 teacher trainees were deployed from the Faculty of Education[8] . Two years on, various donors have initiated numerous projects for this sector, ranging from the rehabilitation of schools and temporary classrooms to providing learning materials and other school equipment[9].

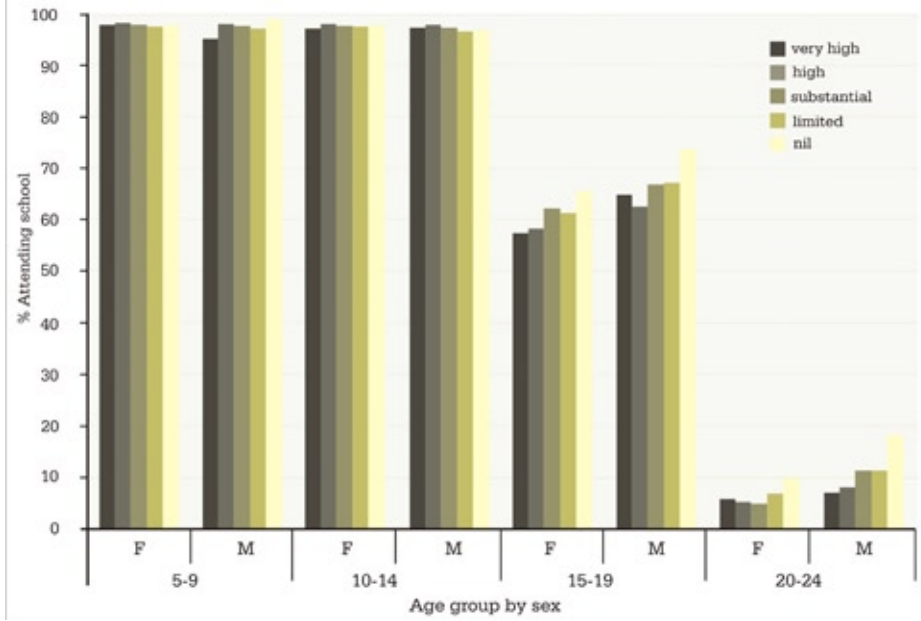
4.1 School attendance by impact groups

The census enumeration identified the highest level of education attained, current attendance in any educational institution and also literacy. For an analysis of the impact of the tsunami, only current school attendance of the school age group is relevant. Figure 3 shows the percent of children in that age group attending school at the time of enumeration by impact group.

[8] *Maldives – One year after Tsunami*

[9] *Maldives – Two years after Tsunami*

Figure 3: School attendance as a % of total age group by impact classification



The attendance of children below 15 years is nearly universal in all impact groups. However, attendance after 15 drops for all impact groups, with a stronger tendency for lower attendance in "higher impact" groups. Furthermore, in all impact groups for the age groups 15 -24, girls have lower participation rates than boys. This is mainly due to the fact that all islands have schools that teach up to primary level and many of the islands have lower secondary schools. Furthermore the atoll education centres and some atoll schools provide an opportunity to attend lower secondary schooling. However, higher secondary schooling is available only in few islands apart from Male'. Hence, the percentage of students attending in this age group 15-19 years has drop mainly due to the fact that after finishing lower secondary school, many students do not have the opportunity to continue to higher secondary level. Moreover this percentage reflects the attendance in secondary education, not tertiary education. However, the percentage of students attending in the age group 20-24 years shows a sharp drop mainly due to the fact that many students do not have opportunity to attend tertiary education due to limited seats in the existing tertiary institutes in the capital Male'.

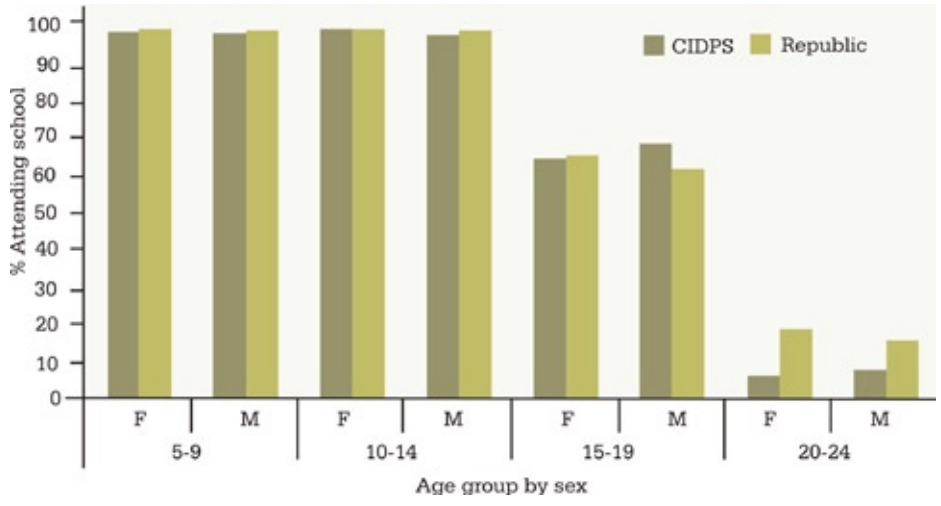
The varying school attendance across impact groups could be because of the need to enter the workforce in this age to generate more household income for those who were more affected and lost more, or it could be that the educational facilities in the more affected islands were not restored adequately to cater for the entire age group.

Since there is such a disparity between groups in the 15-19 age group, this is analysed further in Section 6.2.

4.2 School attendance of CIDPs

School attendance of CIDPs is not very different from the total republic, as indicated in Figure 4 below, especially for below 15 years for both boys and girls, with attendance for boys in the 15-19 year group slightly higher than the national average.

Figure 4: Percent of CIDPs currently attending school by age group



This indicates a satisfactory level of school attendance for CIDPs below 20 years. Comparing these results to figure 3 suggests that school attendance is more affected by location of the person and thus the facilities available, than whether the family is displaced or not.

The Tsunami Impact Assessment Survey (MPND, 2006) reported that the percentage of population living on an island where educational facilities up to grade 10 increased from 65% to 70% after the tsunami. This was a clear improvement due to the migration of the displaced. The census results indicate that this opportunity is used well by the CIDPs below 20 years.

5. Health

The damages to the health sector were also intensive and expensive. One regional hospital, two atoll hospitals, 12 health centres and 30 health posts were damaged or destroyed. Including the massive loss of medical equipment, the total capital loss was estimated at around US$ 12 million. By the end of 2006 half of the damaged health centres and 24 health posts had been repaired or reconstructed. The two atoll hospitals and also the regional hospital had also been repaired[10].

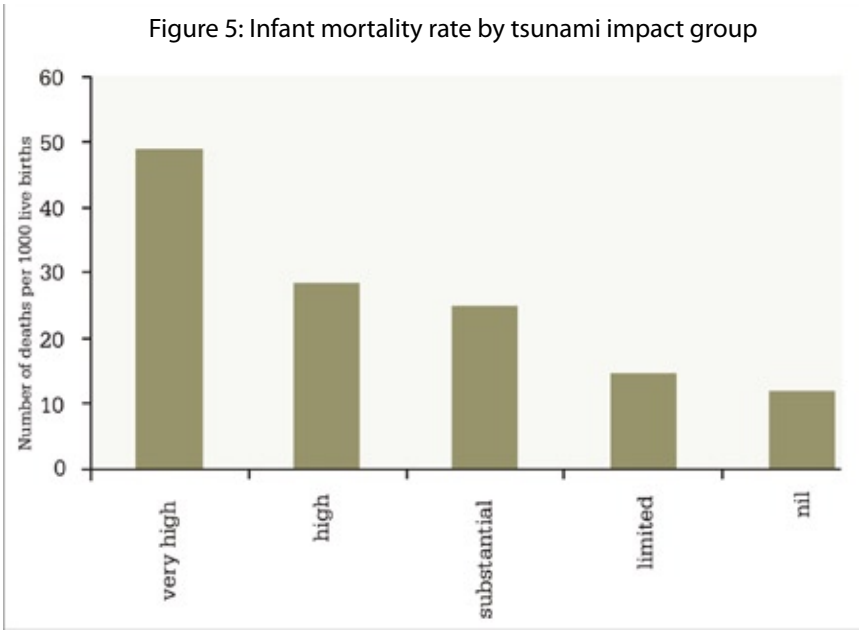
The infant mortality rate (IMR) is one indicator of the health of a population and is calculated by the number of children dying under the age of one year per 1000 live births in that year.

The census data indicates that all 145 babies born in CIDP households in the year up to enumeration, survived, thus once again indicating that the location of the household and thus the health care facilities available are more important for this indicator than housing situation.

The figure 5 on the next page shows the IMR rates for the different impact groups.

[10]Maldives – One year after the Tsunami, Maldives – Two years after Tsunami

Figure 5: Infant mortality rate by tsunami impact group



There is a clear tendency for the IMR to increase in the more affected areas but it is difficult to draw any conclusions about the health situation in these islands using only one indicator. Also, since the population size in the very "high impact" group is significantly smaller than in the other groups, a single death would be of a higher proportion than in other groups.

However, these results highlight a need to further analyze the health sector in these highly impacted islands and gather more evidence for other indicators of health care.

6. Employment

In addition to the loss of livelihoods, families would also have lost their life savings and means of earning incomes, such as backyard agriculture, damage to fishing vessels, and loss of fishing equipment and processing facilities. The agricultural sector also suffered an immense loss when 50% of cultivable area (3,805 ha)[11] in inhabited islands was destroyed due to salt intrusion.

6.1 Labour Statistics

Table 5 presents the statistics regarding the labour force by Impact and Displacement Classifications and for the CIDPs. Figures for Male' and Atolls and the Republic are also given for comparison.

Unemployment rate:

- Of the impact groups the highest unemployment rate is found in the most-affected group for males and females.
- Unemployment rate for female CIDPs is 45.7 percent, a worrying four times larger than the equivalent figures for male CIDPs at 10.2 percent. (See 6.4 Reasons for unemployment)
- The overall unemployment rate for CIDPs is also higher than the national average.

[11]Maldives –Two years after the tsunami

Dependency Ratio:

- In this section the dependency ratio is calculated as the ratio of non-working population to the employed population.
- For the most affected island, (Very high impact), the dependency ratio is 177.3 and increases steadily as the level of impact reduces. This means that more people work as a share of total population in the most-affected islands.
- The dependency ratio among the CIDPs of 261.4 is much higher than the national average of 171.2.
- Islands with a high number of displaced own-residents (PDI) have a much lower dependency ratio of 181.4 compared to islands which are hosting displaced persons from other islands: 208.2. Thus on average, families in host islands have more dependants per worker, while islands with own people displaced have less dependants per worker.

Labour Force Participation rate:

- This rate is calculated as the sum of the employed and unemployed, given as a percent of the total population aged above 15 years.
- There is a strong tendency for the labour force participation rate to be higher in the islands more greatly impacted by the tsunami.
- The labour force participation rate of islands with a high number of displaced (PDI) and also of the CIDPs themselves is also high. This further strengthens the previous findings that the displaced communities are more economically active.

Table 5: Labour force statistics

	Employment			Unemployed			Labour Force Participation Rate			Unemployment Rate			Dependency Ratio*
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	
Republic	69701	40530	**110231**	5981	12624	**18605**	*73.0*	*52.0*	***62.6***	*7.9*	*23.7*	***14.4***	*171.2*
Atolls	44799	26461	**71260**	4000	9800	**13800**	*75.8*	*57.7*	***66.9***	*8.2*	*27.0*	***16.2***	*174.0*
Male'	24902	14069	**38971**	1981	2824	**4805**	*68.5*	*42.8*	***55.6***	*7.4*	*16.7*	***11.0***	*166.1*
Islands By Tsunami Impact Group													
Very high	1384	1022	**2406**	187	399	**586**	*76.7*	*64.8*	***70.5***	*11.9*	*28.1*	***19.6***	*177.3*
High	5400	3828	**9228**	467	1272	**1739**	*73.5*	*59.1*	***66.0***	*8.0*	*24.9*	***15.9***	*178.6*
Substantial	7356	5345	**12701**	713	1687	**2400**	*69.9*	*56.9*	***63.2***	*8.8*	*24.0*	***15.9***	*192.5*
Limited	19647	14984	**34631**	2387	6064	**8451**	*72.7*	*57.0*	***64.1***	*10.8*	*28.8*	***19.6***	*211.3*
Nil	1207	1009	**2216**	145	369	**514**	*68.8*	*57.5*	***62.6***	*10.7*	*26.8*	***18.8***	*217.9*
Islands By Displacement Classification													
Host Islands	5459	3623	**9082**	541	1545	**2086**	*72.9*	*55.2*	***63.5***	*9.0*	*29.9*	***18.7***	*208.2*
PDI	6241	4128	**10369**	639	1549	**2188**	*71.7*	*60.7*	***66.3***	*9.3*	*27.3*	***17.4***	*181.4*
Other	23307	18437	**41744**	2721	6697	**9418**	*72.2*	*57.4*	***64.1***	*10.5*	*26.6*	***18.4***	*204.8*
CIDPS	1130	552	**1682**	128	464	**592**	*68.0*	*63.6*	***66.0***	*10.2*	*45.7*	***26.0***	*261.4*

•e*mployed population to remaining total population (not labour force to remaining total population)*

6.2 Situation of age group 15-19

At this age, children of struggling families are more likely to stop attending school and enter the labour market. While it would be interesting to see if the gender of the head of household has any effect on school attendance at this age, 86% of CIDPs did not state the ownership of household. A significant reason for this is that the majority of CIDPs are living in temporary shelters which are government property.

The following table is an in-depth analysis of the trend indicated in Figure 3, which shows the percent of school attendance in the 15-19 age group decreased as the level of impact increased.

Table 6: Situation of 15-19 age group

	% Attending school		% Employed		% Unemployed	
Very high	57.3	64.7	24.8	21.6	16.8	13.1
High	58.2	62.0	23.4	27.2	13.5	8.7
Substantial	61.5	66.2	22.4	23.8	10.4	8.8
Limited	61.0	66.7	21.3	22.0	14.1	10.6
Nil	65.5	73.4	19.4	18.6	12.4	6.6
CIDPs	63.4	67.5	14.8	26.9	17.6	7.0

Dissecting this age group by impact groups shows a clear tendency for lower school attendance and higher employment rates in higher impact groups for both females and males. At the same time, the percent unemployed is also higher, indicating that these adult teenagers of "higher impact" groups are searching for jobs unsuccessfully, even forgoing the opportunity to attend school. It is also likely that education facilities available to the "higher impact" groups are not sufficient to cater to this entire group due to damage or on-going reconstruction of such facilities.

Females have a higher unemployment rate than males in all groups. These results support the conclusions drawn by the TIAS study that more young women are looking for work unsuccessfully in "higher impact" groups than in other groups. This highlights an immediate need to generate jobs in the islands in very high- and high- impact groups.

The tsunami generated a boom in the construction, trade and transport industries but it does not appear that these opportunities were benefited by those in the "high-impact" areas.

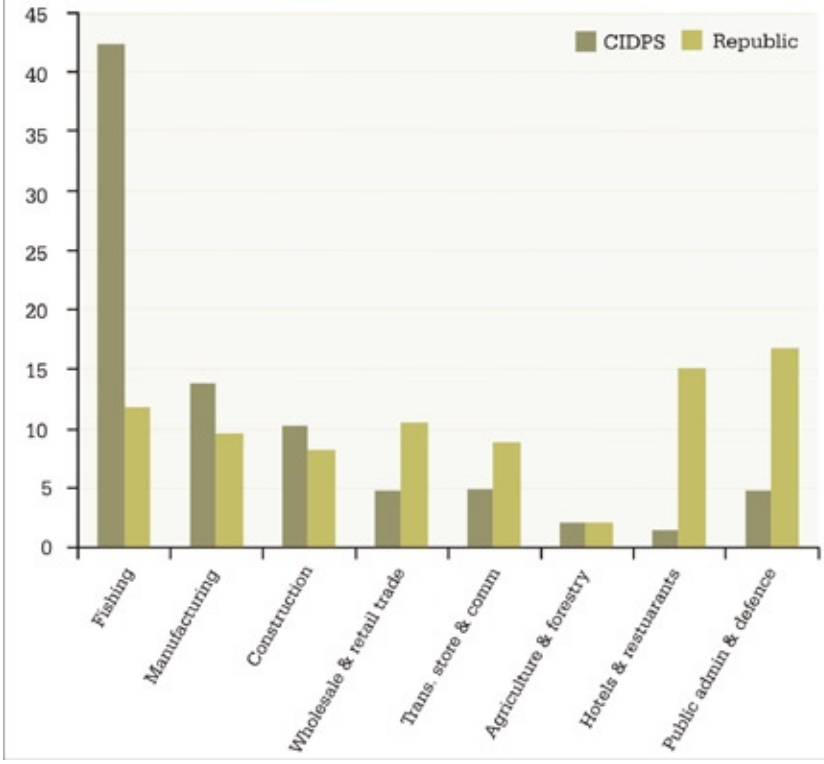
6.3 Main industries where CIDPs are employed

Twenty-four of the eighty-four resorts in operation at the time of the tsunami were damaged. Thus the average occupancy of resorts dropped from 83.9 percent in 2004 to 64.4 % in 2005[12], which was worsened with the second Sumatran earthquake in March 2005. However the tourism industry picked up, with the occupancy rate in 2006 reaching 81.8 %.

Analysis of the main industries that the displaced are involved in reveals different trends for males compared to the national shares in different occupations, as is shown in Figure 6

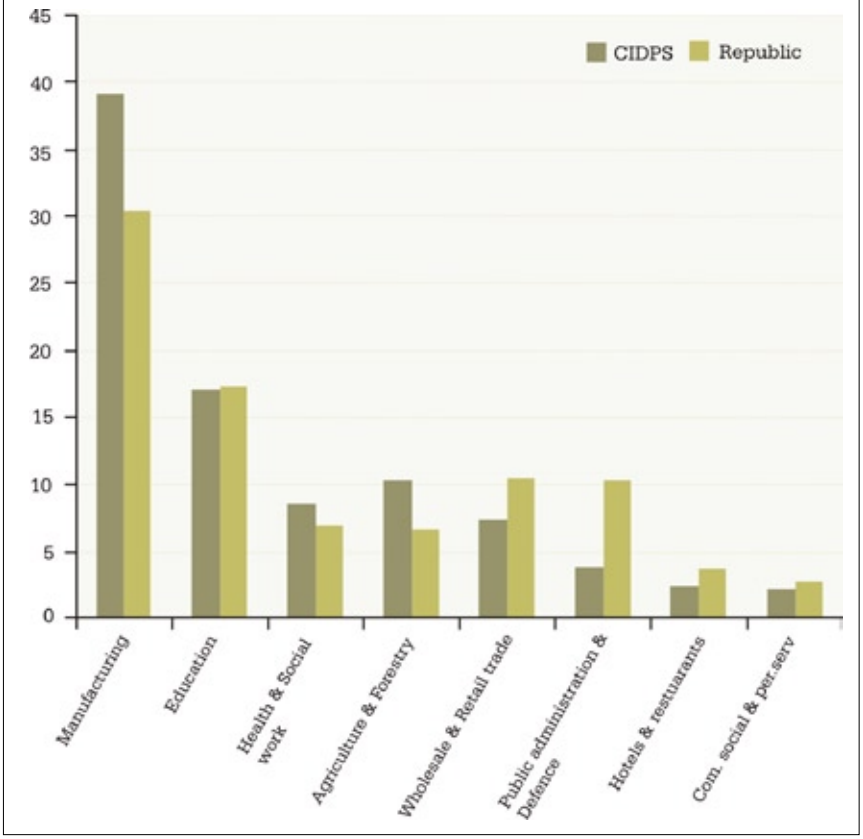
[12]*Tourism Yearbook 2006*

Figure 6: Percentage of Male workers in main industries



About 42% of male CIDPs are involved in fishing, with manufacturing being the next key industry. This is in contrast to the national rates where the most number of males are involved in Public Administration, Defence and the hospitality industry.

Figure 7: Percentage of Female workers in main industries



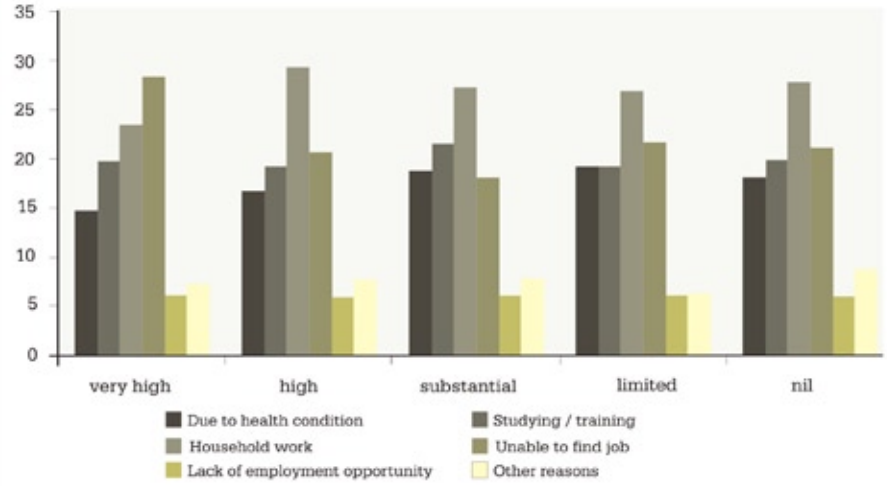
Distribution of the working female CIDPs is similar to the national female distribution, with the largest share in manufacturing and the next largest group in Education.

6.4 Reason for unemployment

The census questionnaire identifies ten reasons why someone who is unemployed is not working.

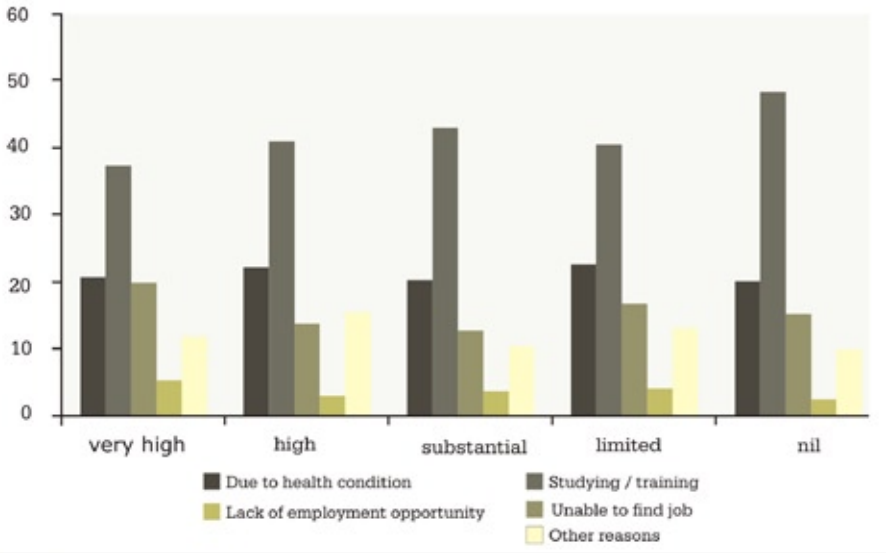
6.4.1 By impact group

Figure 8: Reasons for Females not working by impact group (by %)



Inability to find a job is the main reason that the high unemployment rate of 28% persists among females in the "high-impact" groups. Inability to find a job in the most-affected group even exceeds the traditionally main reason for women not working: due to household work. By contrast, unemployment due to health conditions is lower in the "high-impact" group than in the other groups. Thus this reason is not sufficient to hold these workers back, due to the need to generate more income.

Figure 9: Reasons for Males not working by impact group (by %)



For males, as well, a higher percent in the "higher-impact" group say they are unemployed due to the inability to find a job and that there are insufficient jobs available. Also the proportion of those not working due to studying or training is lowest in the most affected islands. This highlights an important and urgent need to generate jobs in these islands and to inform the population about these jobs.

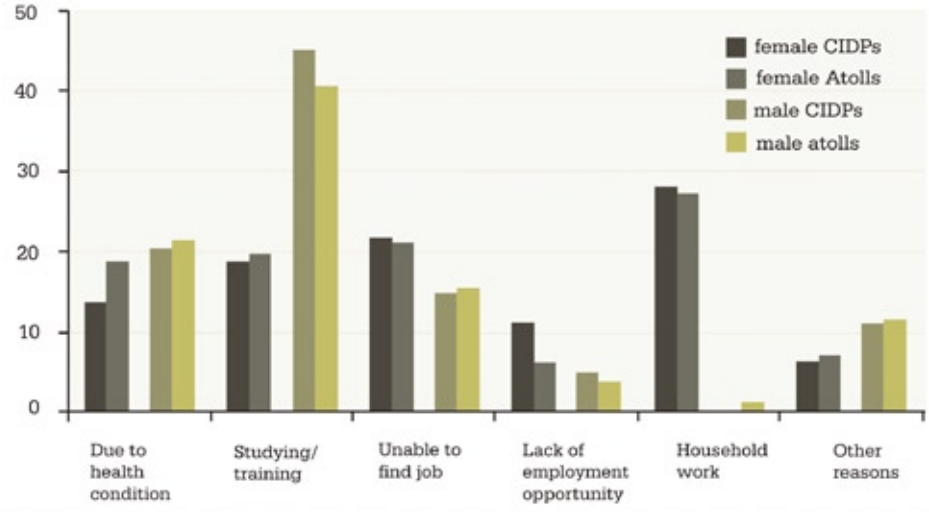
6.4.2 By Displaced populations

Comparing the main reasons for CIDPs not working with the main reasons stated by the Atoll population, reveals similarities within the same gender.

For female CIDPs the main reason for not working is due to household work as is nationally stated. For males the main reason for not working is due to studying or training. However, lack of employment opportunities available to them leads to a larger percentage of CIDPs not working than the national average for both males and females. Furthermore, the percentage of female IDPs who are not working due to the inability to find a job is higher than the national rate for either males or females.

Therefore, these results indicate a willingness to work clearly related to the tsunami that is not being sufficiently catered to.

Figure 10: Main reasons for CIDPs not working compared to reasons given for the Atolls, by sex



7. House Facilities

Since 89% of the CIDPs are living in identical Temporary Shelters with similar kitchen and toilet facilities, it is not useful to analyze the CIDP access to these facilities. Similarly, electricity and water was connected and paid for by the government irrespective of the income level of the household. Thus this section only analyses the household size of and ownership of consumer durables by the CIDPs in comparison with the nation-wide figures.

7.1 Household size

The household size for the inter-censal period (1995-2006) decreased across the atolls and in Male' but this source of data alone does not capture the sharp rise in household size immediately following the tsunami, as illustrated below.

Table 7: Household size during 2000 & 2006 from various sources

	Male'	Atolls
Census 2000	7.6	6.3
VPA II 2004	8.0	6.1
TIAS 2005	8.2	6.6
Census 2006	7.4	6.1

TIAS 2005 indicates an average 8.2 in households in Male' and 6.6 in the Atolls. Thus the reduction of the household size one year later in March 2006, is more appreciated when these figures are taken into account.
The average household size in different impact groups is shown in the next table.

Table 8: Household size by impact group

	Population	No.of households	HH size
Veru high	6,672	1,046	6.4
High	25,712	3,229	7.8
Substantial	37,146	6,169	6.0
Limited	107,815	20,106	5.4
Nil	7,045	1,264	5.6

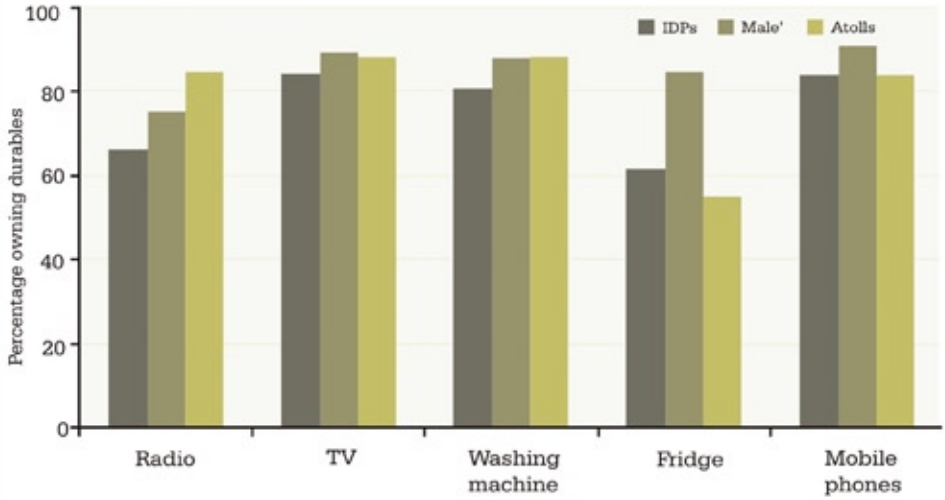
Of the 23 islands in the "high-impact" group, 17 are classified as PDI, which means these islands are hosting people from other islands. Thus, given the number of displaced people on these islands, larger household sizes can be expected.

7.2 Consumer Durables

In addition to damage to housing, the directly-impacted people would have lost a number of consumer durables as well. However, recovery was swift in this area and the TIAS estimated that,

by June 2005, households had replaced 80 % of gas cookers and washing machines and 60 % of television sets. The effect of being displaced on ownership of selected consumer durables is illustrated in Figure 11.

Figure 11: Percentage owning certain durables CIDPs, Male', & Atolls

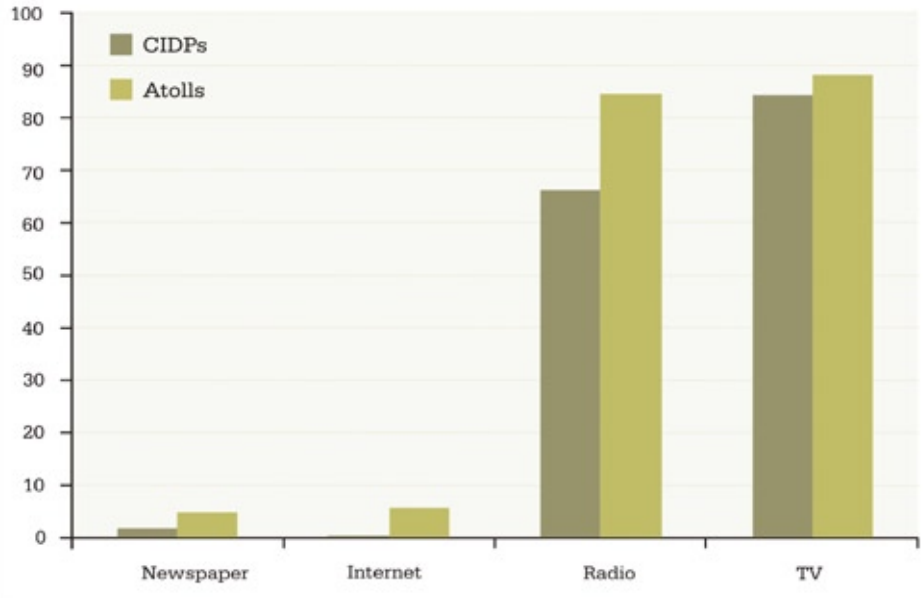


Of the items analyzed here, the ownership of fridges in CIDPs is the lowest but this is not completely due to the tsunami as nearly half of the population in the atolls do not have a fridge. The ownership of radios, TV, mobile phones and washing machines is below the Atoll ownership levels, some more significantly than others.

7.3 Access to Media by CIDPs

The exposure of CIDPs to the general media was below the average for the Atolls as illustrated in the figure 12 below.

Figure 12: Percentage of people with access to selected forms of media



8. Conclusion

In March 2006, there were 10,970 displaced people in total in the Republic. The census analysis identifies 55% of IDPs. The analysis in this chapter is made using the term CIDPs for this group. In addition two classifications of all administrative islands were used in this analysis: Impact groups (level of impact of tsunami on that island) and Displacement classifications (if the island is hosting people from other islands or having their own people displaced).

In the education sector, school attendance rates among younger age groups does not indicate a cause for concern but after the age of 15, there is a higher tendency in islands that were more affected to see children drop out of school to enter the labour market. This is despite the fact that given the tsunami related migration more people were living on an island with better secondary schooling. Furthermore, it is unfortunate that although they forgo the opportunity to study in order to find jobs, this age group still reports high unemployment rates.

Overall, there is a much higher unemployment rate for female CIDPs mainly because they are being unable to find a job. This was also noted in TIAS and is still evident in March 2006.

Analysis of the 2006 Census data on the health sector shows that IMR is higher in higher-impacted areas than in the non-affected areas, but also that, since the size of each impact class is very different, a single death is of different proportions.

9. Recommendation

- These results highlight an urgent need to generate jobs or provide assistance in these areas, especially for women, and inform the people about jobs and opportunities available.

- The higher IMR rates for higher impact groups suggest that the health sectors in areas of higher impact need to be analysed further to assess the true situation of the quality of services available.

- Unemployment caused by inability to find jobs and lack of jobs available needs to be addressed quickly, before these households slip into poverty.

- Social indicators of the 44.6% of IDPs not identified in the Census needs to be analysed so that the areas for concern are not biased or under-estimated. Furthermore regular monitoring of the IDPs economic and psychological well-being should be carried out to minimise any permanent loss caused to the affected persons due to this catastrophe.

10. Annex

Displacement classification

	Name	No.of Islands	Population	Description	Source
1	Host Islands	17	27,992	Hosted more than five people from another island	Census 2006
2	PDI	37	29,176	Have IDPs who are residents of the same island	MIDP March 2006
3	Other	141	127,240	All remaining administrative islands except Male'	Census 2006

Islands classified as PDI in this analysis:

1 HA. Filladhoo
2 HDh. Nolhivaranfaru
3 HDh. Nellaidhoo
4 Sh. Maroshi
5 Sh. Komandoo
6 N. Maafaru
7 B. Dhonfanu
8 K. Huraa
9 K. Maafushi
10 K. Guraidhoo
11 AA. Mathiveri
12 V. Felidhoo
13 M. Muli
14 M. Kolhufushi
15 M. Dhiggaru
16 M. Maduvvari
17 Dh. Meedhoo
18 Dh. Ribudhoo
19 Dh. Hulhudheli
20 Dh. Vaanee
21 Dh. Maaeboodhoo
22 Th. Vilufushi
23 Th. Madifushi
24 Th. Dhiyamigili
25 Th. Guraidhoo
26 Th.Thimarafushi
27 L. Isdhoo
28 L. Dhanbidhoo
29 L. Maabaidhoo
30 L. Mundhoo
31 L. Kalhaidhoo
32 L. Fonadhoo
33 GA. Viligili
34 GA. Maamendhoo
35 GA. Nilandhoo
36 GA. Dhaandhoo
37 GDh. Gadhdhoo

Islands classified as Host Islands in this analysis:

1 HA. Hoarafushi
2 Sh. Funadhoo
3 R. Alifushi
4 R. Ugoofaaru
5 R. Maduvvari
6 R. Meedhoo
7 R. Hulhudhuffaaru
8 Lh. Hinnavaru
9 Lh. Kurendhoo
10 K. Thulusdhoo
11 AA. Bodufolhudhoo
12 ADh. Maamigili
13 V. Keyodhoo
14 M. Mulah
15 Dh. Kudahuvadhoo
16 Th. Buruni
17 L. Gan

For islands which have both internally displaced people and are also hosting people from other islands, the category with the greater number is considered. For instance, L. Fonadhoo hosted 4 people from other islands in March 2006 but had 187 internally displaced. Therefore this island is included as a PDI island in this analysis.

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1. Introduction

The population projections presented in this report span the period from 2006 to 2050 for Maldives. These projections are not intended as predictions or forecasts, but as illustrations of growth and change in the population which would occur if certain assumptions about future levels of fertility, mortality and net migration were to prevail over the projection period.

Projection assumptions are formulated after analysis of short and long-term historical trends, recent trends and patterns observed in other countries, and any other relevant information. Although the assumptions are carefully formulated to represent future trends, they are subject to uncertainty. Given the uncertainties about the future trends in population growth a set of alternative projections are derived, base on different demographic scenarios.

The report highlights the main features from each set of projections, so that their implications for policy-making and planning in both the public and private sectors can be anticipated and catered for. The report begins with a description of the base population, the projection methods and underlying assumptions. The results of the projections are presented along with a brief analysis of projected growth and age-sex structure. The appendix provides detailed tables of four selected projections.

2. Projection Methodology and Results

The *cohort component* method was used to derive the population projections. By this method, the base population is projected forward by calculating the effects of deaths and migration within each age-sex group according to specified mortality and migration assumptions. New birth cohorts are generated by applying specified fertility assumptions to the female population of childbearing age.

The demographic model in SPECTRUM, known as Dem Proj (Version 4), was used to make the population projections. The projection it makes are based on cohort component method and requires information on the main component s of population growth, (1) the current population, and (2) fertility and mortality rates for a country or region. More specifically, the program requires information on the number of people by age and sex in the base year, as well as current year data and future assumptions about the total fertility rate (TFR), the age distribution of fertility, life expectancy at birth by sex, the most appropriate model life table, and the magnitude and pattern of international migration.

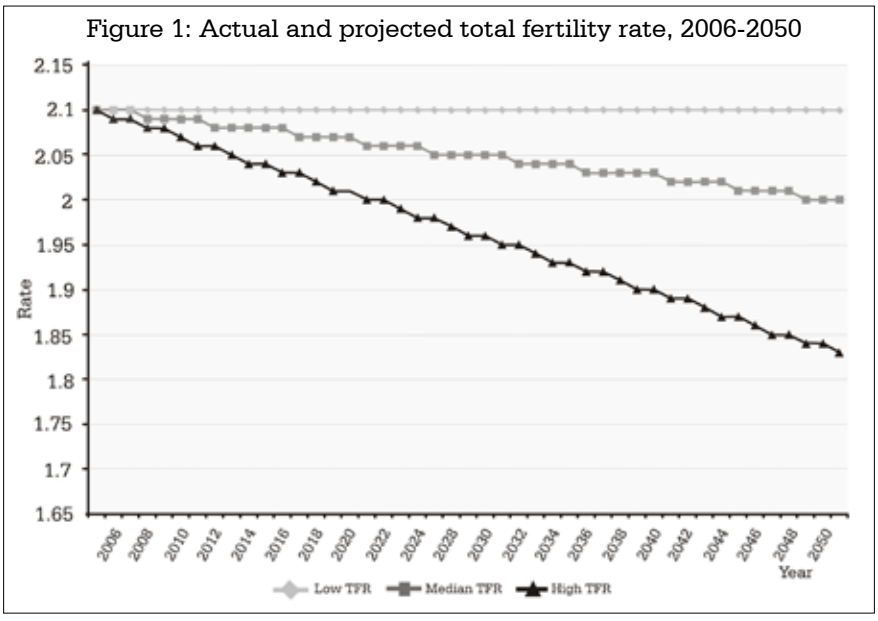
3. The Assumptions of the Projection

There are four broad categories of inputs and assumptions which need to specify before producing the desired projections:

a. Base Population: The first input Variable is the Base Population. As for the starting point of the projection, the base population, male and female population figures, classified by age group as of 31 March 2006, excerpted from the recent Population and Housing Census of Maldives 2006, was used. The "age unknown" figure was proportionately distributed over all age groups.

b. Fertility Assumption: The single most important factor in determining future population is the Total Fertility Rate (TFR). There are four alternative Total fertility variants – designated low, medium and high growth – which assume that fertility rates will be more or less same until the year 2050 when the total fertility rate will reach 2.1, 2.1 and 2.0 births per woman, respectively. The base total fertility rate in 2006 was 2.1 births per woman. The age specific fertility rates for 2006 are assumed to remain constant through out the projection.

Figure 1: Actual and projected total fertility rate, 2006-2050



The assumption that fertility is declining dramatically in the Maldives is backed by the study, rapid fertility decline in the Maldives and previous census and vital registrations. This study demonstrates that the families are having less number of children; the average of six children for woman in 1985 fell for 5.4 in 1995, and 2.8 in 2000 and 2.1 in 2006. Therefore much lower fertility is a distinct possibility in the future. Accordingly, Maldives-high growth projection includes an assumption that fertility will fall over the next 50 years to a level roughly equivalent to current levels in developed countries.

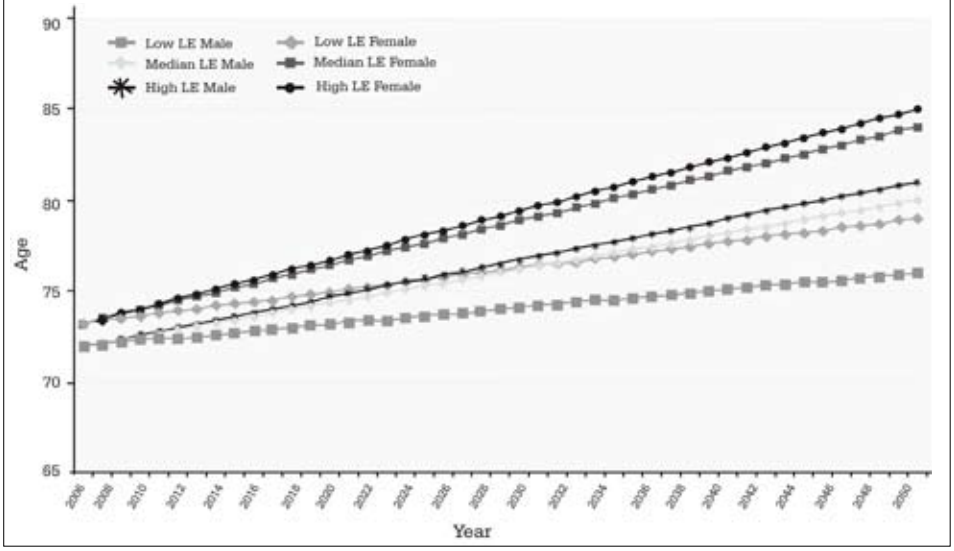
c. Mortality Assumptions: Life expectancy figures (by sex) for the base and end periods of projection are also required. Life expectancy figures for the 2006 calculated from the vital registration system are used in the projections.

The advances of the medicine and the improvement in the general conditions of life of the population had contributed to raise the life expectancy of the Maldivians, that increased 13.76 years for women and 9.7 years for men between 1985 and 2006 that is of 62.2 for 71.9 years, and 59.48 for 73.24 years respectively (See figure 2). Depending on the mortality experience of Maldives, gains in life expectancy at birth is expected to continue throughout the projection period. Mortality is projected by assuming that life expectancy rises according to one of three schedules low, medium and high. Each schedule provides for slower gains at higher levels. In the high growth schedule for instance the gain in life expectancy is one year for both males and females from the initial life expectancy of 71.7 for men and 73.2 for women. Mortality assumptions for the end period of projections (i.e. 2050) are provided in Table 1.

Table 1: Projection Scenarios and Assumptions

Scenarios	Assumptions		
	Total fertility rate	Life expectancy at birth (years)	
	Babies per women	Male	Female
High growth	2.1	81.0	85.0
Medium growth	2.0	80.0	84.0
Low growth	1.8	76.0	79.0

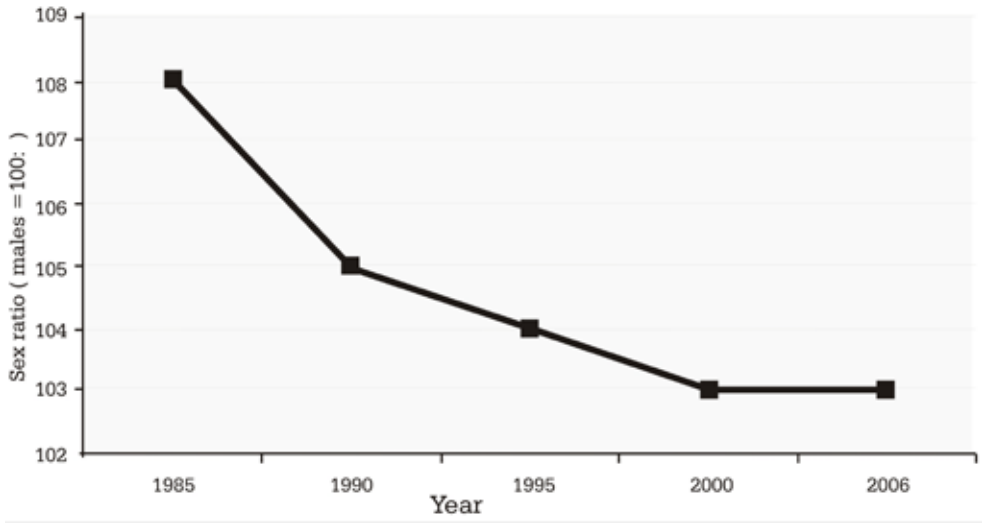
Figure 2: Actual and projected life expectancy at birth, 2006-2050



d.International Migration Assumption: The significance of International Migration factor for the Maldives population growth is not clear. However, for the purpose of this report it is assumed that there is no significant emigration or immigration taking place in the country.

e. Sex Ratio: As for the sex ratio which divide the number of male and female, the female to male ratio is 103 based on the results of the 2006 Population and Housing Census of Maldives and is assumed to remain constant from 2006 onward for the projection series until 2050. (See Figure 3).

Figure 3: Sex ratio at birth 1985 - 2006



4.Population projection

Using different combinations of the above assumptions, four different Projections were generated. These projections were labeled Maldives-Medium, Maldives-high, Maldives-Low. Table 1 shows different combinations of inputs used to generate each. The medium-growth projection is considered the most suitable for assessing future population changes.

4.1 Medium-growth scenario

- Fertility: the total fertility rate will decrease to 2.08 births per woman by 2050
- Mortality: life expectancy at birth will increase to 80.0 years for males and 84.0 years for females by 2050.

The other projection series allows assessing the impact on population size and structuring resulting from changes in the assumptions for each of the components of population change. The varying assumptions of these three projections are as follows:

4.2 High Growth

- Fertility: The total fertility rate falls from 2.8 births per woman to replacement level fertility of 2.1
- Mortality: Life expectancy at birth will rise by 0.5 years in every 10-year period. The initial life expectancies at birth are 70.7 for men and 72.2 years for women. By the end of the projection, these will have risen to 71.7 for men and 73.2 years for women.

4.3 Low Growth

- Fertility: The total fertility rate falls from 2.11 births per woman to 2.08 births per women by the end of the projection.
- Mortality: Life expectancy at birth will rise by 5 years in every 10-year period. By the end of the projection it will have risen to 72 for men and 75 for women.

After specifying the inputs in the SPECTRUM, a detailed report on four scenarios of projected population can be extracted. The output from SPECTRUM contains details about the projected population like age composition, dependency ratios etc. However, for the sake of brevity projected population (Table 2) and growth rate (Figure 4) figures for all four Scenarios at five-year intervals are presented. The Population figures have been presented in thousands and the growth rates are in percentages.

5. Projected Population Growth

5.1 Population size and growth

The total population enumerated in Maldives at the first census in 1911 was only 72.2 thousand; at the last census of population (2006) it was 298.9 thousand. This represents a four-fold increase since 1911. The populations resulting from the four projections scenarios are shown in Table 2 and are graphed in Figure 4.

Figure 4: Total population, projection Scenarios, 2006 - 2050

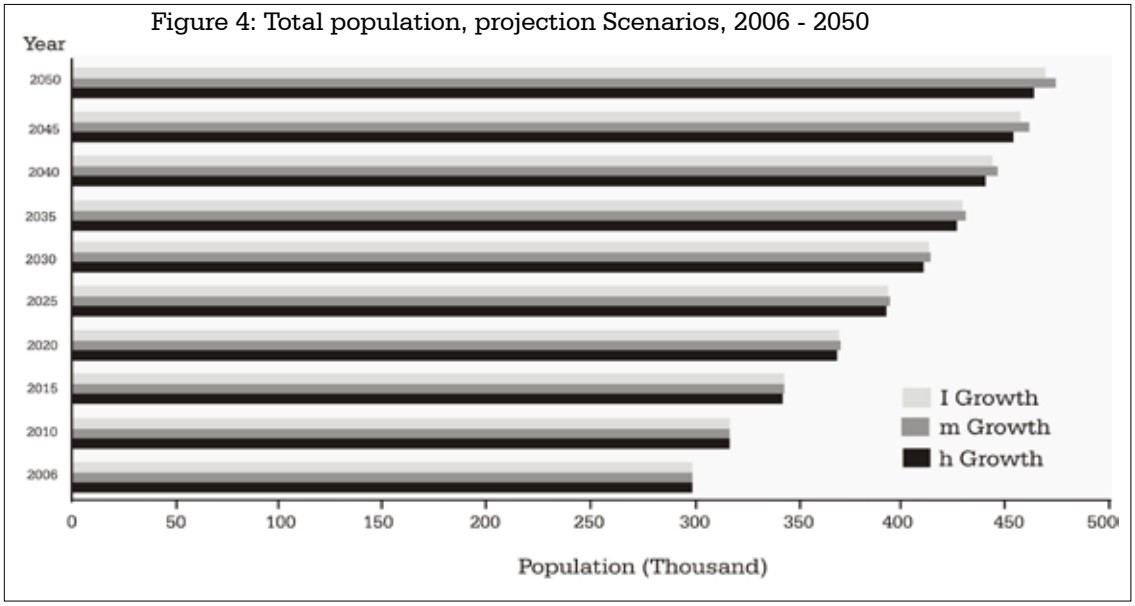


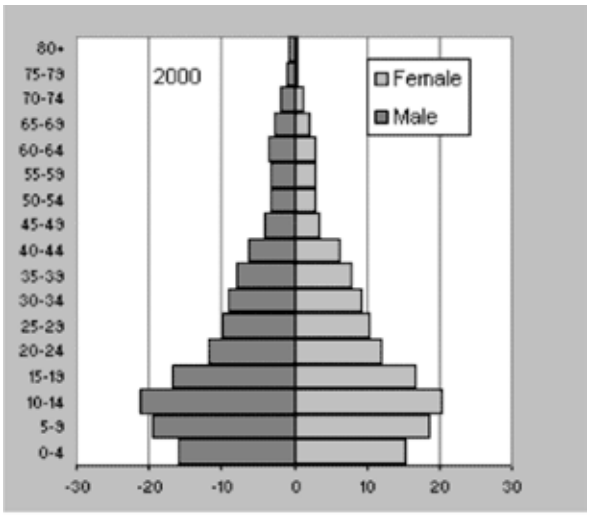
Table 2: Total population, Projection Scenario, Maldives 2006 - 2050

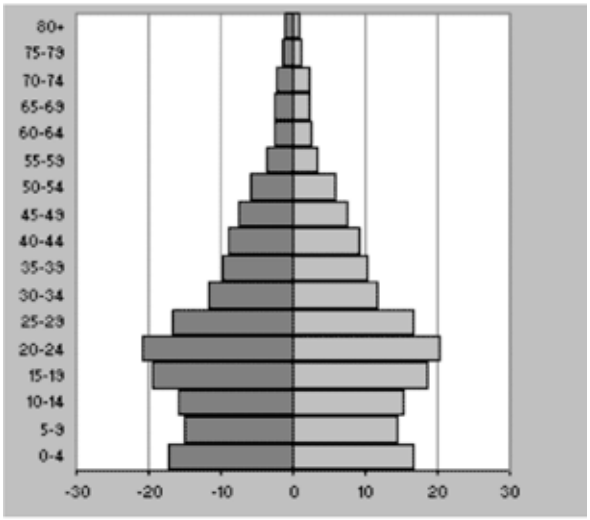
Year	Total Population (Thousand)		
	High growth	Medium growth	Low growth
2006	298.97	298.97	298.97
2010	317.20	317.28	317.23
2015	343.07	343.43	343.24
2020	369.34	370.33	369.96
2025	392.45	394.39	393.77
2030	410.98	414.03	413.00
2035	426.55	430.84	429.06
2040	440.79	446.55	443.79
2045	453.80	461.50	457.64
2050	464.46	474.66	469.64

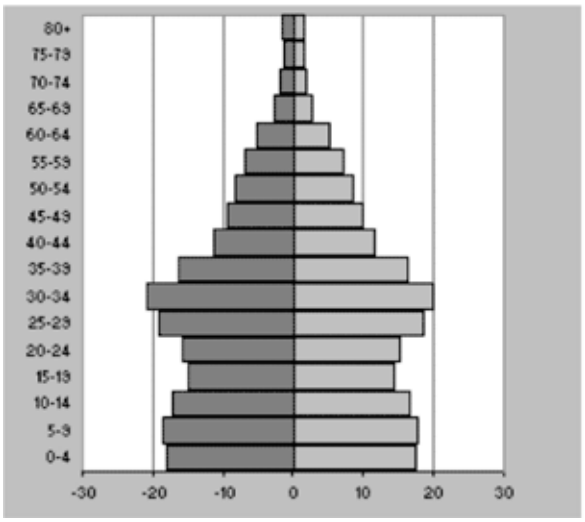
The people in 2006 are projected to grow between 357 and 396 thousand people by 2020. In all the projection scenarios the population is projected to grow continuously throughout the entire projection period. In constant growth projection the population is projected to grow at increasing rates, reaching 396.17 thousand in 2020. In high growth projection the population is projected to reach 374.97 thousand in 2020, but at slower rates. In Medium growth projection the population is projected to reach 366.91 thousand in 2020. The low growth scenario projects the lowest population for 2020 of 357.05 thousand people.

Selected population Pyramids. Low and High growth projections, Maldives, 2000-2020

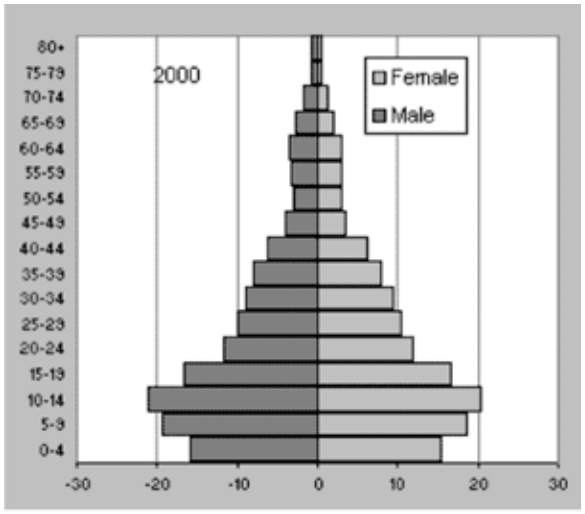
High Projection

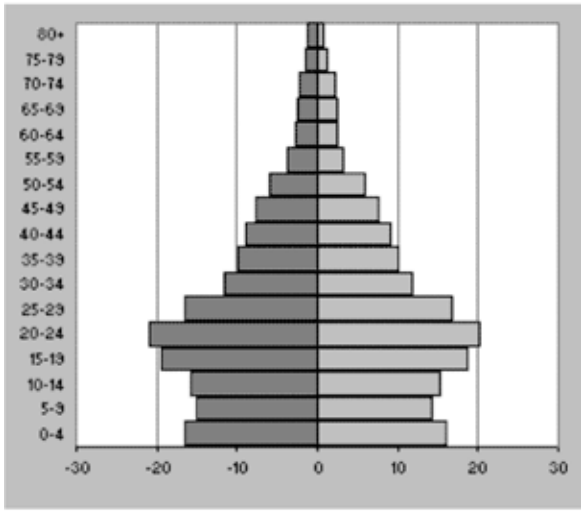


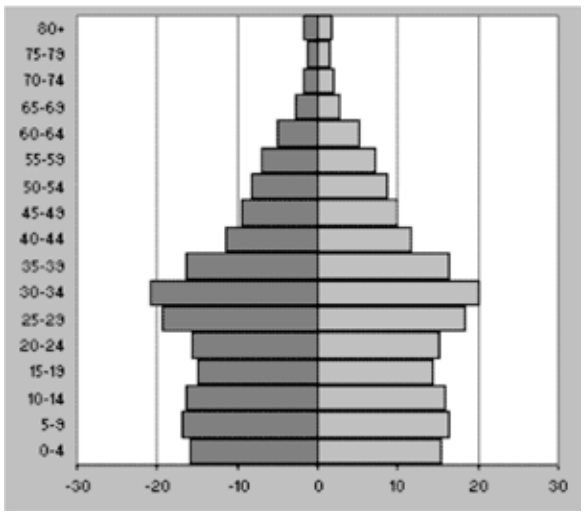




Low Projection







6. Conclusion

The population projections presented here provides an assessment of the future population growth of the Maldives. They represent the statistical outcomes of various combinations of selected assumptions concerning future changes in various dynamics of population change. However the most important elements in the projections, the assumptions, are subject to uncertainty and their limitations should be fully recognized in interpreting these projections.

The projections are trend-based and only demonstrate what is likely to happen to the population if the assumptions based on past demographic trends in the country hold true. Inevitably, population projections are therefore subject to change due to changes in the contributing factors such as, birth rates, life expectancy and international migration. So the projections will have to be revised in line with any new data as they become available.

Due to difficulties in making assumptions, particularly of internal migration trends, at the regional level, the present projections does not attempt to provide disaggregated projections by atolls.

Bearing these limitations in mind, the projections should provide a useful contribution to the planning and policy-making process as they give some indication of where future pressures are likely to arise and of the likely requirements in terms of service needs in both public and privates sectors.

The first major result of the projections is that population of the Maldives is expected to continue to grow in the period 2000-2020, and is expected to reach 367.63 thousand in 2020. By the standards of many small island developing countries, the Maldivian population is neither large nor growing rapidly. Nonetheless the projected growth of population over the next twenty years will affect the Maldives in many ways. Some of the effects will be beneficial. For example; falling birthrates will enable women to further their education, supply more paid labour and, through the combined effects of higher female education, increased employability of females, higher savings resulting from smaller family size and increased empowerment of women, enable families to invest more in the education of each child and allow the government to focus on improving the quality of primary schooling as opposed to quantity. On the other hand, more people will mean more demands on socio-economic services such as education, healthcare, employment and social welfare. Thus, policy changes are needed to maximize the rewards of the demographic changes while minimising the negative impacts.

Some of the far reaching and profound implications of declining fertility and mortality levels as they affect the age structure of the population, such as giving rise to population ageing, labour force shortages, are not of significant policy concern during the medium term (10-20 years). Some salient features of the present population projections are:

- Adolescents population: Half the population of Maldives are under the age 19. The proportion of population at younger ages (below 15) has begun to decline, while the number of adolescents (those aged 10-19 years of age) is currently at its peak. In the immediate future, therefore, there would be a steady increase in the number of persons entering the labour market and the reproductive ages. Therefore the Maldives now has the largest-ever generation of adolescents who are approaching adulthood. High priority and attention should be given to all dimensions of their development and a successful transition to adulthood. Meeting the needs of the adolescents, including their reproductive and sexual health needs and access to quality secondary education is a major challenge of the decades ahead. Moreover the increase in drug use and drug related crime has become a major social ill to the society. Unless urgent and sufficient attention is paid these emerging problems will grow out of control with the increasing numbers of young people. This is the cohort that needs the maximum attention and policies and programmes must be geared to improving their access to gainful employment, vocational and technical education and skill development, meeting their reproductive health needs, information and counseling services.

- Size of the work force: The most significant demographic change that is expected to occur during the projection period is the rapid growth of the working age population. Between now and 2020 it is estimated that around 67,000 people will enter the working age. (about 70% of the population in 2020). Therefore creation of new jobs to productively absorb the growing populations and reduce unemployment is one of the major challenges the government will face. Labor force training and workforce investment play critical roles in addressing these challenges.

- Declining dependancy ratios: The relatively short period of gradually shrinking child population and a corresponding bulge in the working age population in a nation's history is often referred to as the 'window of opportunity' for the obvious reason that it is an opportunity that will never be repeated. Among other positive gains offered by this demographic shift include, enabling women to spend less quantity but more quality time caring for children, providing more free time for them to invest in their own human capital development and thus enabling them to participate in more equitable gainful employment and allowing families to invest more in the education and care of their children. However, in order to maximize the benefits of these opportunities, appropriate policies need to be implemented to create more flexible labor markets enabling women to increase their labour force participation in all sectors.

- Education: The effect of declining birth rates can be seen in the reduction in the demand for primary school classes in parts of the country. This means that the government will now be able to gradually shift the focus from quantity to improving the quality of primary schooling throughout the country.

As the children from large birth cohorts in the past shift to secondary and higher school ages more emphasis is now required on providing the right quantity and quality of secondary schooling opportunities throughout the country, with a clear emphasis on providing the skills required for the local job market in the skills-shortage areas.

- Ageing of the population: Ageing of the population is not a major issue at present and will remain so for the duration of the projections. Therefore the issue is not that of population ageing, but it is of the individual well-being of the growing numbers of elderly at a time of rapid socio-economic change and family nuclearisation. Nonetheless, it would be prudent to be aware of and to plan for population ageing well in advance if the Maldives is to mitigate the negative implications of such a demographic phenomenon in the years to come.

- Family planning & reproductive health services: All indicators point to the fact that demographic transition is well underway in the Maldives. While mortality rates have declined significantly in the past decades, fertility decline has hastened during the past decade. Having sustained a declining trend of fertility since the early 1990s, it is no longer necessary for the Maldives to conduct advocacy programmes encouraging small families. It is now inevitable that fertility levels will keep on declining unless some dramatic change of policy encouraging a pro-natalist regime occurs sometime soon.

1. Introduction

The population and housing census has been the only systematic data collection on housing in the Maldives. Even though the data collected is not broad enough to compute accurate housing needs and affordability, the census data is the most comprehensive source on housing conditions in the country. The 2006 Population and Housing Census collected data on housing types, construction, conditions, quality and quantity.

This chapter attempts to provide an analysis of the Census 2006 data on the housing conditions, household size and their density and household amenities. This analysis will also look into the home ownership versus rental housing aspect of households in the country.

This analysis also makes an effort to compare the data of 2006 against the Census 2000 data in order to try and establish trends in the development of the housing sector, given the limited aspects of sectors that has been considered in the censuses. It is also important to note that different aspects of the sectors are interlinked and hence, considering a specific aspect of housing in the country may not give the overall picture of the development of the sector, unless all aspects are accounted together.

2. Housing construction and types

Census 2006 enumerated 46,194 households when compared to the 40,192 households in the 2000 census. This represents an overall increase of 12.91 percent or 5,282 households. For the inter-censal period 2000 to 2006, the average exponential growth rate of households was at 2.02 percent per year.

Table 1: Number of households & percentage change for 2000 and 2006

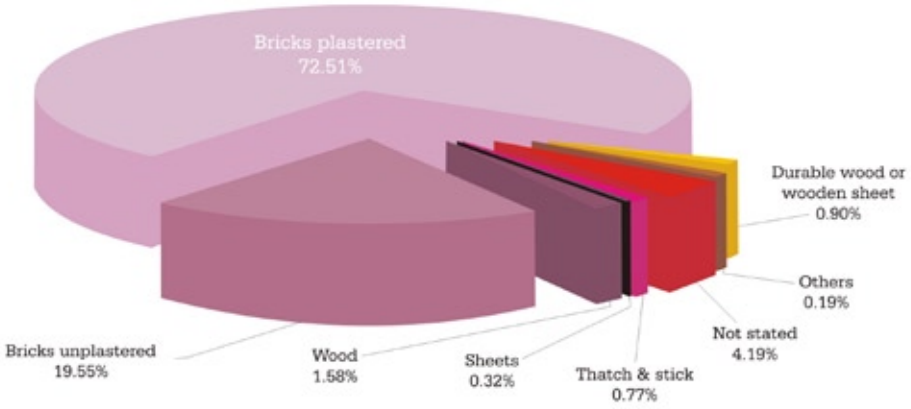
Locality	2006 Census	2000 Census	Increase by numbers	Increase by %
Republic	46,194	40,912	5,282	12.91
Male'	14,107	9,700	4,407	45.43
Atolls	32,087	31,212	875	2.80

This part of the chapter analyses the construction materials used for roofs, walls and floors of residential buildings to determine improvements over the inter-census period. It will seek to provide an insight on changing trends and market movement of construction materials based on awareness, and changes due to aesthetics and durability. During enumeration construction materials used in the integral and major parts of the residential dwellings were accounted. One household does not necessarily live in one building; two or more households may share one house. Hence an accurate analysis of how many houses are opting for better building materials cannot be done. However, a change in the standard of building materials of the overall households can be determined from this analysis.

2.1: Construction materials used in walls

Out of the total number of households enumerated in 2006, 72 percent used plastered brick walls representing 33,496 households. In Male', this was at 87 percent of households while in the Atolls, it was at 66 percent of all households.

Figure 1: Percentage distribution of construction materials used in the walls by the households, Census 2006



When comparing separate atolls, Alif Alif Atoll had the highest number of plastered brick walls at 79 percent of all households. Eight other atolls also registered plastered brick walls at more than 70 percent of all households in these atolls. Gaafu Dhaalu Atoll had the lowest percentage of plastered brick walls at 50 percent of all households in that Atoll.

Figure 2: Percentage distribution of construction material used for the outer wall - bricks plastered Census 2006

The data also shows that 19 percent of total households still reside in houses with un-plastered brick walls, whereas only 2.5 percent of households live in houses with non-durable wall materials such as thatch, stick, wood and sheets. It is worth noting that in Male' only 0.6 percent of household resides in houses with nondurable wall materials whereas in Atolls it stands at 3.6 percent.

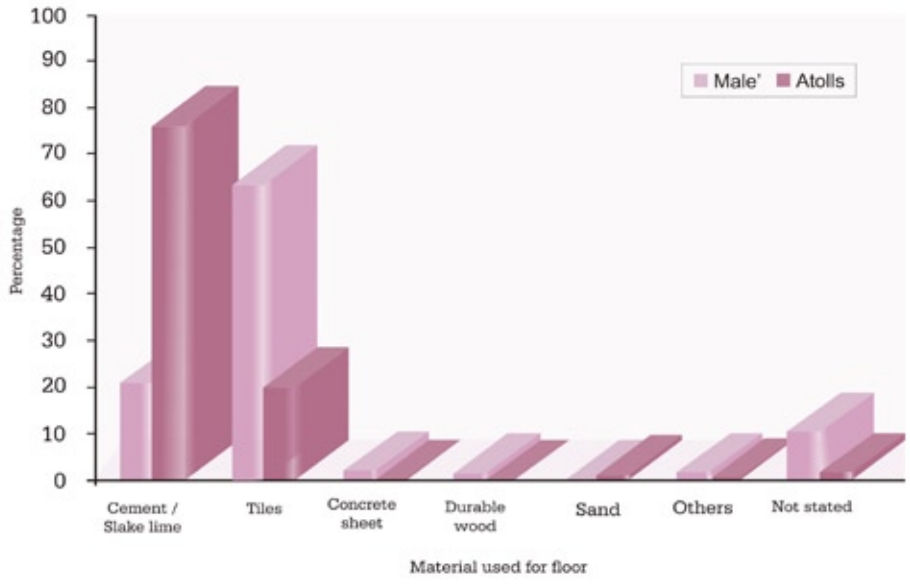
The high proportion of plastered brick walls as construction material used for outer walls signifies the emphasis on and demand for improved construction materials, and hence a focus on more durable buildings, specially in Male'. Using plastered brick walls also improves the aesthetics of the household or structure where the household resides; thereby increasing the price, those households may be able to demand when considering rentals. This may also signify increased availability of better quality construction materials.

A comparison of construction materials used for walls between 2000 and 2006 is not possible due to the 2000 Census enumerating structures, whereas in the 2006 Census it was households and not structure that were considered.

2.2: Construction materials used for floors

As seen from the graph below, cement or slake lime is the most prominent material used for flooring in the atolls (76%), in contrast to Male' where 63 percent of the population preferred tiles as flooring material. Overall, 92.5 percent of the total households (both in Male' and the atolls) used cement, slake lime or tiles, whereas only 7.5 percent of households used other materials such as concrete sheets, durable wood or sand for flooring purposes. A trend in materials used for flooring cannot be identified since prior to the 2006 census, this information has not been captured.

Figure 3: Construction materials used for floors (percentage of households) Male' and the atolls, 2006



2.3: Construction materials used for Roofs

Figure 4: Construction material used for roofs, Male' and the atolls, Census 2006

Among materials used for roofing, galvanized sheets is found to be the most prevalent material according to the 2006 Census, at 86 percent of all households. This trend is more prevalent in the atolls, with 98 percent of all Atoll households using galvanized sheets, whereas this is only 59 percent in Male'. The high use of galvanized sheets may be due to it being cheaper than other types of roofing materials and the widespread availability of such materials across the country.

Twenty five percent of all households in Male' used concrete sheets for roofing materials according to the 2006 Census, signifying the high prevalence of high-rise buildings in Male', with more households living in buildings with more than one floor.

3. Household and density of occupation

3.1: Average household size

Density of household units is used here as Census 2006 data were collected based on households, rather than housing units or structure, as was carried out in the 2000 Census. Density of households is calculated by considering the population residing in that locality and the number of households in that locality.

As shown by the table below, household size for the whole country was at 6.47 people per household. Household size for Male' was however higher than the national average, at 7.35 per household, while for the atolls it was 6.09 per household.

Table 2: Number of households, total population and average household size, 2006

Locality	Households	Population	Average Household size
Republic	46,194	298,968	6.47
Male'	14,107	103,693	7.35
Atolls	32,087	195,275	6.09

Given that almost 35 percent of the total population resides in Male', the high household size for Male' may be explained by the following: the increase in the population growth in Male' has not been met with adequate increases in housing development, housing cost (rent plus cost of services) is too high when compared to incomes, necessitating sharing of living spaces.

Even though the average number of occupants per housing unit occupied is sometimes used as an indicator, it does not necessarily represent poor housing quality on its own. It is often taken together with the indicator of sleeping area and/or living space per occupant. This data has not been collected in census enumerations. This may be one area where future study and research could provide a good insight into the housing quality in terms of living space.

3.2: Number of rooms and living spaces

The total number of rooms for the country was registered at 109,817 in the 2006 Census, resulting in an average of two rooms per household.

The average number of rooms per household in Male' and the atolls are almost at the same rate though, it maybe due to different reasons. In Male', due to the unavailability of land we are more likely to see high rise buildings than in atolls. This may also be due to the trend in Male' for construction to maximize the available land area, and hence increase available land for rental to cater for the increasing in-migration to Male', resulting in more rooms per structure, however, this will not be reflected in more rooms per household. In the atolls, due to unavailability of finance amongst other things, construction takes place piecemeal.

When considering the number of rooms, 65 percent of households reported having 1- 3 rooms. For Male', this was at 57 percent, while 69 percent of households in the Atolls reported having 1 – 3 rooms. However, when considering households with more than 6 rooms, the proportion is higher in Male' than in the Atolls, which may be due to maximization of land size for rental income.

Another indicator of housing quality is the number of rooms for sleeping and other household functions. The number of rooms in a housing unit is often used as indicator for housing quality where more rooms would represent more space for its occupants. However, it is important to note that this indicator is often taken together with number of occupants using the rooms.

4. Home ownership

Ownership housing has been the predominant housing type in the country. The practice is for the Government to provide land freely, on an application basis, and the beneficiaries to undertake construction on their own. This is also the current practice except on the islands with shortages of land. Hence, ownership housing is the most prevalent and also the most preferred type of housing.

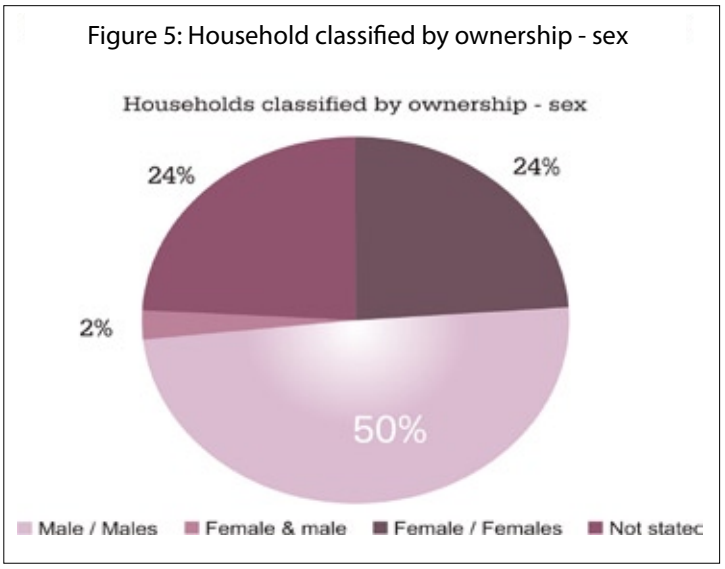
As shown by the Table below, 35,207 out of total of 46,194 households of the country, or 76 percent of all households own their places of resident. However, the majority of home ownership is in the Atolls, where 90 percent of households are owned by a member of that household. For Male', ownership is at 45 percent of all households. This also reinstates the fact that only 42,894 out of the total 103,693 population enumerated in Male' are registered in Male', and explains the high proportion of rented places in Male', at 42 percent of all households in Male'.

Table 3: Household ownership

Locality	Total households	Owned by a member of this household	% of total households	Rented place	% of total households	Others	% of total households	Not stated
Republic	46,194	35,207	76%	6,335	14%	2,662	6%	1,990
Male'	14,107	6,398	45%	5,914	42%	328	2%	1,467
Atolls	32,087	28,809	90%	421	1%	2,334	7%	523

According to Census 2006 data, home ownership is more dominant amongst males. Results show that 49.6 percent of all households in the country are owned by a male, and 2.4 percent are owned by a male and a female. Female-owned households are registered at only 23.75 percent.

Figure 5: Household classified by ownership - sex



Census 2000 does not show any data on home ownership. It only shows 'rent paid', 'rent not paid' and 'rent paid by someone outside the household'. Hence a proper comparison of data of two census period does not seem possible.

5. Housing facilities, amenities and services

This part of the report analyses the accessibility and availability of households to basic facilities such as water supply, electricity, toilet facilities, and kitchens, and the presence of other domestic goods in households such as televisions, computers and phones. Comparisons with the 2000 census data have been made, where available, to highlight the changes that have taken place over the 6 year period. While there has been an increase in the number of households in the country over the 6 years, this does not necessarily mean an improvement in the living conditions of its population, and a detailed analysis of household facilities, amenities and services is required to ascertain development over the years.

The 2006 census data indicate a significant improvement in the living conditions of the population with regard to amenities available. An overall increase in basic amenities can be seen over the intercensal period.

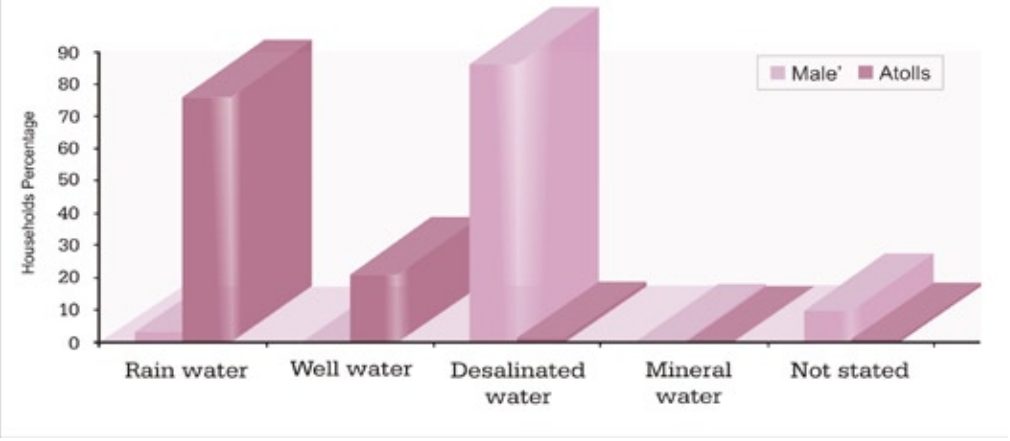
5.1: Source and treatment of water

Domestic water supply of the Maldives is based mainly on rainwater, well water and desalinated water. Rainwater and well water are the dominant sources of water in the atolls. In Male' due to the high density of population and thus the high usage of ground water, the fresh water lens has been depleted. Thus, there is high usage of desalinated water in Male', which is provided through the Maldives Water and Sewerage Company.

5.2: Households classified by type of water used for cooking

A significant difference in the type of water used for cooking is seen when Male' is compared with the Atolls. Even though rainwater remains as the most prominent source of water across the country at 54 percent of all households, only three percent of the households in Male' uses rainwater for cooking, whereas the same is at 76 percent in the atolls. Similarly, desalinated water being the second most prevalent source of water for cooking remains at 27 percent nationwide, only 479 households (1%) in the atolls uses desalinated water for cooking, whereas the same is at 86 percent in Male'.

Figure 6: Percentage distribution of water used for cooking



5.3: Households classified by type treatments used for drinking water

The 2000 census showed that only 22 percent of the total households enumerated drink purified water in the country. Purified water here refers to boiled, filtered or chlorinated water. Corresponding values for Male' and the Atolls were 67 percent and seven percent respectively. While the 2006 census shows that 9,781 (21.2%) households across the country currently drink purified water for Male' and the Atolls were 67 percent and seven percent respectively. There has been a decline of three percent in the households that use purified drinking water in the Atolls. This may be a result of the ongoing programme undertaken after the tsunami disaster to distribute water tanks in the Atolls, which may be being considered to be safe drinking water. There is thus the need to educate the population on safe drinking water and what constitutes as safe.

For Male', the use of safe water has increased by 9 percent over the intercensal period. This may be due to a large proportion of households using desalinated water produced by the Maldives Water and Sewerage Company, which is chlorinated

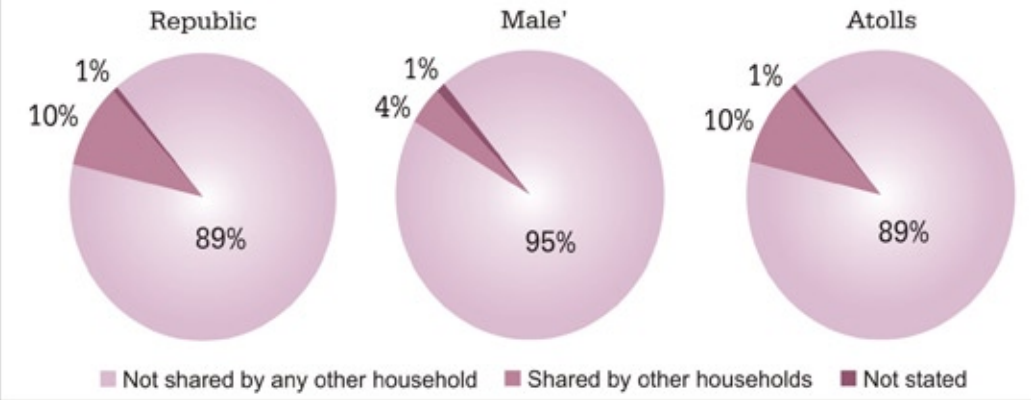
5.4: Sanitation and sewerage

Sanitation and sewerage are two important environmental issues with a direct bearing on the health and well-being of human beings. The 2006 census captured the availability of toilet facilities in households and the type of toilet facilities used. The current sanitation choices include toilets connected to the sea, septic tanks and reserved compounds within the household.

5.5: Household classified by toilet facilities and locality

A quantitative comparison on the availability of the toilet facility amongst the household cannot be obtained as the 2000 census data does not capture this information at a household level. However, 2006 census data shows that 89 percent of the total households have individual toilet facilities and 10 percent of households have toilets that are shared with other households.

Figure 7: Households classified by toilet facilities and locality



The sanitation coverage in the country stands at 95 percent of all households. Male' has the highest coverage at 99.9 percent whereas in the Atolls, this is at 93.38 percent. Table 4 shows the type of toilet facilities that were available at the time of the 2006 census and the distribution of these facilities by administrative area. Toilets connected to septic tanks are most common in the country at 50 percent (23,247 households) though, only one percent of the households of Male' use them.

Table 4: Households classified by toilet facilities and locality

Locality & type of toilets	Toilet connected to sea	Toilet connected to septic tank	Reserved compound of the house (gifili)	Other / No toilet	Not stated
Republic	17,631	23,247	1,189	2,142	1,985
Male'	12,450	186	0	17	1,454
Atolls	5,181	23,061	1,189	2,125	531

5.6: Type of fuel used for cooking

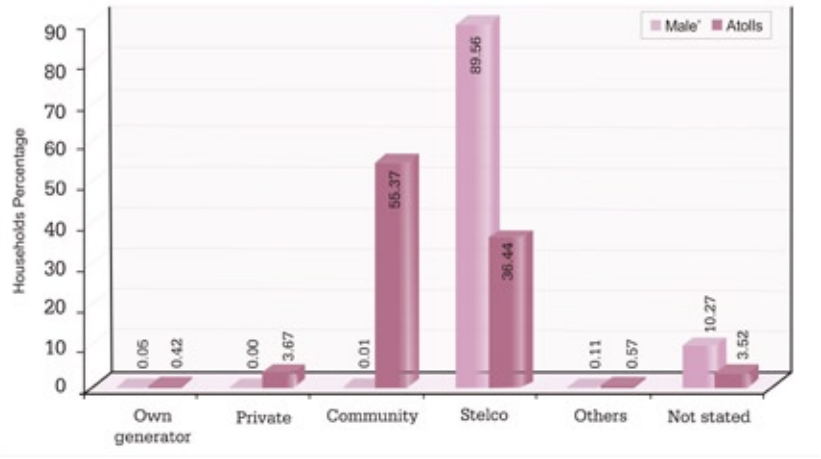
Table 5: Percentage distribution of the type of fuel used for cooking

Fuel used for cooking	2000	%	2006	%
Firewood	19,120	42.73	6,291	13.62
Kerosene Oil	18,979	42.42	2,029	4.39
Gas	6,323	14.13	35,479	76.8
Others	322	0.72	245	0.53
Not stated	0	0	2,150	4.65

The above table reveals that there had been a major shift towards the use of gas as the principal fuel used for cooking purposes during the period 2000-2006. The percentage of households using gas increased markedly from 14.13 percent in 2000 to 76.80 percent in 2006, while the proportion of those using kerosene oil dropped drastically from 42.42 percent to 4.39 percent during the same period. Furthermore, 13.62 percent of households used firewood in 2006 as compared to 42.73 percent in 2000. The proportion of households using electricity, which was already very low in 2000 (0.30%), was not taken in the 2006 census.

5.7: Type of lighting and energy source

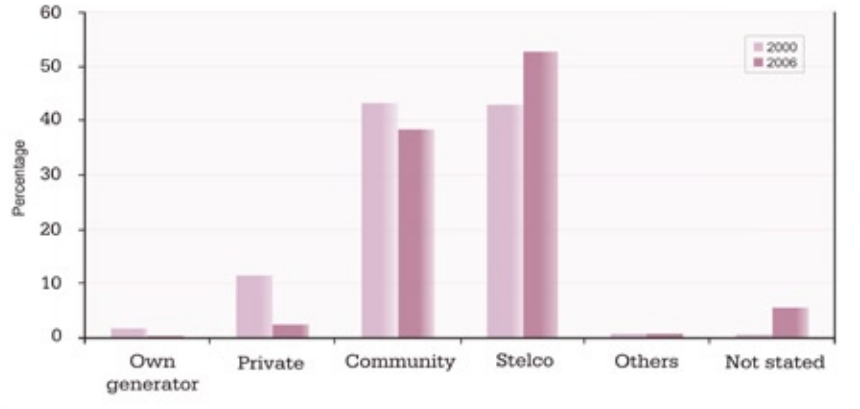
Figure 8: Households classified by electricity provider, male' and the Atolls, Census 2006



The major source of electricity provider in the country is State Electric Company public limited, (STELCO) which provides electricity in 52.66 percent of all households in the country. This proportion is considerably higher in Male' at 89.56 percent, whereas in the Atolls it is at 36.44 percent. The principal source of electricity in the Atolls is by the community, at 55.37 percent.

When we compare 2000 data with 2006, the proportion of households serviced by STELCO has increased by almost 10 percent. There is also a decline over the intercensal period in the percentage of households which use electricity provided by communities. This may be due to increased coverage by STELCO in the Atolls, which was at 4.75 percent in the year 2000.

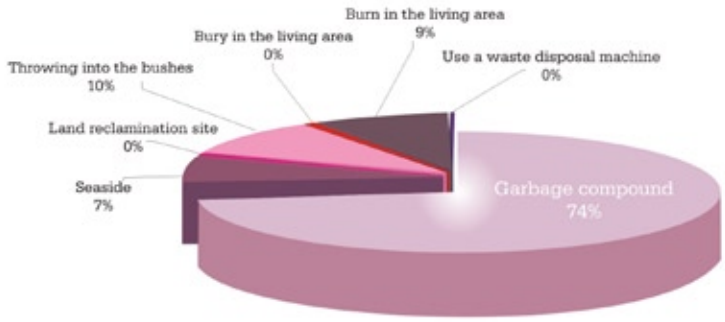
Figure 9: Percentage of electricity provider - census 2000 and 2006



5.8: Waste disposal mechanism used by households

According to the Census 2006 data, 69 percent of all households in the country used a garbage disposal site for waste disposal. This was at 89 percent for the Male' and 61 percent for the Atolls. It is disconcerting to note that almost 25 percent of all households in the country dispose waste either by the seaside, burn it in the living area or throw their garbage into the bushes

Figure 10: Percentage of waste disposal mechanism used by households



5.9: Household appliances

Amongst household appliances, washing machines are available in 84 percent of all households in the country. The proportion is slightly higher in the Atolls at 84 percent, compared to Male', where it is at 83 percent. In the republic households having a refrigerator is at 60 percent, households having a refrigerator in Male' is higher than the national average which is 80 percent of all households. Air conditioners are more prevalent in Male' than in the Atolls, at 17 percent, while in the Atolls it is only one percent of all households. The higher availability of refrigerators and air conditioners in Male' may be due to the higher incomes in Male' than in the Atolls, as well as reliability and availability of electricity in Male' when compared to the Atolls.

Figure 11: Percentage distribution of households appliances, 2006

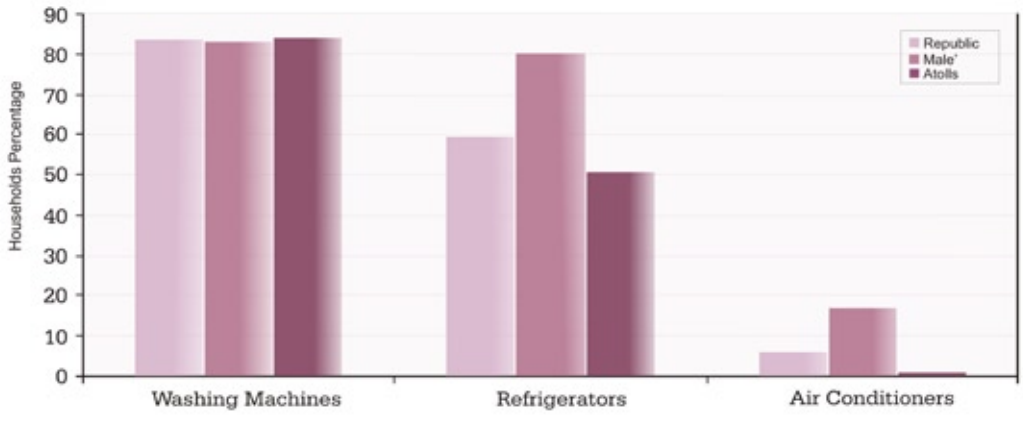


Table 6: Percentage of household with household appliances, 2000 and 2006

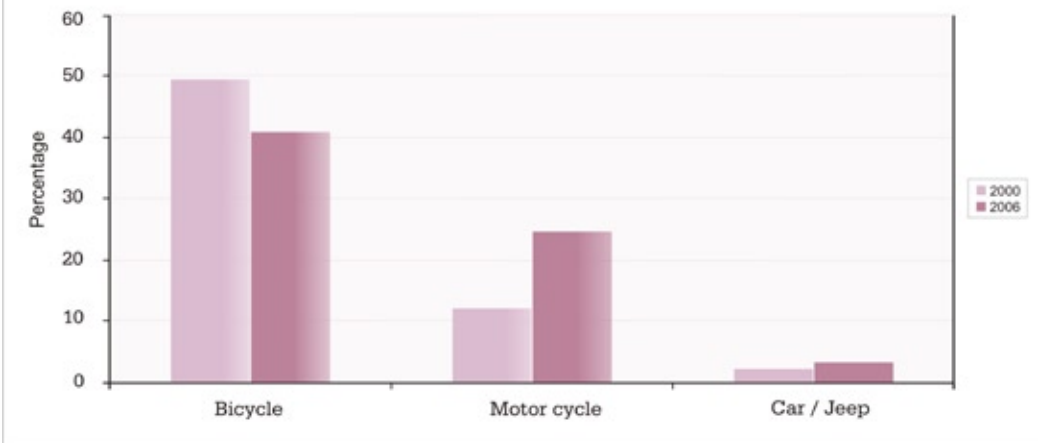
	Washing machine	Refrigerators	Air Conditioners
2006			
Republic	84%	60%	6%
Male'	83%	80%	17%
Atolls	84%	51%	1%
2000			
Republic	62%	37%	2%
Male'	77%	73%	8%
Atolls	57%	26%	1%

As can be seen from the above table household appliances throughout the country has increased between 2000 and 2006. The most significant increases are seen in the Atolls, where access to washing machines has increased by 27 percent, and access to refrigerators has increased by 24 percent for the inter-censal years. This large increase may be due to increased availability of such convenience appliances in the Atolls, and the increased affordability of such items.

5.10: Transport and communication

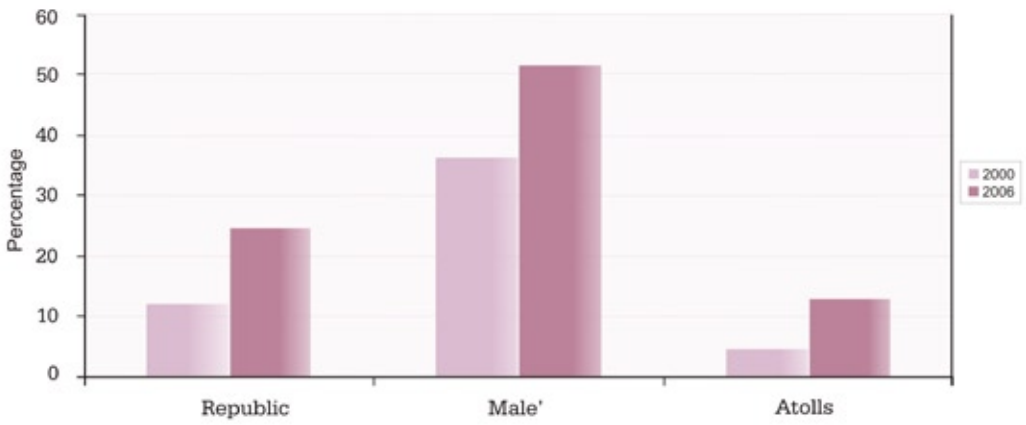
When modes of transportation are considered, there is a clear move away from bicycles and an increase in the use of motorcycles, both in Male' and the Atolls. The use of bicycles declined by 9 percent nationally, and by 40 percent in Male' over the inter-censal period. In contrast, there is an increasing move towards motor cycles, withl households having a motor cycle increased by 12 percent between 2000 and 2006.

Figure 12: Percentage of households having transportation modes, 2000 and 2006



In Male', the use of motorcycles increased by more than the national average, at 15 percent of all households as seen in the figure below. The use of cars, were constant for Male' over the intercensal period, and the use of cars in the atolls increased by three percent. The move away from bicycles towards motor cycles may be a reflection of increased affordability, and the social status accorded to ownership of motor cycles rather than bicycles.

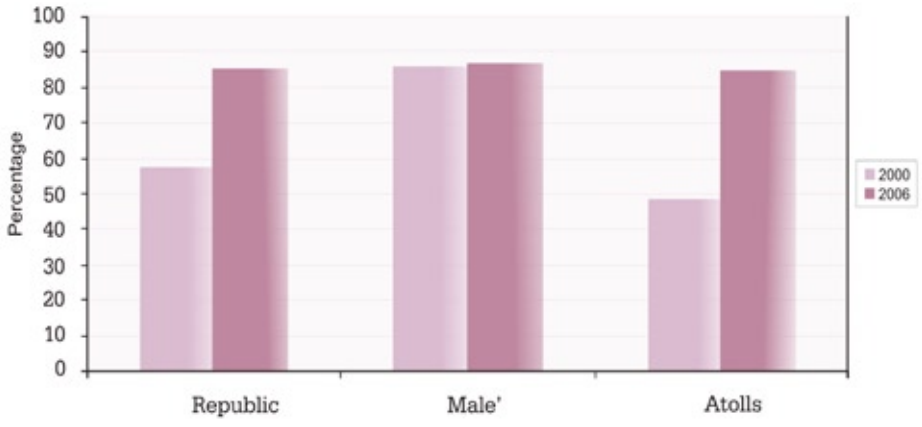
Figure 13: Percentage distribution of households having a motorcycle 2000 - 2006



5.11: Communication

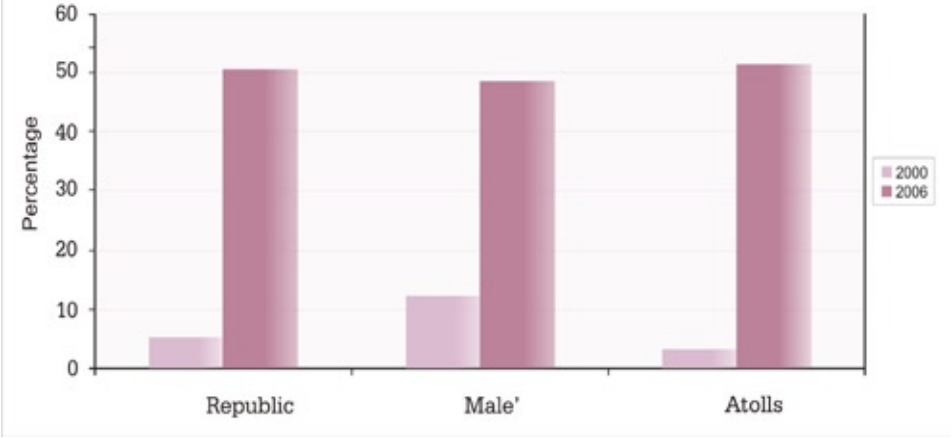
Interesting trends are highlighted when access to and use of communication technologies are analyzed. Televisions are present in 85 percent of all households nationally, an increase of 28 percent when compared to the 2000 census.

Figure 14: Percentage distribution of households having television 2000-2006



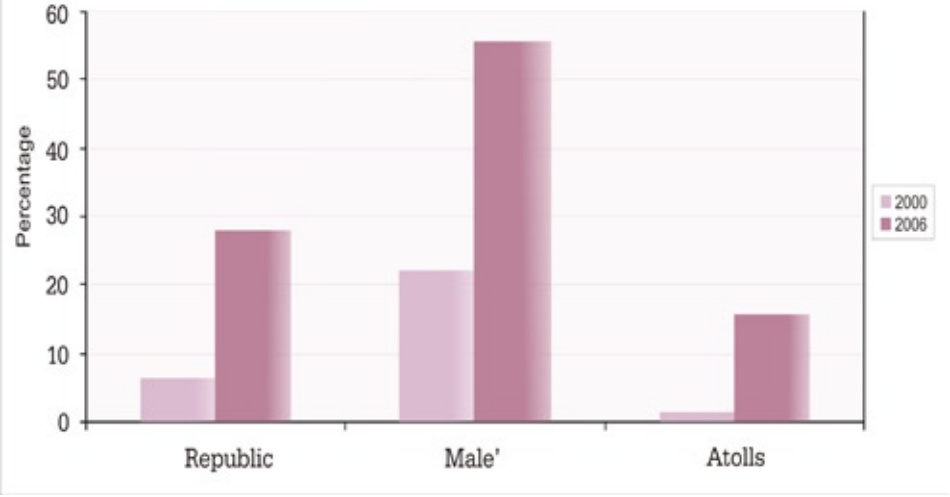
Perhaps the largest increase in communication technologies is found in the presence of satellite or cable connections, which registered a 45 percent increase in all households in 2006 when compared to 2000. Satellite or cable connections are present in 48 percent of all households in Male' and 51 percent of all households in the Atolls. While this may be a result of availability of affordable cable packages nationally, this also highlights a possible market opportunity for better quality and more varied entertainment content in national media.

Figure 15: Percentage of households with satellite / cable connection for 2000 and 2006



Access to computers has also increased by 33 percent and 14 percent for Male' and the Atolls respectively, over the inter-censal years, internet usage is more prevalent in Male' than in the Atolls, at 20 percent of all households in 2006, compared to 2 percent for the Atolls.

Figure 16: Percentage of households with computers 2000 and 2006



Mobile phone usage is also high country-wide, at 89 percent of all households in Male' and 80 percent of all households in the Atolls reporting usage of mobile phones. A comparison with the status in 2000 cannot be done however, as this data was not collected during the 2000 census.

One interesting point to note, however, is the use of fixed lines. While nationally an increase of 3 percent has been registered in the presence of fixed line telephones in households, the use of fixed lines in Male' has declined by 19 percent over the period 2000 to 2006. This may be a reflection of the highly mobile migrant community in Male', who reside in rented accommodation, for whom having a mobile phone rather than a fixed line provides the flexibility required when moving. It may also be due to the increased availability of mobile phone packages at lower rates due to the introduction of competition into the national telecommunications market.

6. Conclusion

The analysis of the household conditions and amenities in the Maldives reveals a high prevalence of luxury consumer goods and improvements in living conditions although there are regional imbalances. Where intercensal comparisons are possible, the use of more expensive alternatives has been noted. Comparison of Male' and the atolls shows that the quality of housing, living situation and utilities consumed are very different as expected.

The construction materials used show the most marked differences between Male' and atolls. Better quality construction materials and finishing such as plastered brick walls and tiling for floors were prevalent in Male' while cheaper alternatives were found in atolls.

The average number of rooms per household in Male' and the Atolls are almost at the same rate. In Male', due to the unavailability of land it is more likely to see high rise buildings than in atolls.

Gender imbalances in the country are noted in many aspects and the ownership of homes is one area of stark difference. The ownership of homes by a female is half of that owned by males. Since this data was not available in the 2000 census, any changes are not apparent and this data should be compared with and updated by other sources of this information such as registration records in Male and islands.

Intercensal comparison of household amenities and selected consumer durables is possible and has been carried out. Luxury items such as satellite/cable connections, computers, televisions, washing machines, refrigerators, motor cycles and air conditioners are all being used by more household across the republic. The use of more expensive alternative of motorcycles has replaced bicycles in both Male and atolls. Of all the household items analysed, mobile phones have the highest prevalence in the country, while satellite connections asserts the largest expansion.

The differences in the availability of facilities in Male' and the Atolls are naturally reflected in the household consumptions patterns. The number of households in Male' that consumes safe drinking water and more reliable and cheap electricity (provided by STELCO) is twice the number of households in atolls. STELCO has increased their consumer base to reach half of the households nationwide. This will allow the company to reduce prices and provide more reliable services. However half of the households in the atolls are still dependent on their community providers. Furthermore there is a slight decline in the atolls and a significant difference between Male' and atolls. Regarding waste disposal as a quarter of households still dispose of their waste in environmentally harmful ways.

The varying results in household living situations and facilities make it difficult to conclude whether the standard of living has increased or decreased. To determine this, an index of indicators has to be developed along with greater consistency in enumerations. This will enable better study of changes in regional imbalances as well. Critical areas needing further study and attention include the reduction of safe drinking water in the atolls, environmentally damaging methods of waste disposal and the gender imbalance in home ownership.

The consumption habits and priorities of the people should be analysed further to facilitate the private and public sector to meet the changing needs of the people, and to identify the obstacles in achieving the Millennium Development Goals for the country.

1. Introduction

Today, entrepreneurship has emerged as one of the key players of economic and social development of a country. A country to flourish within a competitive and dynamic economy, capable of sustaining economic growth while creating more jobs, and developing greater social unity ultimately depend on the success of the enterprises.

Establishments being the key buyers of the major factors of production, ie; land, labour and capital, the importance and usefulness of micro data on establishments have become a valuable source of information for economic analysis and policy decisions. One of the cornerstones of such statistical information on establishments is the Population and Housing Census 2006.

Census 2006 included an establishment information form in order to capture various aspects of the establishments in the economy. Data was collected on the nature of the establishment, employment under these establishments and type of establishment by the major economic activities carried out in the Maldives.

These data obtained on establishments furnishes an initial frame for measures such as the GDP estimates, supply and use or input/output measures, production and price indices, and other statistical series that measure short-term changes in the economic structure.

Census 2006 attempted to enumerate all establishments currently active with a physical location. An Establishment is identified according to the System of National Accounts; as a business unit or part of a business unit that is situated in a single location. Census 2006 excluded all Government offices, schools, and other government units, except for government companies and public enterprises.

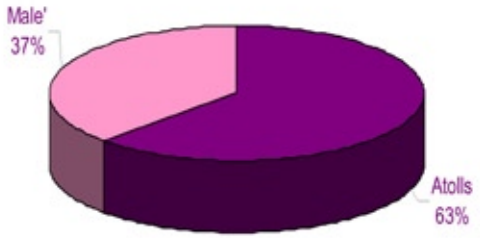
This report attempts at providing an analysis of data on establishments collected from census 2006, Establishment Form. Section 1; assist to understand the nature of the establishments, Section 2; focuses on the establishments by major economic sectors in the economy while Section 3; highlights the employment pattern in these establishments.

2.Nature of the Establishments

2.1: Number of Estalishments

The total number of establishments enumerated totaled up to 8,927 of which 37% of the establishments were located in the capital Male', and the balance 63% of the establishments in the Atolls. The percentage distributions of establishments are aligned with the distribution of the total population across the country.

Figure 1: Number of Establishments by Locality, Census 2006



The legally operating population of establishments in the economy totaled to 10,910 by the end of 2005, according to information obtained from Ministry of Trade and Economic Development, the authority responsible for registering the business operators.

Table 1: Number of Establishment by different data sources

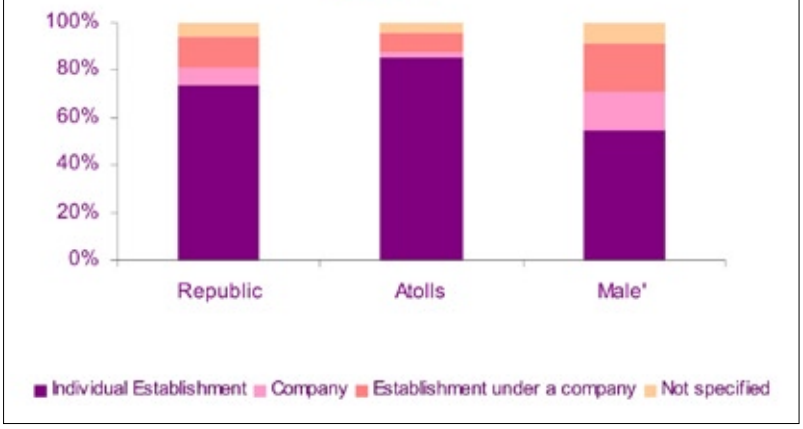
	Registered at MTED	Based on listing form	Based on Establishment form
Republic	10,910	9,904	8,927
Atolls		5,971	5,593
Male'		3,933	3,334

The findings of the Census 2006 as of March 31st 2006 showed a lower number of establishments compared to the registered population of establishments at the Ministry of Economic Development and Trade. The main reason behind this difference is the fact that it had been very common for individuals to form a company and register it in order to facilitate their business operation without having a definite physical location under the particular company to operate their business activities. Hence, only the establishments operating with a physical location are captured in the Census operation. The establishments not captured in the census, could be the ones operating without a formal location to conduct their business or just paper companies.

2.2: Type of Establishment

The type of establishment is identified based on their legal formation under the Ministry of Economic Development and Trade (MEDT). Any establishment which is identified as an individual establishment are those establishments registered under MEDT as a sole proprietorship with a trade license. These individual establishments do not come under any company. Establishments registered as a company under MEDT operating under the company law is identified as a Company. Establishments, which are apart of a registered company irrespective of ownership structure being single or partnerships is identified as establishment under a company.

Figure 2: Number of Establishments by type of Legal Formation



Based on the results, as shown in Figure 2, about 3/4 of establishments in the economy were active as individual establishments. Especially in the Atolls, close to 90% of the establishments enumerated were identified as individual establishments while in Male' this accounted for about 55%.

About 20% of the establishments were operating as formal companies of which about 80% concentrated in Male' while only 20% operated in the Atolls. Establishments operating under companies account for about 5% of the establishments in the economy.

3. Establishment & Industry

All economic units engaged in producing a commodity or providing a service is classified systematically by applying classification criteria and principles according to the economic activity it caries out. The census data have been based on the International Standard Industrial Classification, revision 3 (ISIC, rev 3) of the United Nations.

Table 2: Number of Establishments by Industry, Census 2006

	Numbers			Percentage		
Industry Classification	Republic	Atoll	Male'	Republic	Atoll	Male'
Agriculture, livestock & forestry	38	35	3	0.43	0.63	0.09
Fishing	8	6	2	0.09	0.11	0.06
Manufacturing	1,333	971	362	14.96	17.41	10.86
Electricity & Water	170	164	6	1.91	2.94	0.18
Contruction	137	34	103	1.54	0.61	3.09
Wholesale & Retail trade	4,868	3.122	1,746	54.63	55.98	52.37
Resorts, hotels & restaurants	634	331	303	7.11	5.94	9.09
Transport & Communication	445	238	207	4.99	4.27	6.21
Financial Intermediaries	25	10	15	0.28	0.18	0.45
Business Activity	174	48	126	1.95	0.86	3.78
Education	273	222	51	3.06	3.98	1.53
Health & Social work	74	29	45	0.83	0.52	1.35
Other service activities	342	203	139	3.84	3.64	4.17
Unspecified	390	164	226	4.38	2.94	6.78
Total	8,911	5,577	3,334	100.00	100.00	100.00

Figure 3: Number of Establishments by Industry

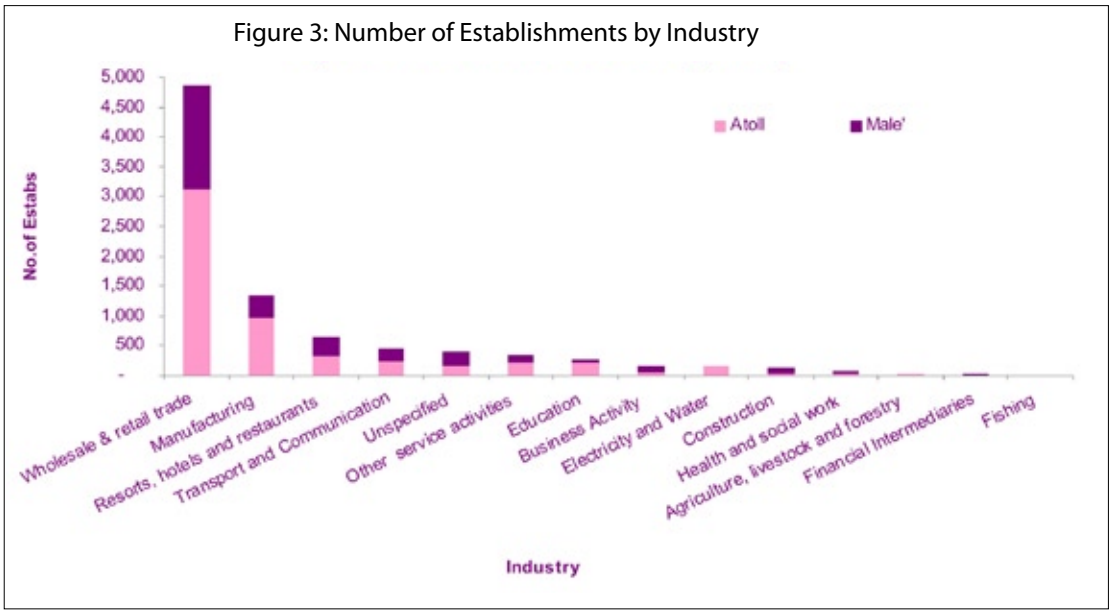
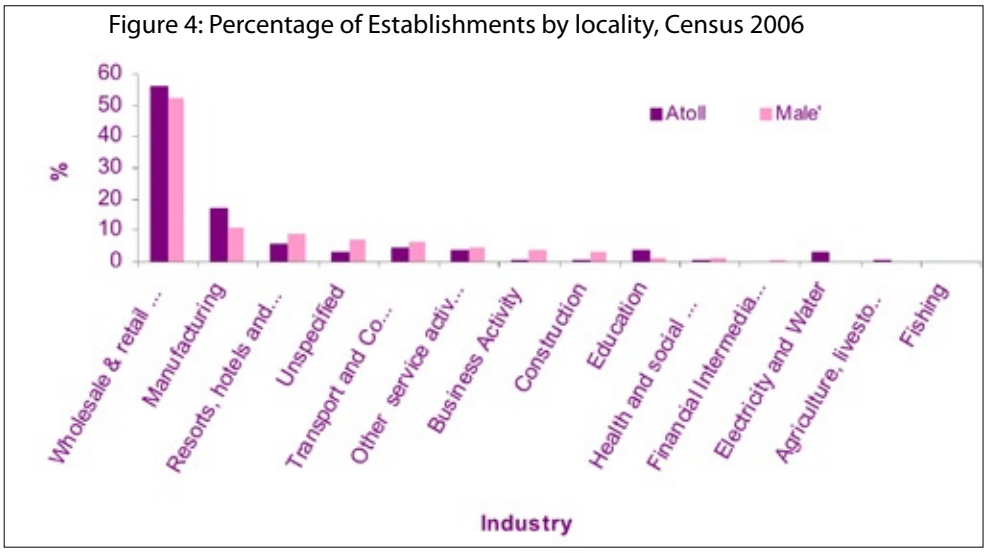


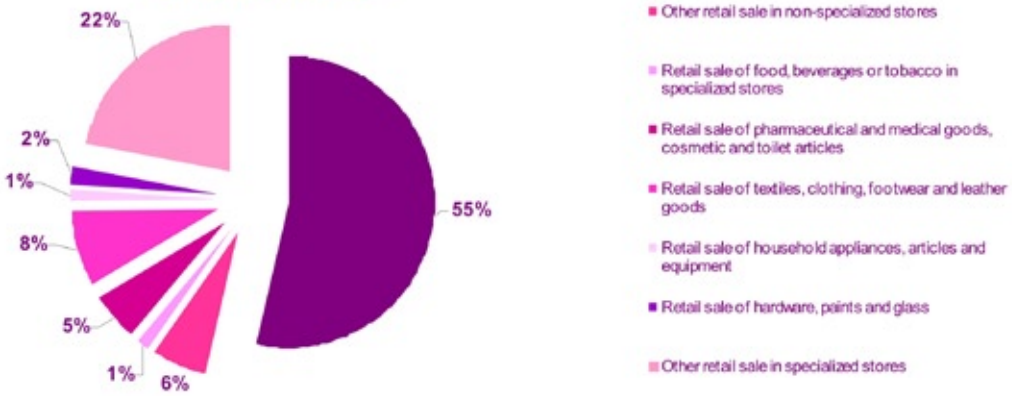
Figure 2-1 shows how the share of establishment's activities varied across specific sectors and industries as well as by locality. The highest number of establishment were involved in the wholesale and retail trade sector, accounting around 55 percent followed by manufacturing sector accounting for around 15 percent. This share is similar in the establishments' distribution in Male as well as the Atolls as seen from figure 2-2.

Figure 4: Percentage of Establishments by locality, Census 2006



Majority of establishments involved in the trade sector consisted of small scale retailers engaged in the sale of mainly unspecified (all types) products as seen from Figure 5. These establishments are involved in retail sale of non-specialized goods with food, beverages or tobacco predominating. Rest of the establishments in this sector was involved in the sale of specialized goods such as clothing, footwear, book and etc.

Figure 5: Share of different types of retails trade, Republic, Census 2006



Furthermore, for the manufacturing sector which is the second largest sector in terms of the number of establishments, distribution of type of activities carried out in Male' and Atolls differs as can be seen from Figure 6. In Male' 41% of the establishments were involved in manufacture of wearing apparel while printing followed by manufacture of furniture came in second and third with 16% and 14% respectively.

In Atolls the largest share of the Manufacturing sector of 35% were involved in manufacture of furniture. The next largest share was involved in processing and preserving of fish and fish products with 19% followed by building and repair of ships with 11%.

Figure 6: Distribution of Establishments in Manufacturing sector by locality, Census 2006

Apart from Trade and Manufacturing, the other economic sectors which had a strong hold on the economy in terms of number of establishments were Hotels and Restaurants and Transport, storage and communication. The rest of the sectors numbers were of very minimal.

For the whole republic, the Hotel and Restaurants sector accounted around 7% of the establishments, where two thirds of these establishments were Restaurants and cafes'. And the balance was Hotels, and other provision of short stay accommodation. These include all the resorts, which contributes the most to our economy based on their output.

Transport, Storage and Communication sector accounts 5% of the establishments. Under this sector Male' and Atolls differed in the distribution of activities carried out, where in Male' the largest number of establishments were involved under activities of travel agencies and tour operators, followed by telecommunication services such as sub offices of telecommunication providers, internet cafes and cable operators. Whereas in Atolls the largest share of 59% of the establishments involved Transport, Storage and Communication sector were involved in telecommunication services followed by 24% of the establishments providing Storage and Warehousing.

The remaining establishments shared by all other sectors each accounted below 5%. For Agriculture, Fishing and Mining had a share less than 1% while Electricity and Water 2%, Construction 2%, Real Estate, Renting and Business Activities 2%, Education 3%, Health and Social Work 1%, Other Community, Social and Personal Services and for the balance 4% of the establishments the specific activity was unidentified.

The above mentioned sectors with fewer establishments listed do not indicate that these activities are carried out less in the economy. These activities are conducted without a designated physical location and this is the main reason why they are not listed as an establishment. For example, fishermen do not have a separate single location, but the fishing vessel to conduct their day to day business activities fall among these sectors to a large extent. However in this sector also there have been a few larger companies which operate in a physical location which have been included in the analysis.

The Construction sector which has been growing recently and contributing widely to our economic development also showed a very low number of establishments. The same limitation of non-existence of a single location plays its hand here. The main activity, i.e the construction work carried out is done at a particular location which differs in different time periods. All the paper works could be handled within the company owner or partners' residence. The same goes to the Real Estate and other business activities such as Lawyers, Accountants, and Architects etc where their business mostly needs paper works and can be handled within their residence.

For the rest of the sectors, most of them like Electricity and Water, Education, Health and Social Work, and Other Community, Social and Personal Services are dominated by the Government where few are operated under private ownership.

4. Employment & Establishment

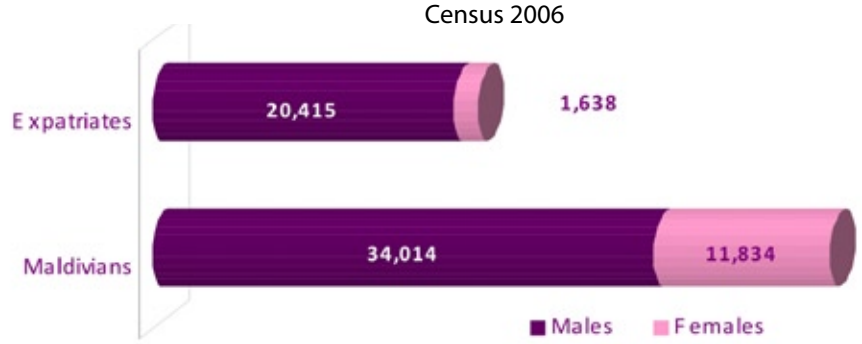
4.1: Employment by Industry

The emergence of entrepreneurship is identified as the key to the area of job creation. With the appearance of the large number of establishments, active in different economic sectors became the means of job opportunities to a large number of youths coming out of school in search of fresh jobs to begin their future. Based on the results, it showed the total number of employed population under the establishments counted 67,301.

Table 3: Employment by Sex & Origin, by locality

	Republic		
Both Sexes	45,248	22,053	67,301
Males	34,014	20,415	54,429
Females	11,834	1,638	13,472
	Male'		
Both Sexes	16,573	8,685	25,258
Males	12,335	8,258	20,593
Females	4,838	427	5,265
	Atolls		
Both Sexes	28,675	13,368	42,043
Males	21,679	12,157	33,836
Females	6,996	1,211	8,207

Figure 7: Share of workforce between locals & Expatriates by Sex, Census 2006

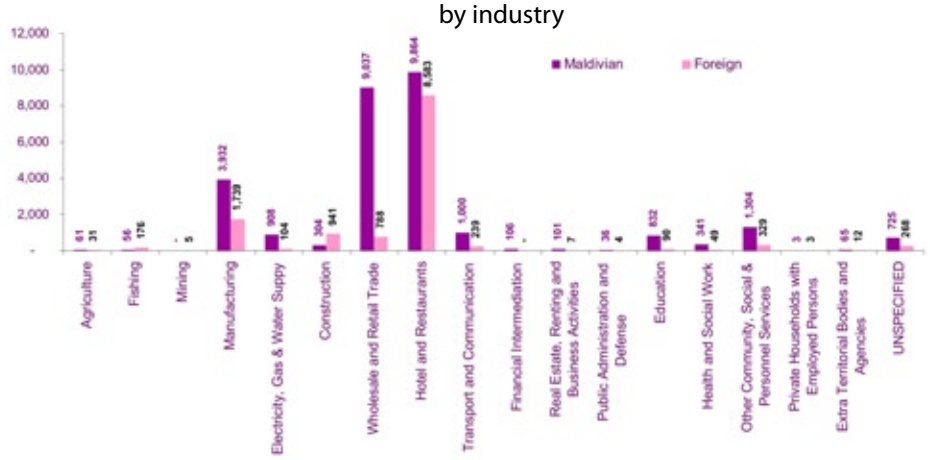


A very small share of the employed population under establishments represented female employees, where the reason for this could be the large portion of female workers working in the government sector. The main reason for this could correspond to the working hours attached to the government sector. Most females may prefer to spare their time physically for the well being of their home and children compared to male workers and hence spend less time working at a job.

Figure 8: Share of workforce between locals & expatriates

The result as shown in figure 8, showed around 33% of the employed population under establishments is expatriate workers. Out of the expatriate population the most number of workers are active under Hotel and restaurant sector. And the second largest portion of expatriate workers is involved in the manufacturing industry. This goes in line with the pattern in the growth of our economy where Hotel and restaurant is the leading sector followed by manufacturing and then construction.

Figure 9: Total Employment in establishments. locals & Expatriates by industry



Hotel and restaurant sector have been the strongest link to the rapid economic growth and development in recent years for the Maldives. In terms of employment numbers, as seen from Table 4, this sector accounts for about 34% of total employed while trade followed with 28%

Table 4: Employment by origin, for some major economic activities in the economy

	Maldivians	Expatriates	Total	% of Maldvians	% of Expatriates	Total %
Hotels & Restaurants	12,220	10,726	22,946	18.16	15.94	34.09
Manufacturing	5,225	2,988	8,213	7.76	4.44	12.20
Construction	1,365	2,473	3,383	2.03	3.67	5.70
Wholesale & Retail Trade	15,619	3,114	18,733	23.21	4.63	27.83
Total Employment	45,248	22,053	67,301	67.23	32.77	100.00

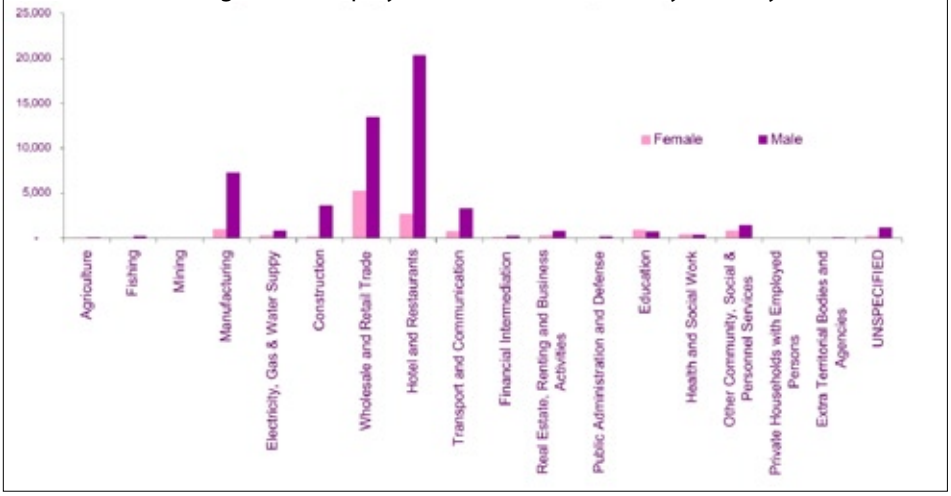
The tourism industry relies heavily on having sufficient supply of workers. In this regard the sector in need of adequate number of workers attracts labor from abroad to meet their needs. Expatriate workers fills a number of jobs for which the pay is too low for local residents and jobs that locals do not prefer to do. Expatriate workers offer flexibility and help to minimize the staffing shortages, and also provide expertise that might not be available locally.

Construction Industry being the third largest sector to employ expatriate workers exhibited strong growth in the years following the tsunami, along with the reconstruction activities and new resorts construction in the tourism sector. The sector is controlled by a small number of active players and the sector lack the capacity to meet the huge demand for tsunami reconstruction, resort construction and the booming housing industry in Male', the capital city. Thereby, the sector attracts expatriate workers in order to fulfill the staffing shortages for which it is easy and cheap to hire them.

In addition, jobs related to the construction sector do not seem to attract much of the locals. A hypothetical reason for this could be that these jobs are being weighed as blue-collar jobs which most of the locals consider low level jobs and would demean their status. Apart from this, the construction companies tend to employ expatriate workers because of the fact that labor turnover is low when foreigners are employed. Also it is believed that expatriate workers are attracted to these jobs at a lower cost.

The largest portion of the employed population in the establishments is working in the sectors Hotel and Restaurants followed by Wholesale and Retail Trade. Compared to the number of establishments in the economy, the distribution of employed population in these establishments differed. As indicated before, the most number of establishments are involved in Trade sector; however the largest number of employment is in Hotels and Restaurants. This difference could be due to the scale of the activities carried out. The Trading business is most commonly carried out at a small scale in a single location, with a limited number of employees whereas; Hotel and resorts sector operates very widely by employing large number employees.

Figure 10: Employment of Establishment by Industry



5. Conclusion

Enterprises face major challenges in trying to remain competitive in the global market place. Hence, identifying the number, size and recognizing the significance of enterprises is essential but not sufficient either for policy formulation or implementation. An attentive measurement of the structure and role of these enterprises is required to understand the different responsibilities that these enterprises play and how their role can be developed throughout the country.

According to the legal formation of establishments in the country, about 75% of establishments were operating as individual establishments, and this distribution is similar in the Atolls as well as in Male'. However, companies are seen to be more concentrated in Male' than in the Atolls probably due to the ease of doing business in the capital.

The mainstay of the Maldivian economy being tourism, the largest amount of employment was concentrated in this sector, which is about 34% of the total employed population of the establishment. However, it should be of concern that expatriate numbers were very close to local employment in this sector 16% and 18% respectively. Hence, policies need to be in place to rectify this if we are to increase our employment numbers, as specified in the 6th NDP.

Among the four major sectors of the economy, only construction sector has expatriates more than the local labour force. Further studies need to be conducted to illuminate the cause of it, and measures to resolve it.

This report only sheds light on the main activities carried out in the country and the size of these activities and establishments based on the employment numbers. However, size of establishments also depends on the scale of activities they carry out and the expenditures and revenues of these establishments and different economic activities. This is just a stepping stone to understanding the activities the economy is engaged in, how far these activities benefit the Maldivian economy as a whole would be a further step to understand the developments in the economy.

Major Findings

Compared to the registered population of establishments at the Ministry of Economic Development and Trade the number of establishments listed and enumerated in census 2006 was less.

As for the legal formation of establishments, it showed that about 75% of establishments in the economy were active as individual establishments while only 20% of the establishments were operating as formal companies.

About 55% of the establishments in the economy were engaged in wholesale and retail trade followed by 15% engaged in manufacturing sector. The majority of establishments involved in the trade sector consisted of small scale retailers engaged in the sale of mainly unspecified (all types) products. As for the manufacturing sector 41% of the establishments were involved in manufacture of wearing apparel, in Male' while in the Atolls 35% were involved in manufacture of furniture. The Construction sector showed a very low number of establishments engaged in the activity.

About 2/3rd of the employed population in the establishments were locals. Hotel and restaurant was the sector which engaged most of the employment for local workers as well as expatriate workers.

A very small share, only 20% of employment in establishments represented female employees.

6.References

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