



# A COMPREHENSIVE HOUSING MARKET STUDY FOR THE GREATER MALE' REGION (2017)

Final Report

## ABSTRACT

Housing forms a crucial part of human dignity. It is one of the basic needs essential for healthy living, welfare, social attitudes and economic productivity of the individual. Thus, the fundamental human right to housing is globally recognized under article 25(1) of the Universal Declaration of Human Rights (United Nations, 2008), as well as many other major international human rights treaties

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## Contents

List of figures .....	2
List of Tables .....	3
Research Team .....	4
Executive Summary .....	5
<b>A Comprehensive Housing Market Study for the Greater Male' Region .....</b>	<b>7</b>
Background .....	7
Introduction to housing affordability and the challenges faced in provision of housing.....	7
Trends in provision of housing and establishment of a housing market in the Maldives....	9
Purpose and main objectives of the study .....	11
Elements of the report .....	11
Methodology .....	13
Phase One: Questionnaire Design and Sampling .....	13
Sampling unit.....	15
Sample frame .....	15
Sample size .....	15
Phase Two: (Quantitative aspect).....	16
Pilot the Questionnaire .....	16
Data Collection and Instrument Administration .....	16
Phase Two (Qualitative Aspect).....	16
Interview Guide and Sampling.....	16
Results.....	19
Demographic Information.....	19
Gender, Age and Marital Status .....	19
Education and Employment.....	21
Income categories .....	24
Location and migration pattern.....	25
Accommodation .....	28
Current housing conditions and affordability .....	30
Housing Finance Mechanisms.....	42
Housing Preferences.....	44
Housing Forecasts, equilibrium and Housing finance options to be taken to encourage growth of end user financing market .....	52
Conclusions and Recommendations .....	55
Reference list.....	59

## List of figures

Figure 1: Gender of participants .....	19
Figure 2: Age distribution of participants .....	20
Figure 3: Marital status of the participants .....	20
Figure 4: Educational background of the participants.....	21
Figure 5: Employment status .....	21
Figure 6: Employment vs. gender .....	22
Figure 7: Type of employment.....	22
Figure 8: Place of work.....	23
Figure 9: Personal Income .....	24
Figure 10: Household Income .....	24
Figure 11: Percentage of people who moved to Male' .....	25
Figure 12: Reasons for moving to Male' .....	25
Figure 13: Location in greater Male' .....	26
Figure 14: Duration in the current location .....	26
Figure 15: Migration within greater Male'.....	27
Figure 16: Preferred place to live.....	27
Figure 17: Current accommodation.....	28
Figure 18: Location vs. type of accommodation .....	28
Figure 19: Monthly rent .....	29
Figure 20: Household income vs. monthly rent.....	30
Figure 21: Rent vs. number of bedrooms .....	31
Figure 22: Most number of people living in one room .....	32
Figure 23: Least number of people in one room .....	32
Figure 24: Most number of people sharing one toilet.....	33
Figure 25: Least number of people sharing one toilet.....	33
Figure 26: How owned properties are acquired .....	34
Figure 27: Number of years since ownership .....	34
Figure 28: Number of bedrooms with toilets in owned houses .....	35
Figure 29: Number of bedrooms without toilets in owned houses.....	35
Figure 30: Most number of people in one room .....	36
Figure 31: Least number of people sharing one room .....	36
Figure 32: Most number of people sharing one toilet.....	37
Figure 33: Types of Housing in Hulhumale' .....	38
Figure 34: Type of social housing scheme .....	39
Figure 35: Rent ranges of social housing .....	41
Figure 36: Percentage pf participant who utilize finance mechanisms for housing.....	42
Figure 37: Type of financing mechanisms.....	43
Figure 38: Hardship in paying back loan .....	43
Figure 39: Factors considered when opting for housing finance mechanisms .....	44
Figure 40: Preferred type of housing .....	44
Figure 41: Preferred home characteristics .....	45

Figure 42: Preferred type of housing scheme.....	45
Figure 43: Preferred number of bedrooms.....	45
Figure 44: Preferred number of bathrooms .....	46
Figure 45: Preferred characteristics in housing .....	47
Figure 46: Preferred facilities in housing .....	48
Figure 47: Satisfaction with current condition .....	49
Figure 48: Reasons for dissatisfaction .....	49
Figure 49: Prefer to with family .....	50
Figure 50: Percentage of people who prefer to move to an island .....	50
Figure 51: Location of people who prefer to move to an island .....	51
Figure 52: Percentage of household income spent on rent .....	55

## List of Tables

Table 1: The most important housing facilities .....	48
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## Executive Summary

Housing is one of the basic needs essential for healthy living, welfare, social attitudes and economic productivity of an individual. Like many other countries, one of the main challenges faced in meeting the housing need in Maldives is provision of affordable housing, especially in the capital city Male'. Housing Development Corporation in consultation with the Maldives National University and Islamic University of the Maldives undertook this study, "A comprehensive Housing Market study for the greater Male' region" in order to explore and address the challenges faced in meeting housing need. Hence, the objectives of this study were to explore the local housing conditions and trends, to identify housing choices in a demographic and geographic context, to analyse and forecast the housing market stock, supply and housing finance options and to determine a housing market equilibrium.

To achieve these objectives a mixed method approach was used. Quantitative survey collected data on demographic and migration information, current housing conditions, housing finance options and housing preferences of the people living in greater Male' region. The qualitative part of the study collected more in-depth information on housing market stock, supply, housing finance options and housing market equilibrium.

The results revealed that there are many people living in appalling housing conditions. In addition, mechanisms for them to apply for affordable housing might not be in place. According to housing financing authorities people who get a lower salary do not qualify to apply for social housing; In addition to this, people with a low income cannot even apply for housing loans but they can apply for social housing regarded they fall within a certain income threshold. It is also evident that the authorities are facing difficulties in supplying for the housing demands.

In order to address such challenges it is recommended to

- Lower the prices and promote according to different segments.
- Deliver according to the budget and schedule so that, foreign loans can be managed better.
- Provide subsidies for things that can lower the cost, for example, building materials like in tourism sector.
- Ensure the total set cost of the housing does not increase with the builders' add-ons or changes.
- Increase the housing supply by the private sector to cater for the annual growth in housing demand. Government can partner with the private sector to facilitate cross subsidization for low income housing and allocate a certain percentage of housing for lower income households.
- Continue development of social housing by the Government.
- Introduce affordable mortgages supported with targeted subsidies to ensure the needs of the disadvantaged groups are met.
- Introduce loan schemes for housing improvements.
- Create housing finance safety nets with the support of annual budgetary allocations. The safety nets can be used for creating guarantee facilities for housing loans for those who cannot afford the equity percentage required.

## A Comprehensive Housing Market Study for the Greater Male' Region

### Background

#### Introduction to housing affordability and the challenges faced in provision of housing

Housing forms a crucial part of human dignity. It is one of the basic needs essential for healthy living, welfare, social attitudes and economic productivity of the individual. Thus, the fundamental human right to housing is globally recognized under article 25(1) of the Universal Declaration of Human Rights (United Nations, 2008), as well as many other major international human rights treaties.

Maldives being party to the Universal Declaration of Human Rights, has an obligation to ensure that everyone can exercise these rights. Thus, provision of adequate shelter has been one of the central themes in national development policies, plans and strategies (Ministry of Housing and Urban Development [MHUD], 2008).

Nevertheless, like many other countries, one of the main challenges faced in meeting the housing need is provision of affordable housing, especially in the capital city Male'. According to the Report by the Human Rights Commission of the Maldives (Human Rights Commission of the Maldives [HRCM], 2008) on Rapid Assessment of the Housing Situation in the Maldives, 85% of income is spent on housing in the Male', while the Seventh National Development (Ministry of Planning and National Development, 2007) states that housing prices in Male' exceed 12 times the average annual income. The HRCM (2007) report also revealed that the 3<sup>rd</sup> highest number of complaints concerning economic, social and cultural rights received by the HRCM was related to housing matters.

The main reason for the housing burden in Male' is due to the continued migration from the islands as a result of the development pattern. Until recently, development in Maldives has been focused towards Male' – the capital island. Consequently, most of industrial, commercial and social infrastructure developed within and around Male'. This pattern of development had caused job opportunities and services concentrated in and around Male',

triggering migration from islands towards Male' for services, mainly education and health, and for employment. Today, Male', with a land area less than two square kilometers (National Bureau of Statistics, Ministry of Finance and Treasury, 2015), is accommodating more than one third of the country's population, causing congestion and leading to urban decay and other issues of sustainable development (MHUD, 2008).

The total Maldivian population enumerated in Census 2014 was 344,023, of which 38 percent of the population lives in Male' (National Bureau of Statistics, Ministry of Finance and Treasury, 2015). The density of Male' stands at 65,201 resident population per kilometer squared, making it one of the most densely populated cities in the world (National Bureau of Statistics, Ministry of Finance and Treasury, 2015). According to the Maldives Population and Housing Census 2014: Statistical Release: VI Housing & Household Characteristics, the average household size in the country is 5.9 persons per household, while this number is 5.8 persons per household in Male' (National Bureau of Statistics, Ministry of Finance and Treasury, 2015). The report also revealed that 31 percent of the households in Male' lives in a dwelling unit owned by a member of that household while 60 percent live in rented places.

In addition to migration, a number of other factors contribute to the exceedingly high prices of housing in Male'. These include the scarcity of land, high cost of construction due to the reliance on imported building material, the need to accommodate more users with population change and to respond to the households to be located in areas that are better serviced, secure and have better economic prospects (MHUD, 2008).

In Malé the shortage of housing supply itself raises rents and prices. For a relative long period, accessibility to housing finance was very difficult whereby the commercial banks and other financial institutions make only limited financing available to private sector developers and to individual home buyers (Ministry of Planning and National Development, 2007). Furthermore, the supply of new units for the lower income groups was also progressing very slowly until 2010, and often the upper-income housing is by redeveloping low-rent housing, thus further reducing options for those with limited means.

However, significant progress towards relieving the housing stress in Male' has been made in the last decade, through direct government intervention in constructing new housing units as well as facilitating opportunities for private developers to invest in and develop a housing market.

#### Trends in provision of housing and establishment of a housing market in the Maldives

Housing provision in the Maldives traditionally was by privately constructing on inherited land or on plots allocated for residential use by the Government (MHUD, 2008). The growing population was initially catered to by the reclamation of land in Male'. It is noteworthy, that the residential land was reclaimed by the individuals themselves thus, gaining access to ownership of the land that they reclaimed. But within the span of less than 20 years, Male' had been reclaimed up to the physical boundary of the natural reef, with an increase of over half its original size.

A satellite settlement on the nearby island Villingilli was also developed to cater for the growing population in Male'. However, the government identified housing in Male' as being a severe issue by the late 80's and having exhausted the reclamation prospects for expanding Male', initiated construction of flats for social housing as a solution to the growing crisis.

With the experience of the pilot housing scheme, the dire need for establishment of financial institutions that provides finance for housing with terms that are more favorable than commercial banks that were operating in the country was expected. Thus, Housing Development Finance Corporation (HDFC) was established by the Government in March 2004. HDFC was initially set-up as a one hundred percent government entity; however, it is now privatized with forty nine percent Government and fifty one percent private shares Housing Development Finance Corporation [HDFC], 2017). Today, in addition to HDFC, Bank of Maldives Plc. is also one of the main financial institutions in providing housing finance for developers as well as end-users.

With the issue of severe land shortage for housing and infrastructure services in Male', it was decided by the Government that a new island be reclaimed within Hulhule/Farukolhufushi lagoon. Reclamation of first phase of the development started in

1997 and was completed in 2003. First residents moved to Hulhumale in 2004 with the completion of 280 residential units, 48 commercial units, major road network and main social infrastructure, including a school, a hospital, an administration building and a mosque. All utilities such as electricity, water and sewerage and telecommunication were also established. In addition, 222 land plots were allocated for residential purpose and 65 land plots allocated for light industrial activities (MHUD, 2008).

Since then, land has been allocated to private sector as well as Government agencies for private housing, condominium housing, social housing, institutional development and social infrastructure development. At the same time, development and allocation of social housing has been continued. As of 2016, the population of Hulhumale has increased recording numbers over 40,000 (Housing Development Corporation, 2017) and is one of the thriving urban centres of the country.

With the rapid increase in the development of housing, the need to revise the existing legal framework was required. Thus, the first Land Law of Maldives was enacted in 2002, and condominium registration (strata titling) was introduced along with the enactment of the Land Law, which had a chapter on condominium registration. This has allowed individual registration of units in a building, which in turn has facilitated ownership housing, where individual units could be mortgaged, sold and/or given with title. This has also facilitated group of individuals who have a joint ownership of a piece of land to construct a building jointly rather than subdividing the plot. Thus, condominium registration has allowed many owners to benefit from a plot of land by creating more housing units, and this paved the way for an influx of private developers to participate in the provision of housing in the country and establish a housing market (MHUD, 2008).

The recognition of housing as a basic human right under the newly rectified constitution of the Republic of Maldives resulted in provision of housing as the top most obligations on the government. Housing was identified as one of the key pledges of the government, and the government was directly involved in construction and delivery of housing throughout the country. Some of the projects were financed by state loans, while models were

formulated to encourage private investment in the housing sector (Ministry of Housing and Infrastructure, 2012). Hulhumale became a main attraction for development of various housing projects by private investors for the middle to high income categories. Consequently, housing has become an attractive market for investment especially in the greater Male' region.

Nevertheless, despite the rapid growth of construction in Male', with exhaustion of land, the housing market in Male' for the most part remained as a rental market. Nevertheless, in the last five years, housing for rent to buy options has also come into the market to some extent (PAN real estate). However, today the majority of housing provision for ownership is in Hulhumale. Hulhumale has become a hub for different types and options for buying housing. Moreover, with the addition of newly reclaimed land under the Hulhumale Phase II reclamation project, there is continuous allocation of land for various types of housing developments.

#### Purpose and main objectives of the study

- To explore the local housing conditions and trends
- To identify housing choices in a demographic and geographic context
- To analyse and forecast the housing market stock, supply and housing finance options
- To determine a housing market equilibrium

#### Elements of the report

- Current conditions and trends of the local housing market
- Growth and forecasts in the local housing market
- Demographics: Information of population growth in the Greater Male' Region
- Market segmentations based on age groups, family sizes, wages (salary bands and frequency), employment and poverty
- Key information on household characteristics and physical living conditions. Needs of resident groups who face challenges finding housing or have specific

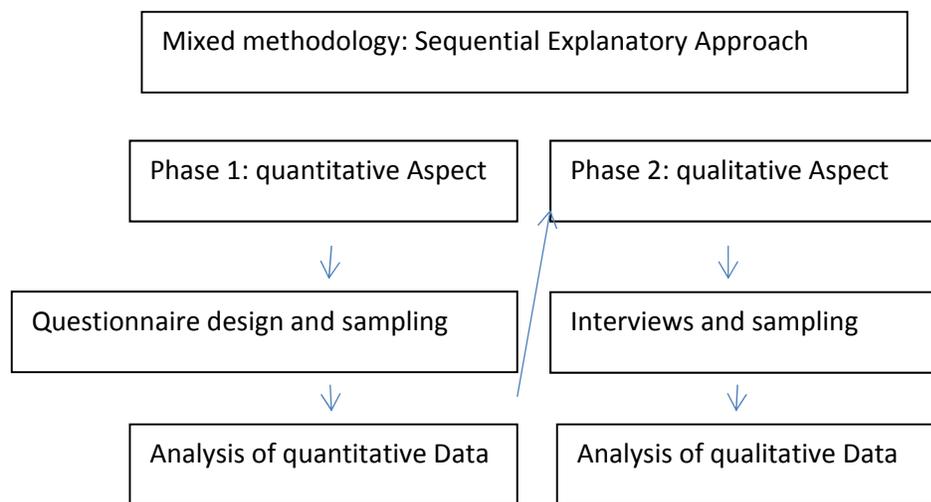
needs (low income renters, senior citizens, persons with disabilities, single parents and youths.

- Geographic context: Distribution, migration and population consolidation, preference on residence locations
- Current data forecasts on housing market segmentation including but not limited to:
- Equilibrium price range for each market segment
- Housing finance options to be taken to encourage growth of end user financing market

## Methodology

### The Study Design

This study used a sequential explanatory strategy within mixed methodology. This approach is characterized by collection of quantitative data and analysis in the first phase of the research study followed by collection and analysis of qualitative data collection in the second phase in order to build on or compliment the result of initial quantitate results (Creswell 2013).



#### Phase One: Questionnaire Design and Sampling

A questionnaire was used as the key instrument for primary data collection in this study. Questionnaires enable quantitative data to be collected in a standardized way so that the data are internally consistent and coherent for analysis. Hence, a comprehensive design process was followed in getting a proper questionnaire designed. The key components to be collected such as key indicators were based on the areas identified in the request for proposal. In addition, expert opinion was sought to validate these areas for evaluating housing conditions and trends. The components that were included in the questionnaire were background characteristics, indicators for disaggregating data.

In addition, the questionnaire was designed with the target respondents in mind, taking into account their educational level and experience. The language used and the context of the questions was framed in such a way that they were all familiar to the respondents. It has to be noted that the sample questionnaires from the client was used as a base for designing the final questionnaire.

Some points considered in the questionnaire design was:

1. Questionnaire was designed in English and then translated
2. Questionnaire was around 30 minutes long

Identifiers for this study included the locality information such as atoll, island, and/or ward. In addition, it included any other identifier that helped in the reporting of the study.

Background demographics of participants were collected such as employment, income level, education level, livelihoods etc.

The main indicators of this questionnaire included:

- Current conditions and trends of the local housing market
- Growth and forecasts in the local housing market
- Demographics: Information of population growth in the Greater Male' Region
- Market segmentations based on age groups, family sizes, wages (salary bands and frequency), employment and poverty
- Key information on household characteristics and physical living conditions. Needs of resident groups who face challenges finding housing or have specific needs (low income renters, senior citizens, persons with disabilities, single parents and youths.
- Geographic context: Distribution, migration and population consolidation, preference on residence locations

- Current data forecasts on housing market segmentation including but not limited to:
- Equilibrium price range for each market segment
- Housing finance options to be taken to encourage growth of end user financing market
- Recommendations based on findings

#### Sampling unit

The sampling unit comprised of Male', Hulhumale and Villimale.

#### Sample frame

For the study, the sampling frame was composed of the population targeted by the project

Target group: The general public from Greater Male' was the sampling frame for this set of respondents. Participants were selected and a probability sampling approach was used. Multistage cluster sampling method was used to choose samples for the survey. With a confidence interval of 95% and 5% error as well as adjusting for a 50% response rate, a sample size of 672 was calculated using the Roasoft sample size calculator. The sample was then stratified into Male', Hulhumale and Villimale. This sample was further stratified to include foreigners as well.

#### Sample size

Option 1: Total number of respondents 770 Location	No of Respondents (local)
Male'	460
Hulhumale	126
Villimale	86
Total	672

### Phase Two: (Quantitative aspect)

To achieve the objectives both qualitative and quantitative data collection approach was employed. For the qualitative part of the study, a question guide was used to explore key information on household characteristics and physical living conditions, needs of resident groups who face challenges finding housing or have specific needs (low income renters, senior citizens, persons with disabilities, single parents and youths.

For the quantitative part, for validity and reliability an investigator-led survey was carried out to fill the questionnaires. The survey took between 15-20 minutes to complete.

#### Pilot the Questionnaire

Questionnaires developed were first piloted in a small sample of respondents by the research team in Male'. The data collected during pilot testing was analysed at item level to fine tune the final questionnaire by the research team.

The pilot testing enabled

1. To identify if the enumerators understood the questionnaire properly
2. To identify if the public understood the questions properly
3. To identify if the sampling method designed capture the required data

Pilot testing will be carried out in Male'.

#### Data Collection and Instrument Administration

The research team developed soft copies of the questionnaires which was used on the tablets. The research team also prepared the data coding of the questionnaires. Upon completion of the printing the research team administered the tests in the selected sample. The evaluators/enumerators trained by research team will code the answer responses for each participant.

### Phase Two (Qualitative Aspect)

#### Interview Guide and Sampling

To achieve the objectives both qualitative and quantitative data collection approach was employed. For the qualitative part of the study, a question guide was used to

explore key information on household characteristics and physical living conditions, needs of resident groups who face challenges finding housing or have specific needs (low income renters, senior citizens, persons with disabilities, single parents and youths). These areas were identified to explore further based on the quantitative results and analysis from phase 1 of the study.

## Sample

A purposive sampling approach was used to identify the respondents for this phase of the study. In choosing the respondents, preference was given to bring in a range of voices and hence, interviews were conducted with government officials from Housing Ministry and HDFC as well as stakeholders in the industry involved in housing and construction.

## Results

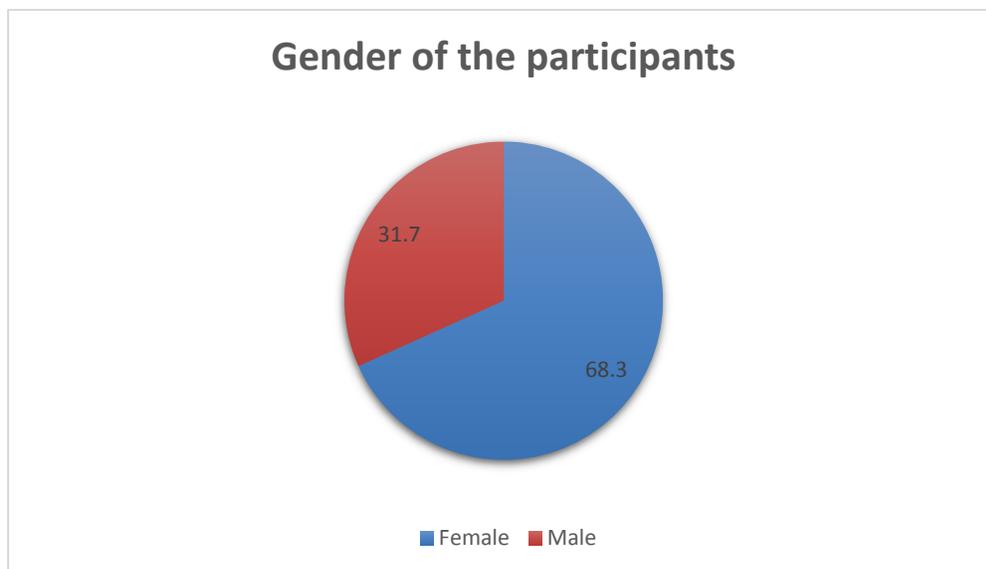
### Demographic Information

Demographic elements are the primary drivers of housing market and real estate market. Demographic factors like characteristic of people living in a certain area, their age, marital status, sex, income and occupation, among many other similar factors drive housing markets (Bujang, Zarin and Jumadi 2010). The demographic profile for this study is presented below.

### Gender, Age and Marital Status

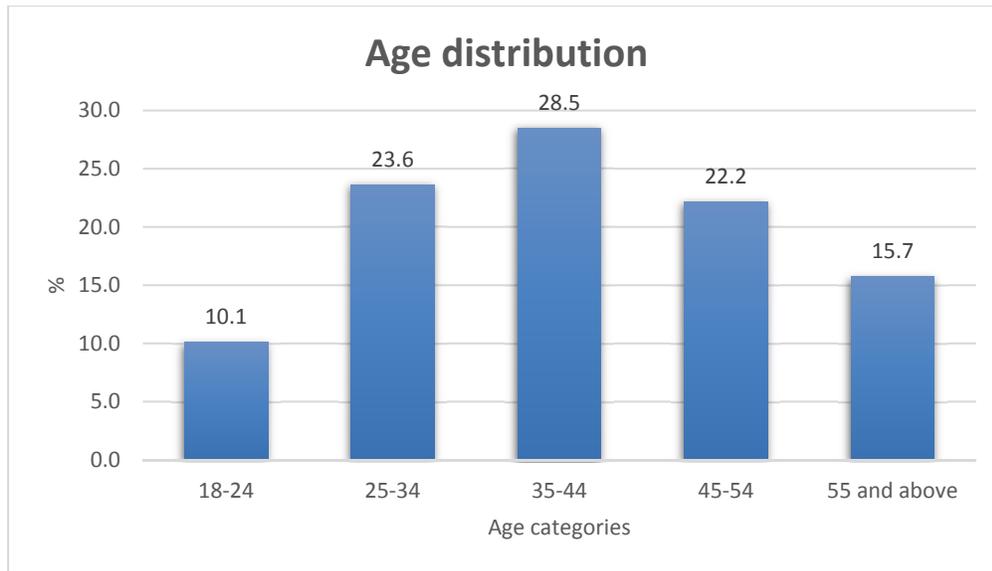
The response rate of the survey was 84.3% which gives a representative sample based on 95% confidence interval and margin of error 5% with a sample size of 649 participants. Similar to many other studies when the data collection was carried out it was mostly females who are at the residence the percentage of females is higher (68.3%) compared to percentage of males (31.6%) (Figure 1). Although the male percentage is lower, the number of males in the study is statistically representative.

*Figure 1: Gender of participants*



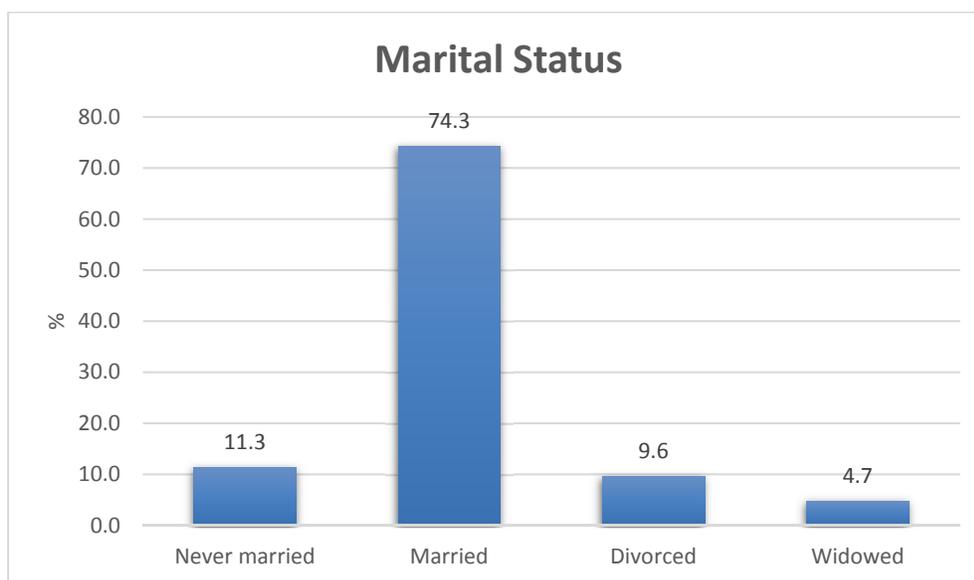
As shown in figure 2, there is a normal distribution of age categories in the data, ranging from 18 years to 55 years of age and above. Highest number of respondents were from the middle age, age group 35-44 years of age.

Figure 2: Age distribution of participants



As shown in the figure three, 74.5% of survey participants are married, 11.3% has never married, 9.6% of the participants are divorced and 4.7% of the participants are widowed.

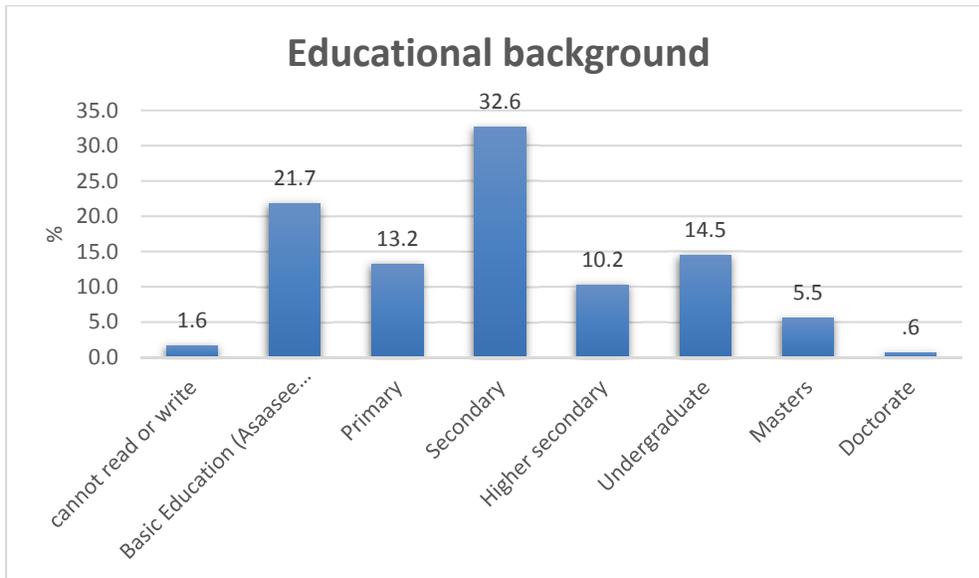
Figure 3: Marital status of the participants



The highest number educational qualification attained by the respondents is secondary education. It is important to note that 1.6% of the participants reported that they cannot read or write (figure 4).

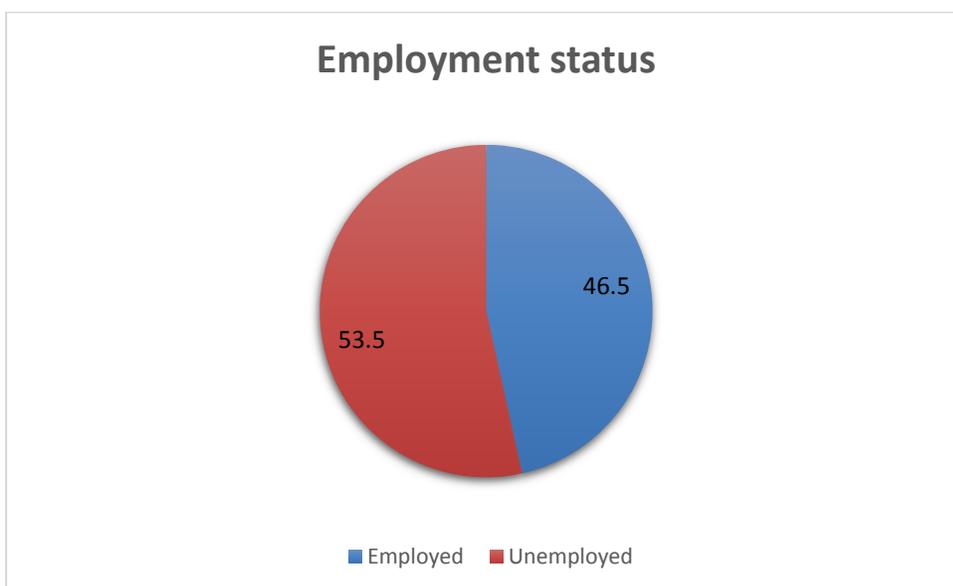
### Education and Employment

Figure 4: Educational background of the participants



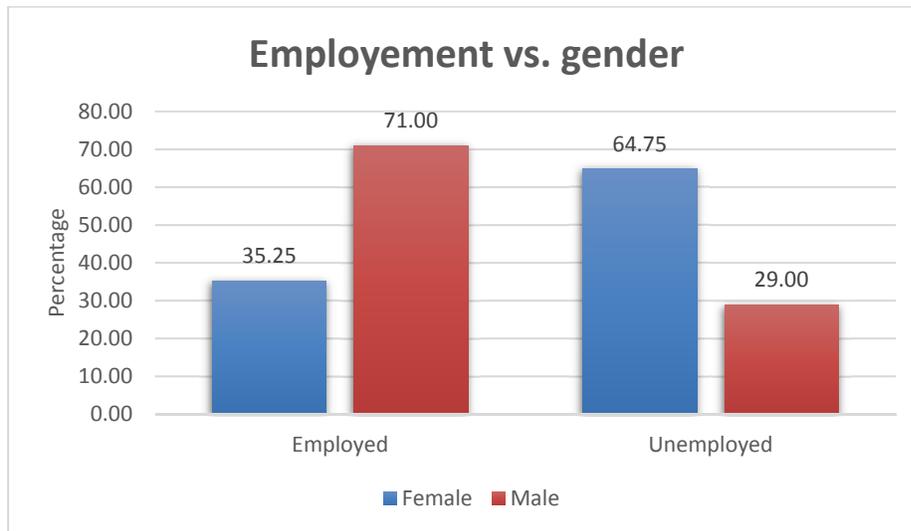
As the data was collected mostly from females who are staying at home the percentage of unemployment is 53.5% and 46.5% was employed (figure 5).

Figure 5: Employment status



A disaggregation of employment by gender shows that 29% of the males in the study are not employed (Figure 6). When this data was further split into age groups it is the age group below 24 and age group above 55 who has the highest unemployment rate in males.

Figure 6: Employment vs. gender



As shown in figure seven majority of the respondents are government employees (50.7%). More than 30% of the people are employed in the private sector and 19.3% of the people do their own private work.

Figure 7: Type of employment

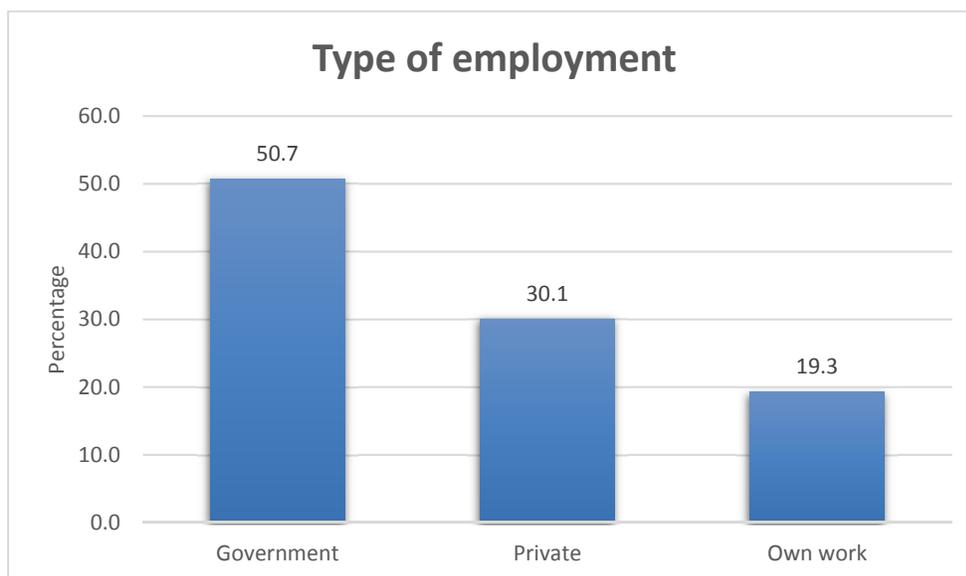
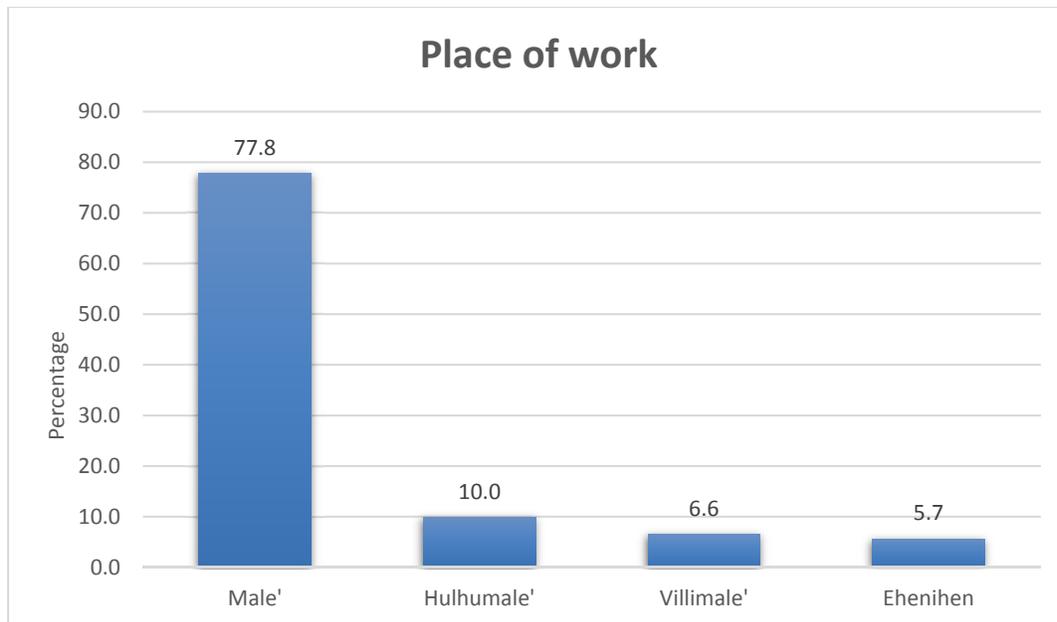


Figure eight shows that 77.8% of the people are employed in Male', 10% in Hulhumale', 6.6 in Villimale and 5.7% in other places (Thilafushi and tourist resorts). Still, a lot of people who are living in Hulhumale and Villimale are working in Male' hence it can be deduced that job opportunities are less in Hulhumale and Villimale.

Figure 8: Place of work



Since most of the respondents in the study are unemployed they have reported that they get less than MVR 5000 per month (Figure 9). However, household income graph shows that most of the families get a total household income between MVR 20,000 to 30,000 (Figure 10).

### Income categories

Figure 9: Personal Income

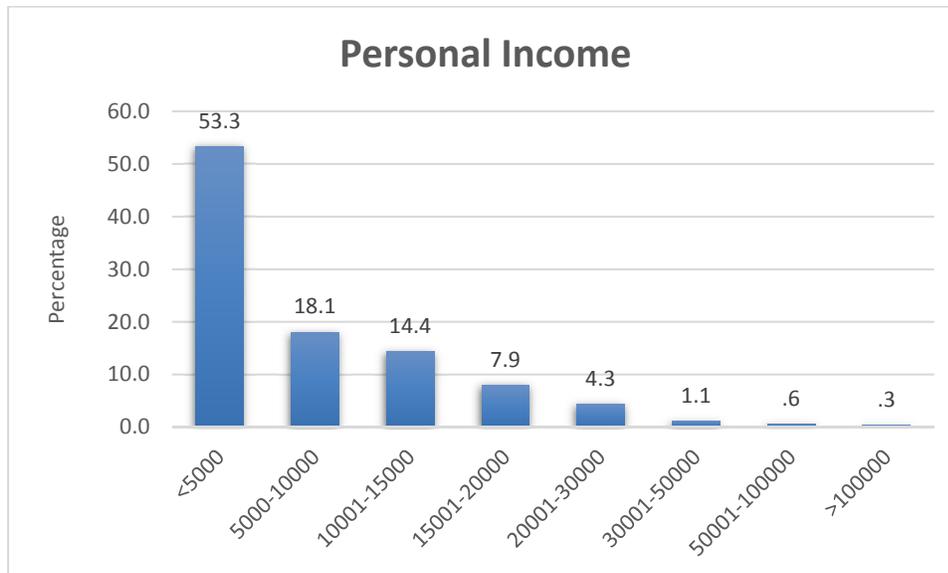
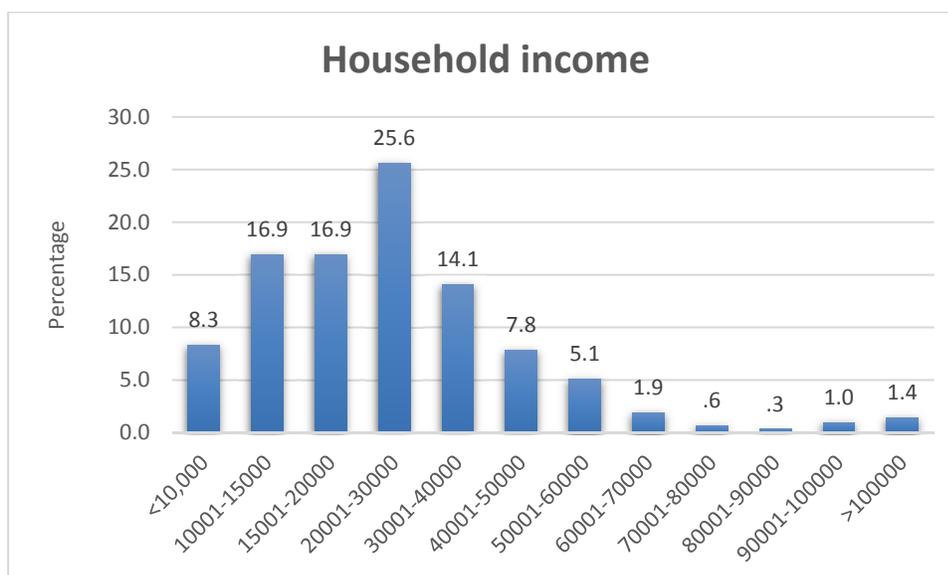


Figure 10: Household Income



### Location and migration pattern

Out of the surveyed participants 57% reported that they have moved from an island to Male' region (figure 11). As shown in figure 12, the major reason why they moved to Male' was education. Some of them (17.3%) said they moved for medical reasons and 46.2% stated that they moved for job opportunities.

Figure 11: Percentage of people who moved to Male'

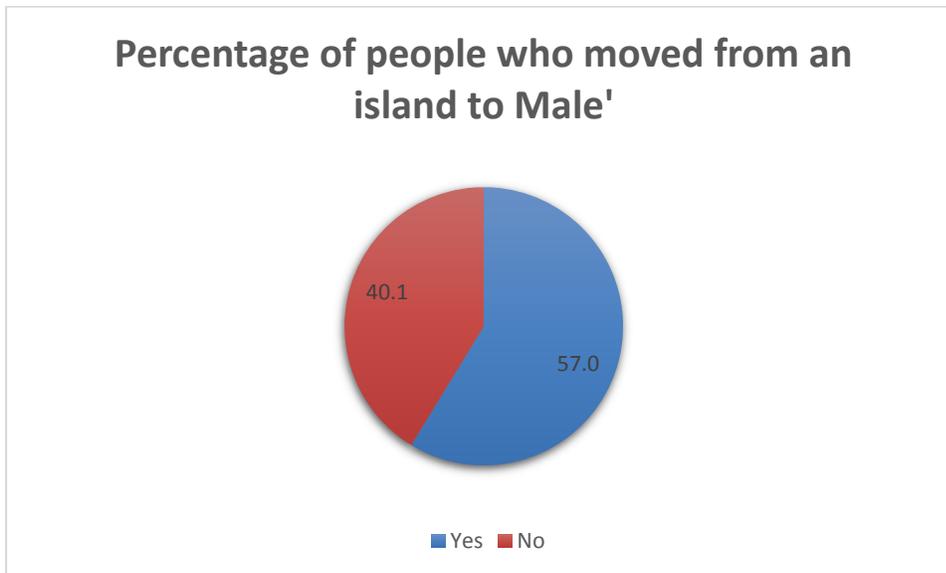
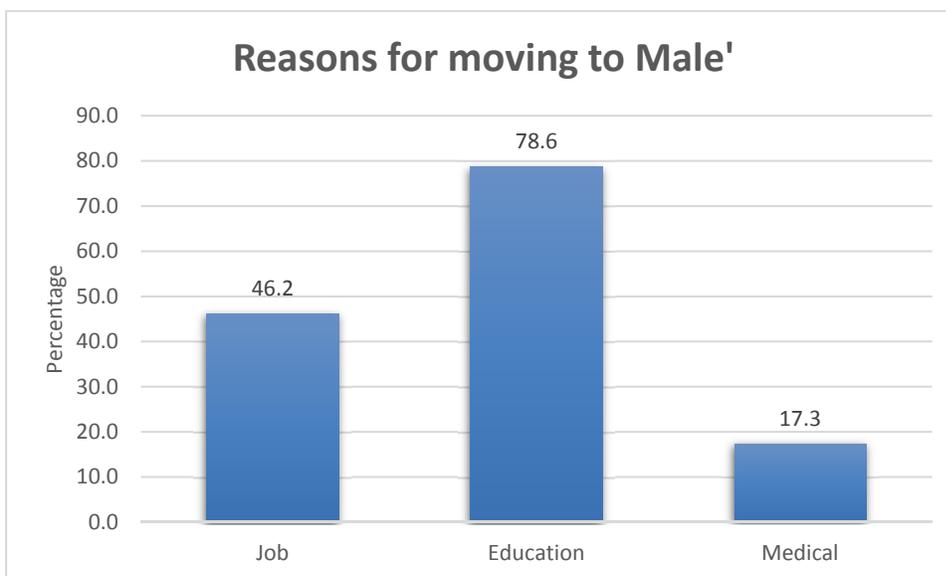


Figure 12: Reasons for moving to Male'



Most of the participants (72.9%) in this study live in Male', which shall be due to the major sample size taken from Male', 14.3% from Hulhumale and 12.74% from Villimale' (figure 13). As shown in figure 14, a large percentage (38.2%) stated the duration in the current location to be 0-5 years, 35.9% stated that they have spent more than 16 years in the current location.

Figure 13: Location in greater Male'

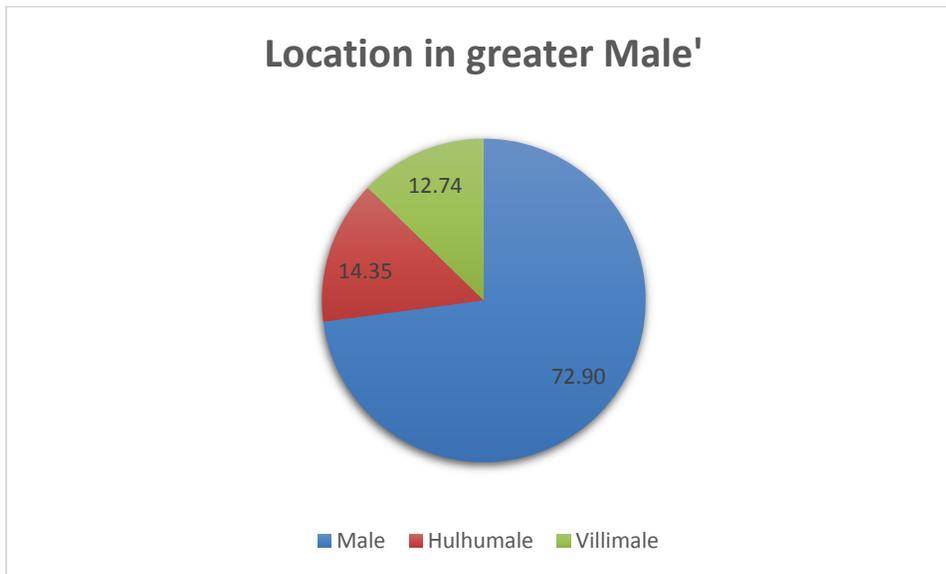


Figure 14: Duration in the current location

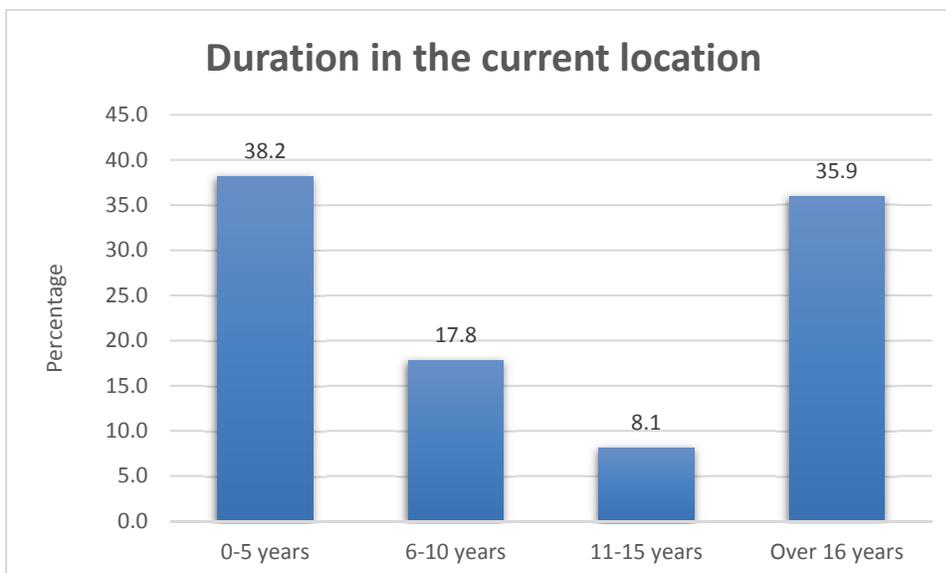
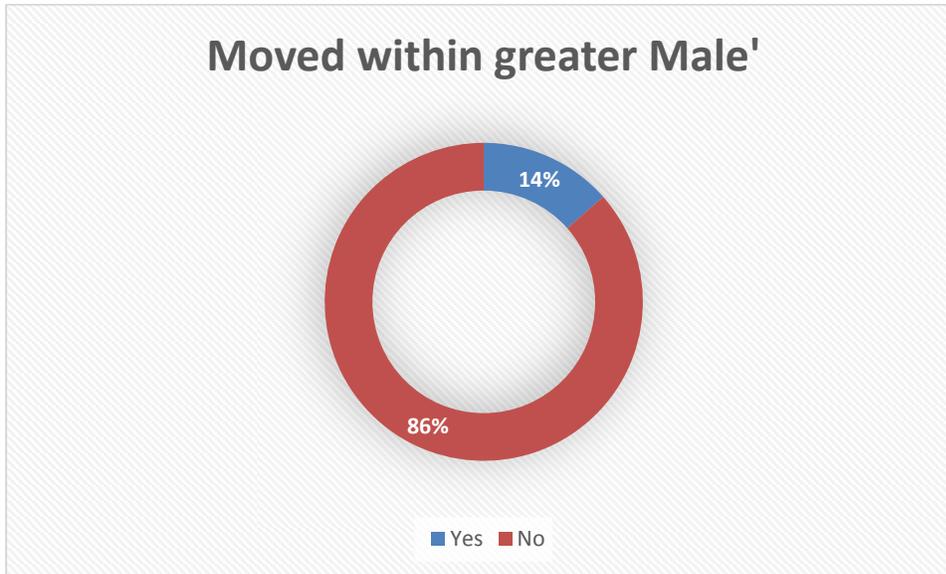


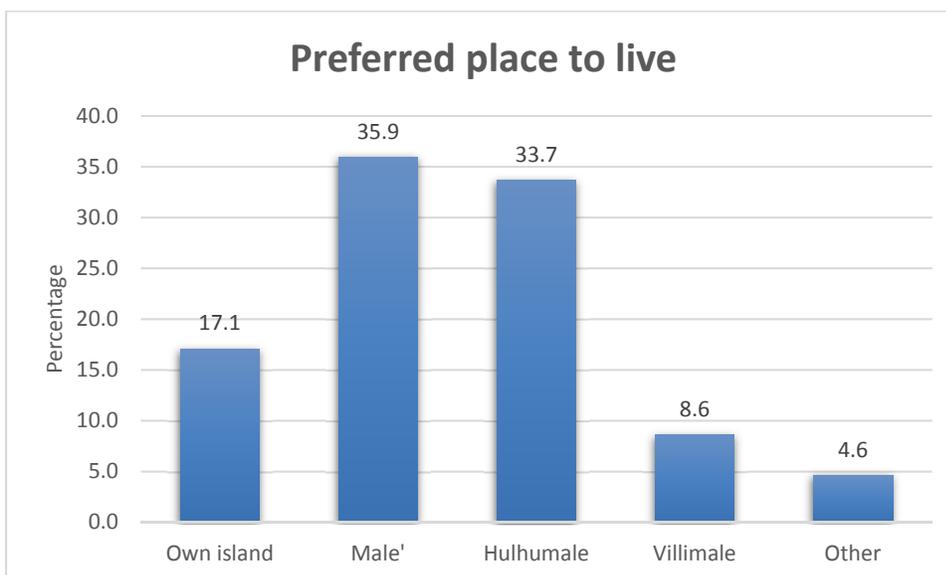
Fig 15 shows migration within the greater Male' region. Only 14% said they have moved within greater Male'.

Figure 15: Migration within greater Male'



Even though the majority of the study participants are living in Male', 33.7% participants have indicated Hulhumale as a preferred place to live compared to Male'. It is important to note that only 17.1% of the participants want to live in their own island. (figure 16).

Figure 16: Preferred place to live



## Accommodation

Figure 17 shows that 56.6% of the people live in rented apartments, 41.5% live in owned places and only 1.9% live in social housing. When this data is disaggregated by locality it is evident that most (39%) of the people who rent are from islands. However about 10% of people from Male' also live in rented places and a similar percentage of people from islands own their dwellings.

Figure 17: Current accommodation

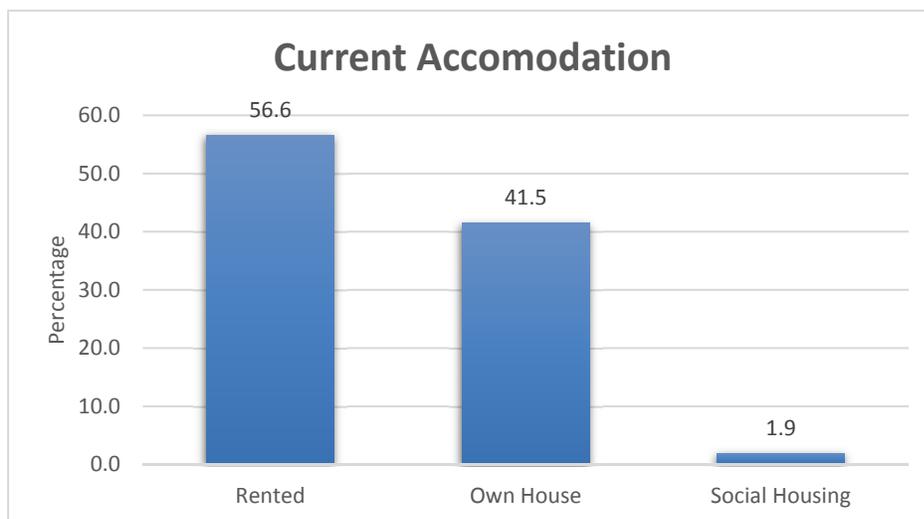
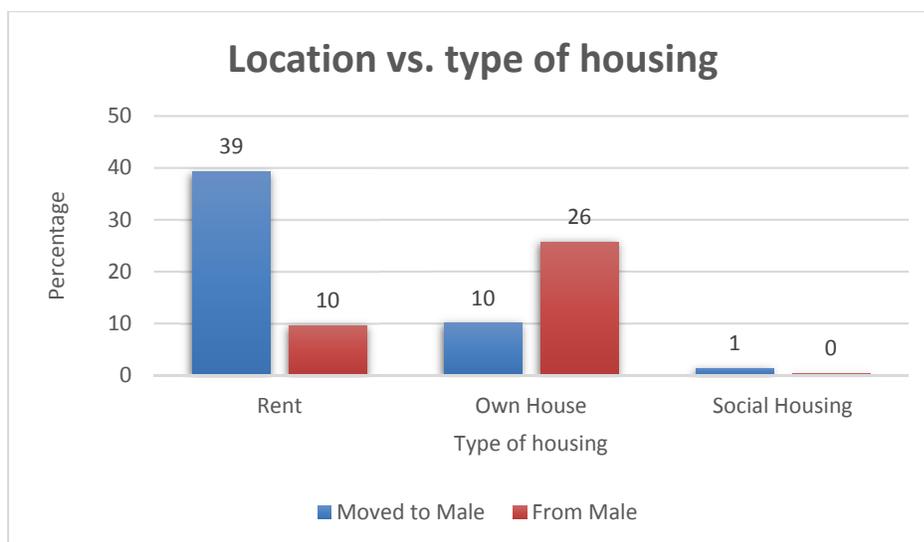


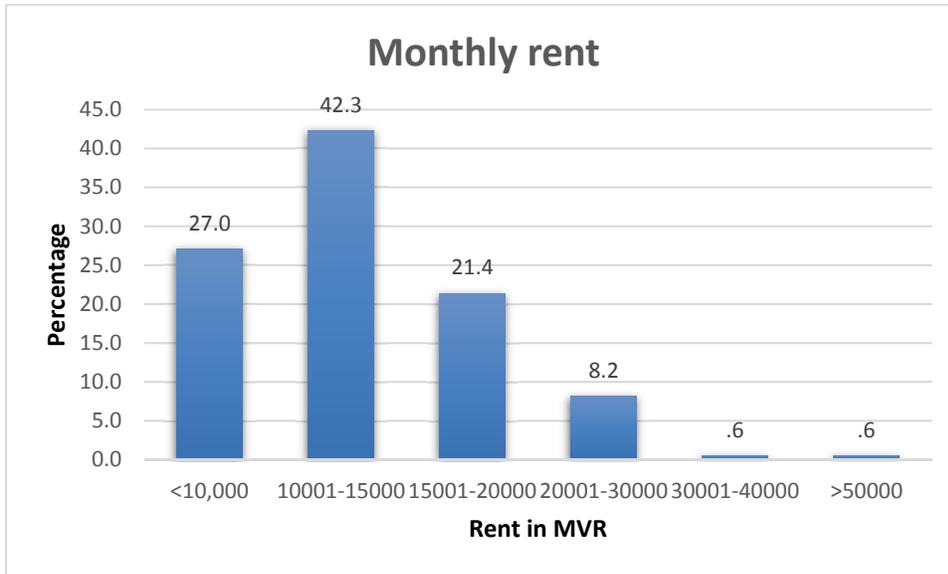
Figure 18: Location vs. type of accommodation



As shown in figure 19, the most common price range for rent is between MVR 10000 and 15000. A large percentage (21.4%) rent for prices ranging from MVR 15000 to

20000. It is interesting to note that there are few (0.6%) people who rent places for more than MVR 50,000.

Figure 19: Monthly rent



## Current housing conditions and affordability

### Rented properties

Figure 20 shows household income versus the price of the rent. Most of the people who rent for less than MVR 10,000 gets a household income less than MVR 10,000. A small percentage of people whose household income is less than MVR 10,000 rents for a price between MVR 10,000-15,000. In other categories of household income compared with the rent prices, it can be observed that only few people can afford to pay the rent. Even if the rent is affordable, only a small amount of money would be left for other expenditures each month since household income in this study was defined as the income the family gets from any earnings. Hence, housing is not affordable for an average person. This is a great concern since in countries where good housing is provided, the rent prices or housing prices will be about 15 to 20% of the income.

Figure 20: Household income vs. monthly rent

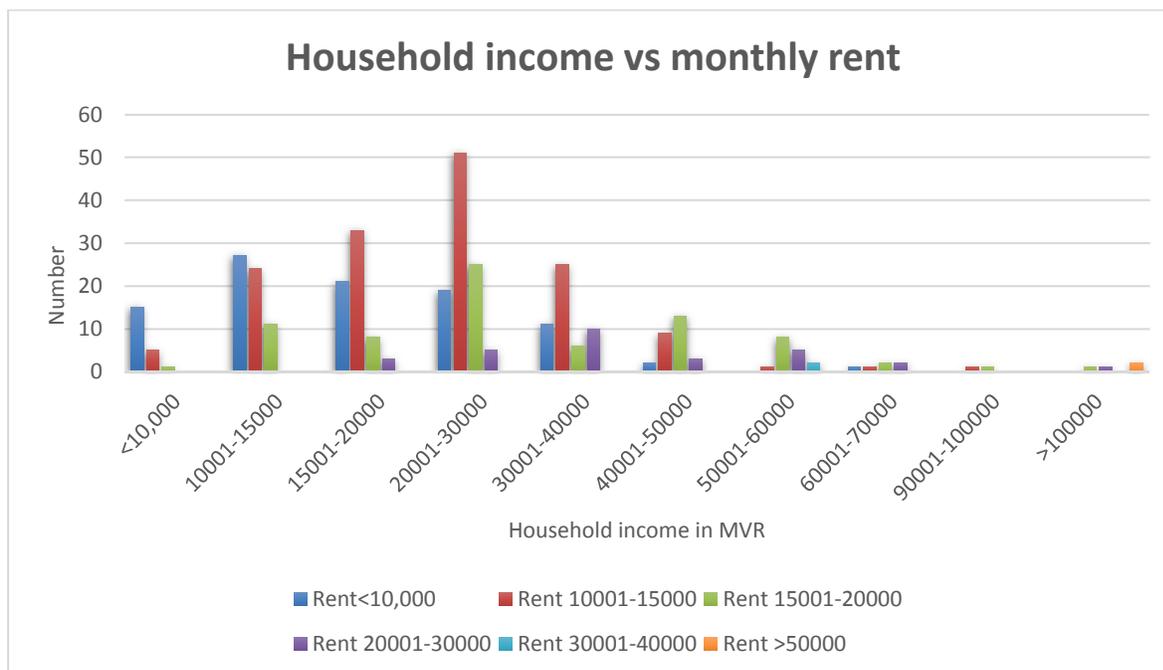
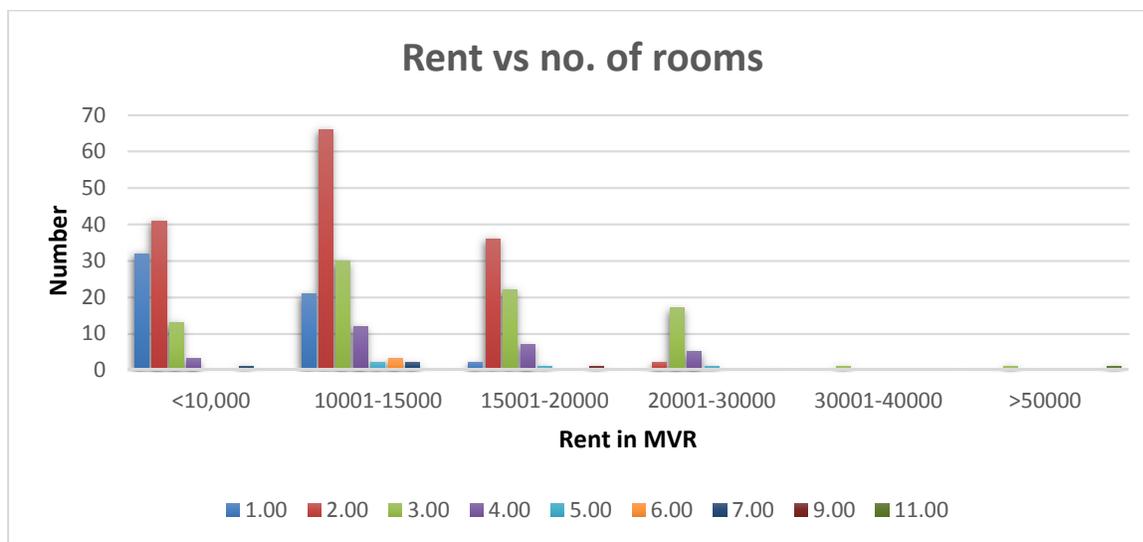


Figure 21 shows the rent compared with number of rooms in the properties that are leased. As shown in the graph, most people rent for a price between MVR 10,001-15,000. Within this rent price range, 21 places consist of 1 room, 66 places have two rooms, 30 places have three rooms and 12 places consist of four rooms. Even in the next rent price range (MVR 15,001-20,000), most of the places have two rooms. Hence, in greater Male' region the equilibrium market price for one bedroom is <10,000, two bedrooms ranges from <10,000-15,000 and three bedrooms ranges from 10,000-15,000.

Figure 21: Rent vs. number of bedrooms



Since the total household income of most of the families ranges from MVR 20,001-30,000, it will be very difficult to afford more than two rooms per family. As a consequence, many family members have to share one room. Figure 22 shows the most number of people living in one room. Most of the study participants reported that there are four people in a room. A few participants reported that there are 10 people sleeping in one room. This is a great concern since congestion can lead to health and social problems. Most respondents also stated that the least number of people in one room is two (figure 23).

Figure 22: Most number of people living in one room

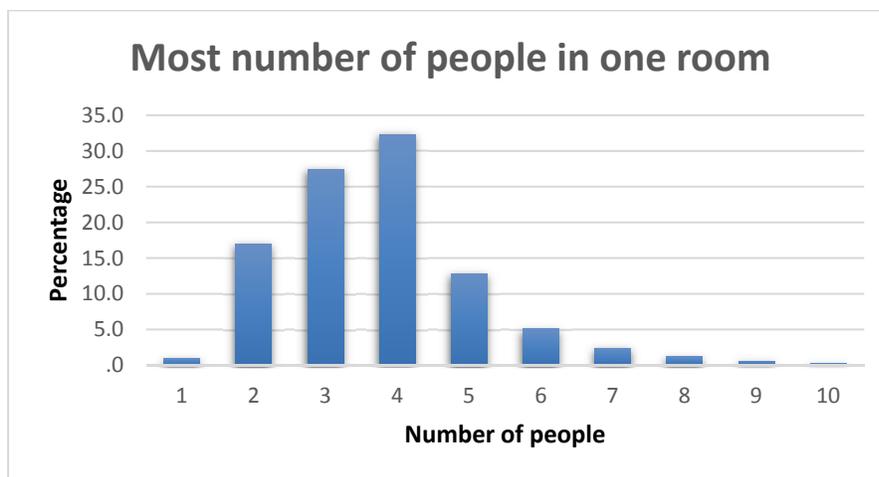
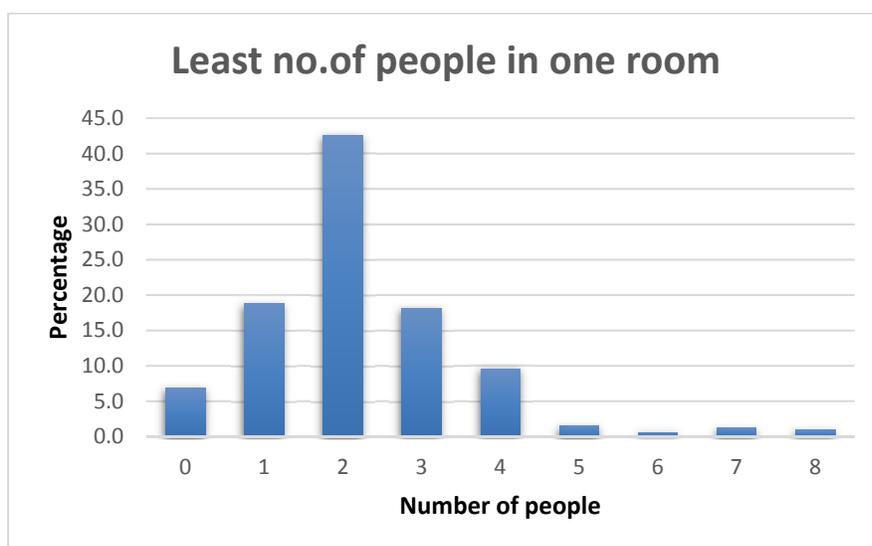


Figure 23: Least number of people in one room



A similar concern is the number of people sharing toilets. Survey participants reported that 14 people share one toilet and most of the people indicated that 4 people share a toilet (Figure 24). They also indicated that least number of people sharing one toilet is 13 (figure 25). This shows there are families in Greater Male' who are living in very adverse housing conditions.

Figure 24: Most number of people sharing one toilet

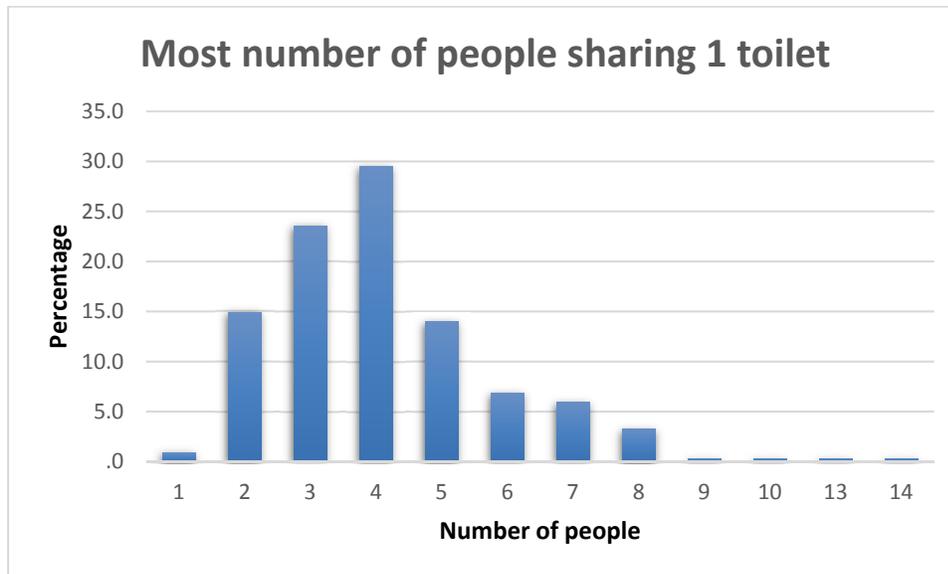
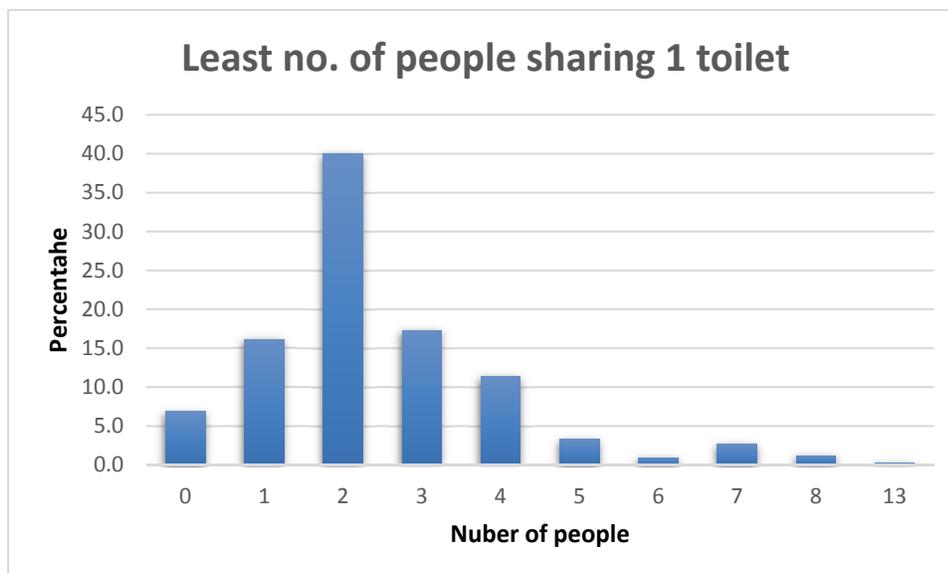


Figure 25: Least number of people sharing one toilet



### Owned properties

Figure 26 shows the respondents who own houses or apartments. From the people who own their own properties, 77.6% said that they inherited it and 22.4% said that they bought the property. As shown in figure 27, number of years since ownership of the property ranges from 0-89 years.

Figure 26: How owned properties are acquired

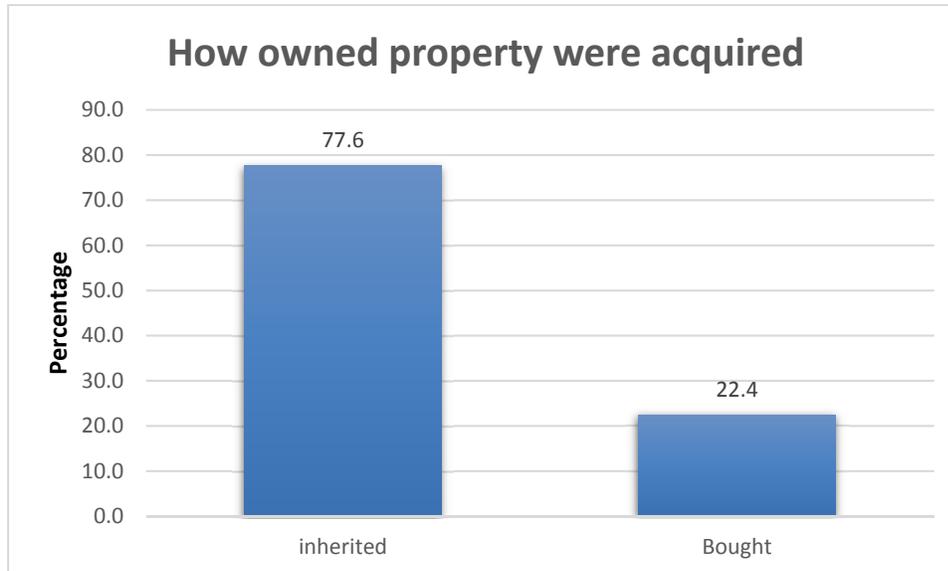
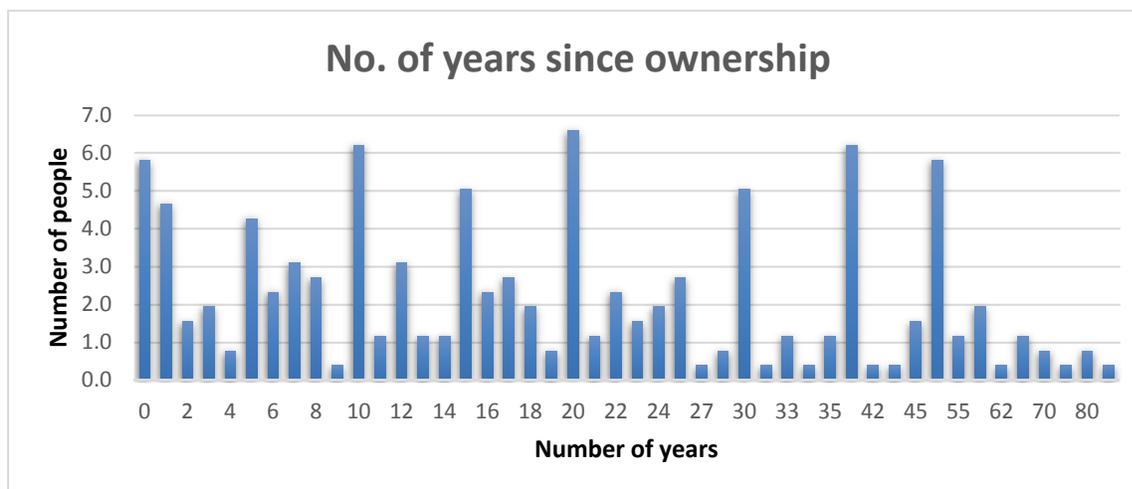


Figure 27: Number of years since ownership



As shown in figure 28, the most common number of bedrooms with attached toilets in owned properties is two. More than 20% of the properties people own consist of only one room with an attached toilet. Some owners have properties with three (13.4%) or four (14.6%) bedrooms. Almost (50%) of the participants reported that they do not have bedrooms without a toilet (Figure 29). However, 25.4% of the participants reported that they have got one room without an attached toilet. It is evident from the data that most people prefer to have attached toilets. Government contractors also reported that people want attached toilets in every room.

*“They also look into the internal setup such as the location of the toilet. Now people want 3 three rooms; they want to have 3 toilets attached to each room.”*

Figure 28: Number of bedrooms with toilets in owned houses

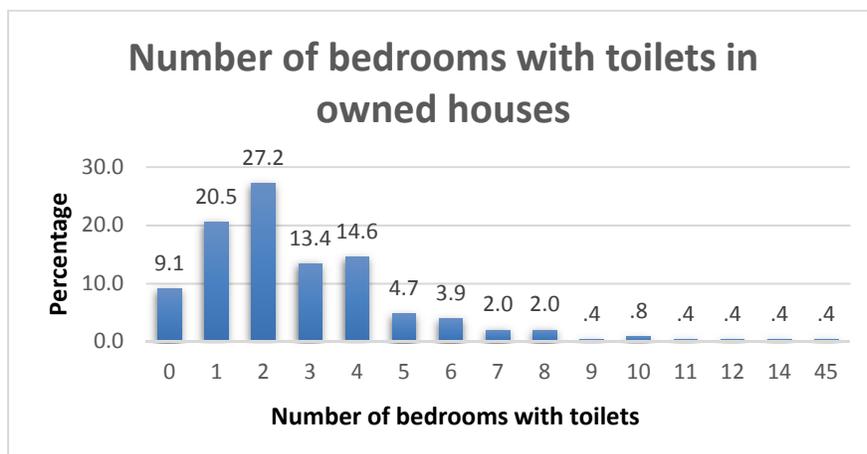
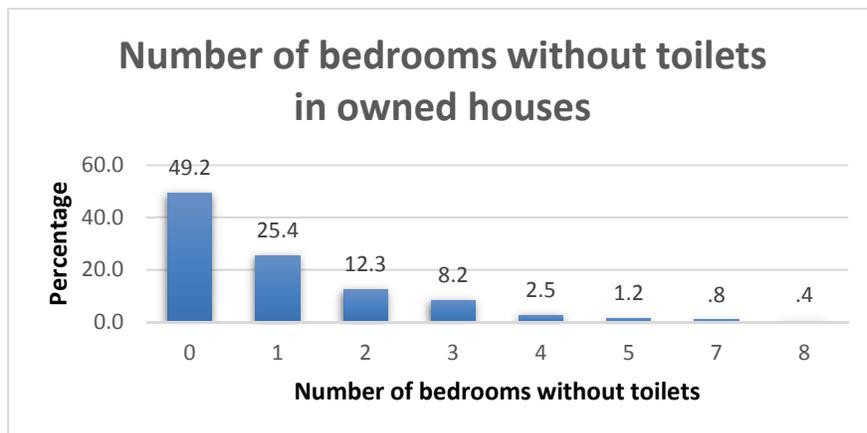


Figure 29: Number of bedrooms without toilets in owned houses



The survey data shows that some people who own properties are also living in appalling housing conditions. Some participants have reported that there 10- 14 people sleeping in one room (figure 30). In addition, one participant also reported that the least number of people sleeping in one room is 10 or 13 (figure 31).

Figure 30: Most number of people in one room

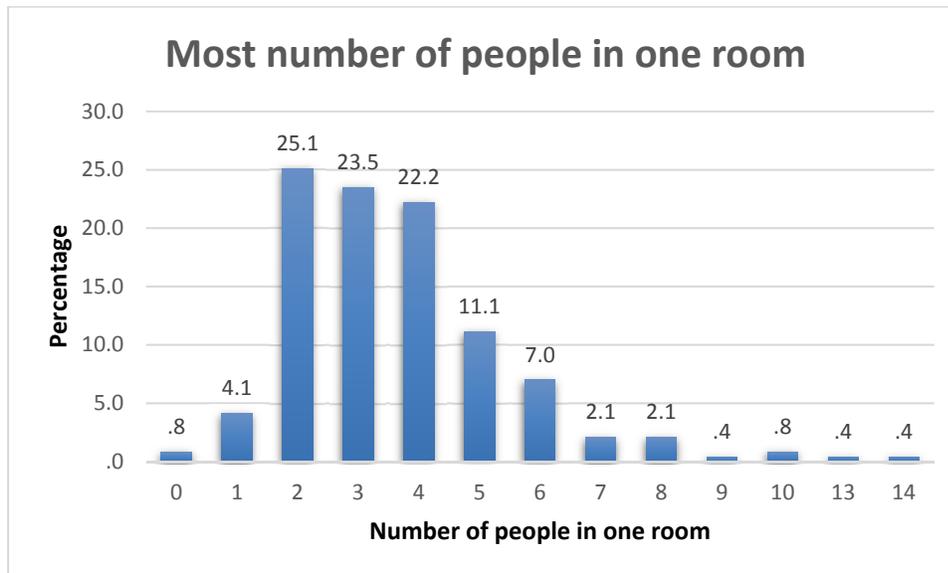
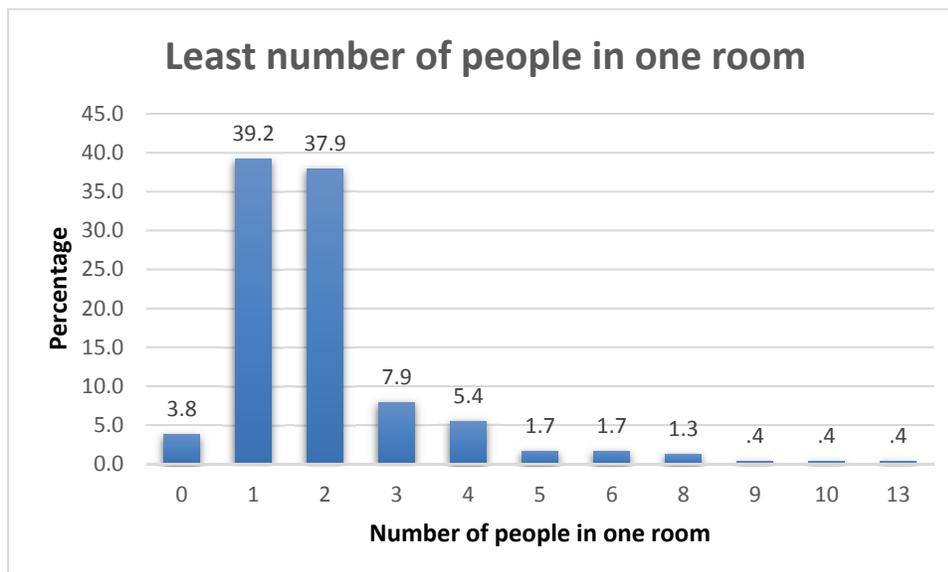


Figure 31: Least number of people sharing one room



It is very disappointing that the most number of people sharing one toilet in some places is 21 (figure 32). A further analysis showed that the property contains a total of two toilets both of which are shared by 21 people. This shows that there is a portion of the public who do not have access to decent housing conditions. To make matters worse, mechanisms for them to apply for affordable housing might not be in place. According to housing financing authorities people who get a lower salary do not qualify to apply for social housing;

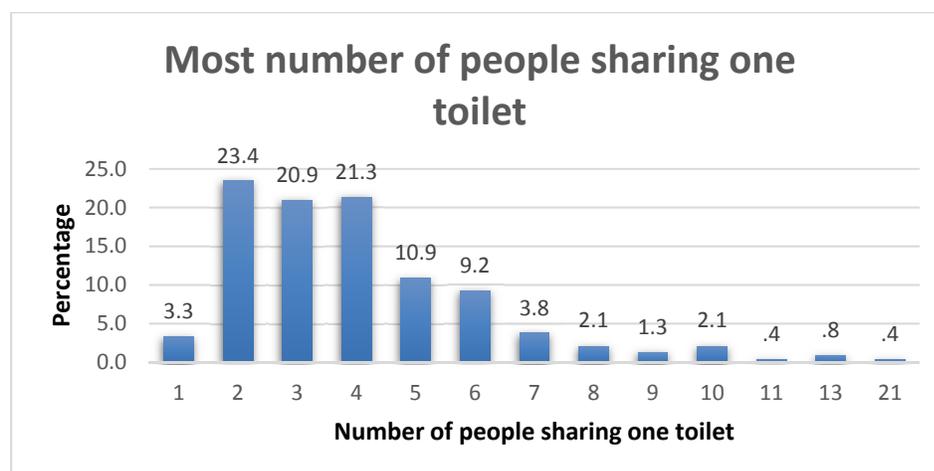
*However, in order to be qualified to apply for the social housing, the applicant should earn an income threshold between MVR10000-15000.*

In addition to this, people with a low income cannot even apply for housing loans but they can apply for social housing regarded they fall within the income threshold mentioned above.

*If the salary is less than 5000, they will not be eligible for a loan of HDFC. However, for people who get lower salaries 15000 or less, the government schemes will be there. HDFC loans will normally have salary bands higher than 15000.*

*Under HDFC, if the salary is 10, 000, they have to pay 10% of the salary. If the salary is 10000 to 25000, they have to pay 20% per month. If the salary is up to 30,000, they can pay 40% of the salary per month for loan. If it is higher than 30,000, they have to pay 45% of the salary per month.*

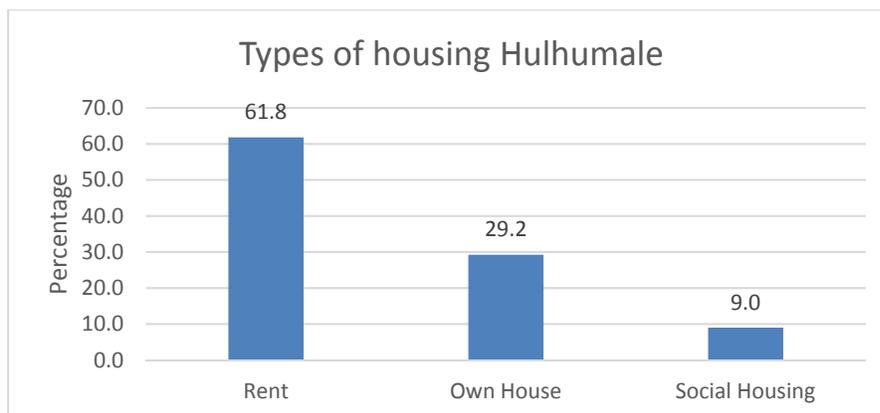
Figure 32: Most number of people sharing one toilet



### *Social Housing Schemes*

Even though housing finance authorities indicated that families within the income threshold of MVR 10,000 –MVR15,000 per month can opt for social housing schemes, the results show that only a very small percentage (1.7%) of the participants are in fact living in social housing (figure 33). Out of those 1.7%, 75% of the participants are in government housing scheme (China flats) and 25% of the people are sector based housing or housing targeted for MNDF or families with a member having special needs. When the data is further divided into the types of housing in Hulhumale, 61.8% of the people reported that they live in rented places, 29.2% said they live in their own houses and only 9% reported that they live in social housing. The finding is quite alarming since a large proportion of social housing was included in the study sample. This means most of the people who were successful in getting social housing do not live there and the places are eventually leased as a medium or upper end housing. This means for various reasons the current model is not working. Hence this problem will not be solved unless there is a mechanism to provide social housing for the right and deserving category of people.

*Figure 33: Types of Housing in Hulhumale'*

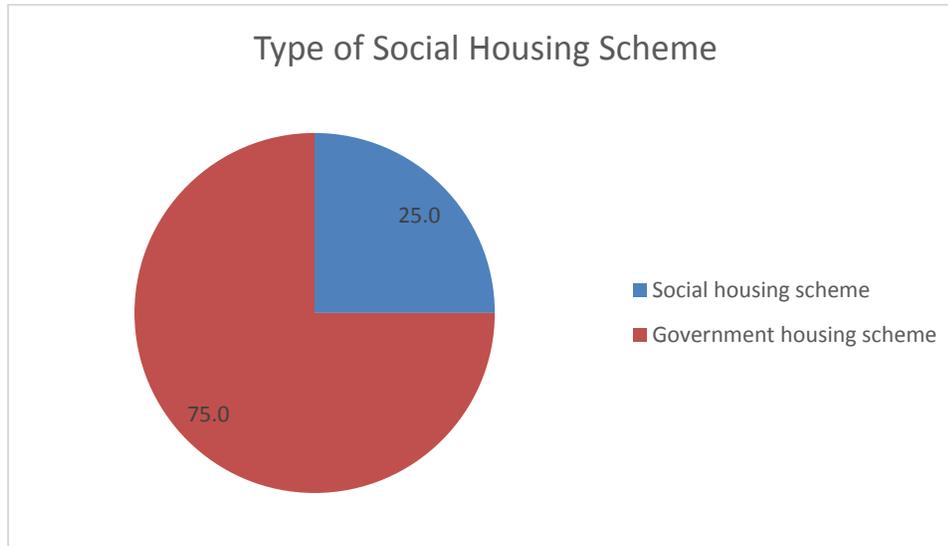


In addition, a family who gets a salary less than MVR 10,000 and does not get selected for the government social housing scheme, cannot apply for the normal HDFC housing loans since their salary would be documented within low salary range.

*Sometimes people change the salary band to get selected for a certain band. For example, some lowers their salary to get selected for*

*government scheme, but if they didn't, they would not be eligible for HDFC loan scheme because the salary will be too low.*

Figure 34: Type of social housing scheme



The prices of the social housing range from MVR 0-10,000 and 18.2% of social housing scheme participants have free housing (figure 34). The prices of the social housing schemes in the survey is not very expensive. However, some of the recent social housing schemes are not affordable to people.

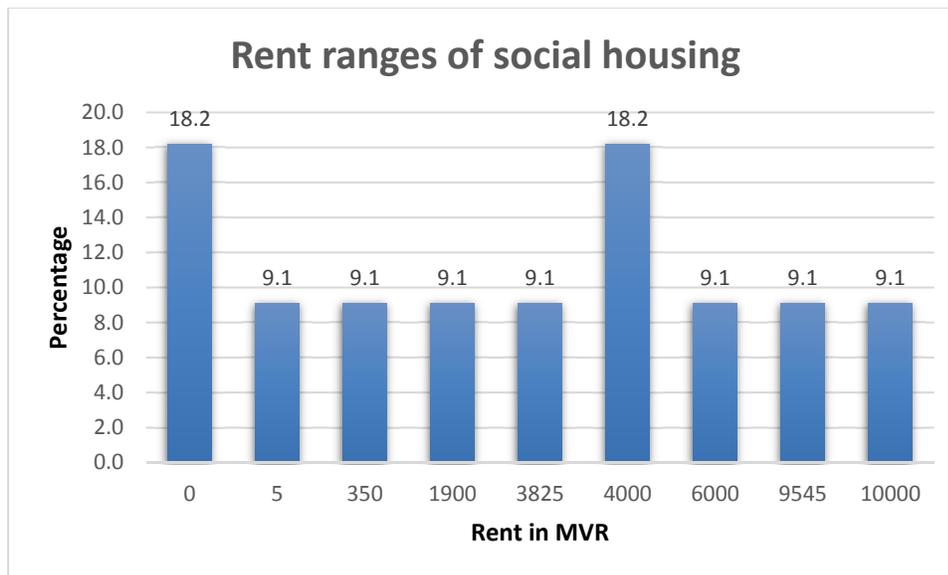
*There are low income categories, yes. No we don't have any specific, but we have social housing for housing ministry ...Arabiyya and Gaa-koshi. That's the that's the only affordable housing we have. Other housing we have, middle segment and as well as high end segment. We are targeting that...*

*...So basically, two classes. we are catering almost three categories, also right. These two; Arabiyya and Gaa-koshi is affordable. Affordable means low-cost housing. It is as for Housing ministry's budget allocation. Within that we try to do that...but we never compromise anything on the quality or...*

*...For our 300 homes, there were 5000 applications. At that time, they have to pay 7000-9000 per month for 25 years. But the*

*government changed the scheme. Now they have to pay 33,000 per month. The change of scheme, doesn't affect us. We are not obligated to sell. 12 families are in Arabiyya and 5-6 families are in Gaakoshi. It's a very little number compared to the total. People are not able to pay. They say they have to pay 2 million in 5 years' time. So, it's a lot. When they go to Bank, they (bank) will definitely ask about how they are going to pay their (home owner) contribution. Which is around MVR400,000. So, that is a trigger to get into that cash back process.*

Figure 35: Rent ranges of social housing



In addition, according to officials, government social housing cannot cater for everyone who needs housing.

*For the social housing government comes up with a value. For example, 50 million might be the fund amount. It is fixed, so we cannot cater for everyone who applies...*

*...When people are selected, the government representatives do give considerations for those sometimes. The government scheme does consider the family size and income as well. Also, special needs and those areas are also considered depending on who represents..."*

*"...For our other scheme, we cannot give (loans) to everyone who applies due to many reasons. Salary is not the main reason, rather, the 20% equity that they need to start with is not available because many people do not have savings. Income is also not the main issue. For example, an income of 30,000 would be eligible for a loan of 1 million. Income meets the criteria, but the savings or their share of 800,000 is not there. That 20% is not available. So, we have tried to address that issue. For example, we have an understanding the*

*pensions office and savings in pension scheme can be used as their 20% now. But if pension scheme is used, the loans will be larger because we don't use the money in pension scheme, rather it is use as a guarantee and a full loan will be allowed.*

### Housing Finance Mechanisms

The survey data shows that 11.9% of the participants utilize finance for housing (Figure 35). Majority (62.7%) of these respondents said they use BML loans, 22.4% indicated that they use HDFC and nine percent said that they use Islamic Bank loans (figure 36). As shown in figure 37, most (89.4%) of the people who utilized housing finance mechanisms reported that it wasn't difficult to pay the loan. Only 10.1% said that it was difficult. According to banks too, loan payments are done regularly except for a very few cases.

*Yes, loan payments are done on a regular basis. Mostly, the issues arise when the loan bearers borrow equity money from another party and when they have to pay for equity and the loan payments at the same time. Or sometimes when conflicts arise with contractors and projects get delayed.*

Figure 36: Percentage pf participant who utilize finance mechanisms for housing

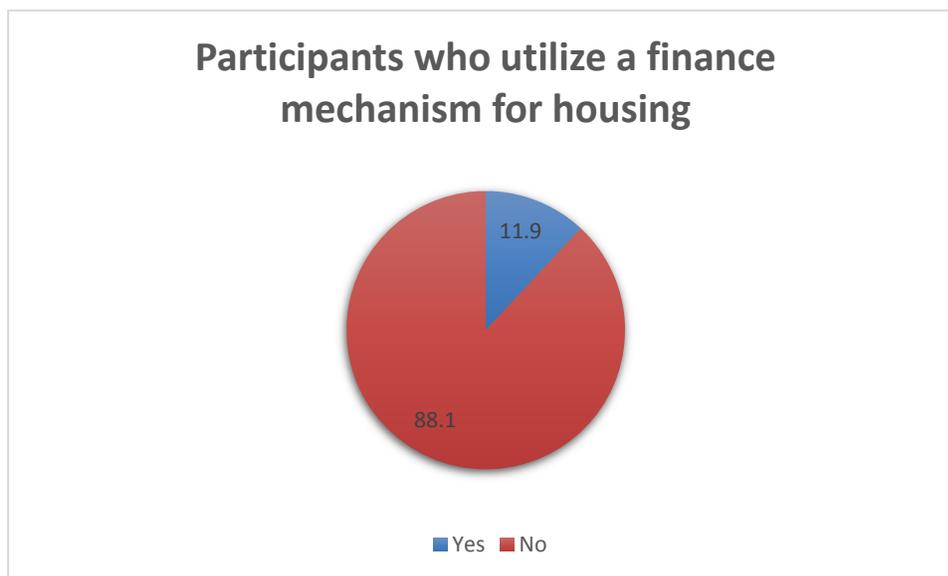


Figure 37: Type of financing mechanisms

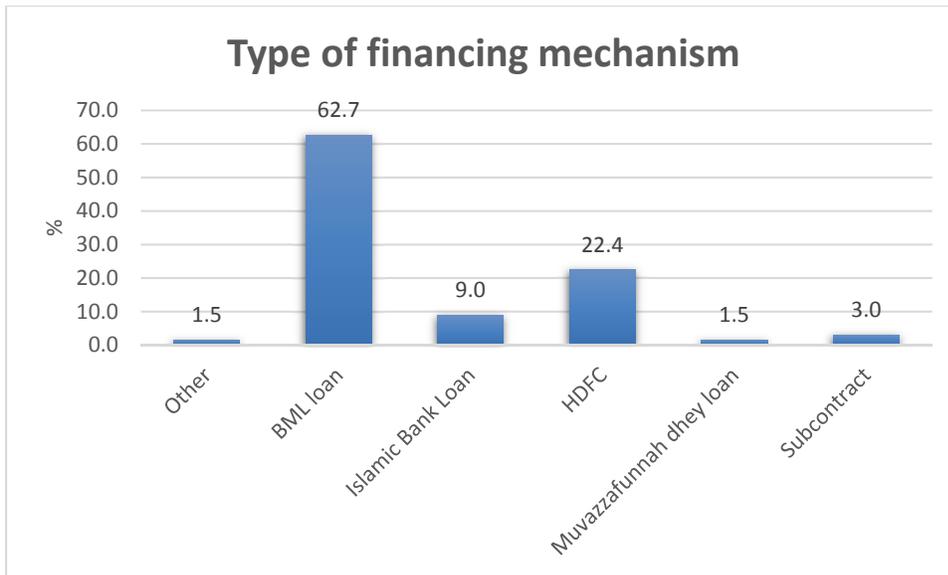
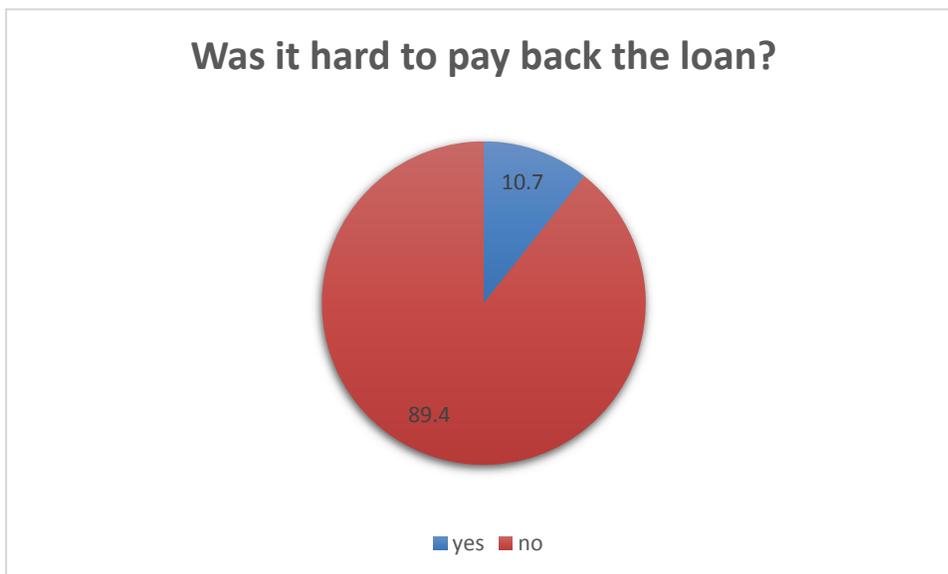
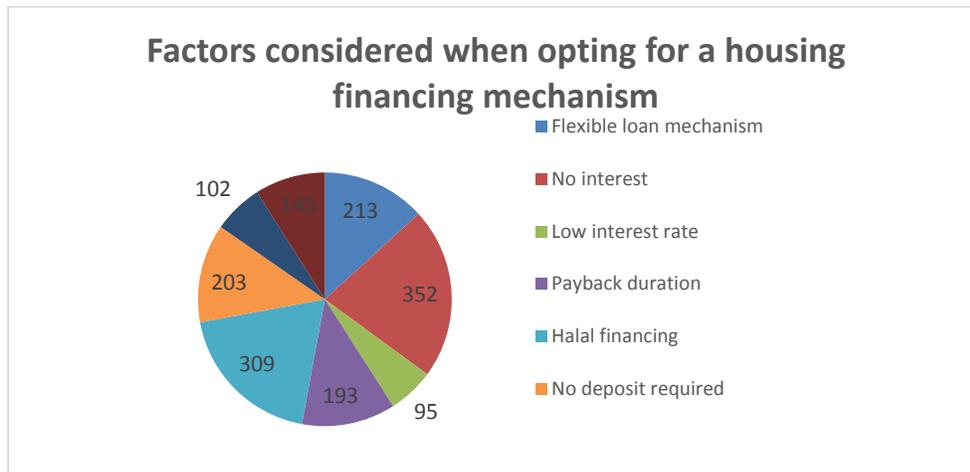


Figure 38: Hardship in paying back loan



The most common factors people would consider when opting for housing financing mechanisms include halal financing, no interest rate and flexible loan payback mechanisms (figure 38). Halal financing and flexible loan mechanisms such as one year grace period are presently available through banks.

Figure 39: Factors considered when opting for housing finance mechanisms



### Housing Preferences

Majority (280 people) have said that they would prefer to live in detached houses (figure 39). The second preferred type of housing is apartments. Security was selected as most preferred home characteristics by the respondents. The second preferred home characteristics is "with furniture and other facilities" (figure 40).

Figure 40: Preferred type of housing

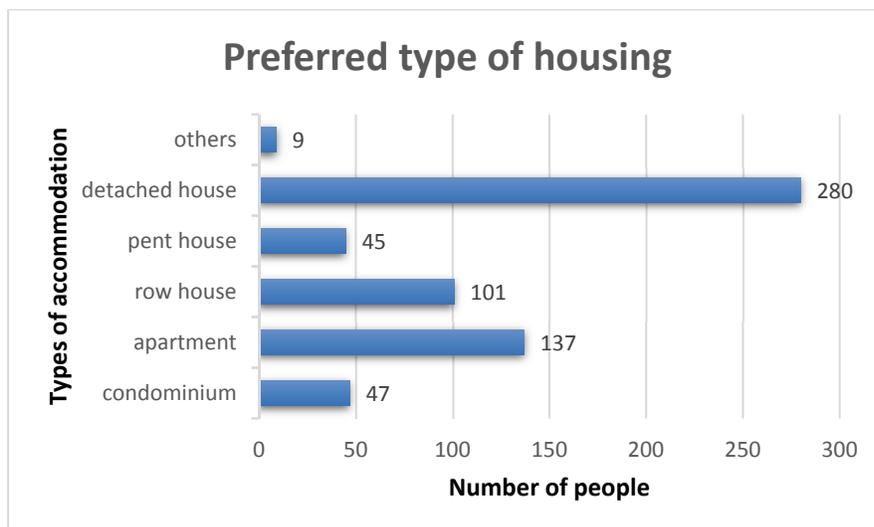
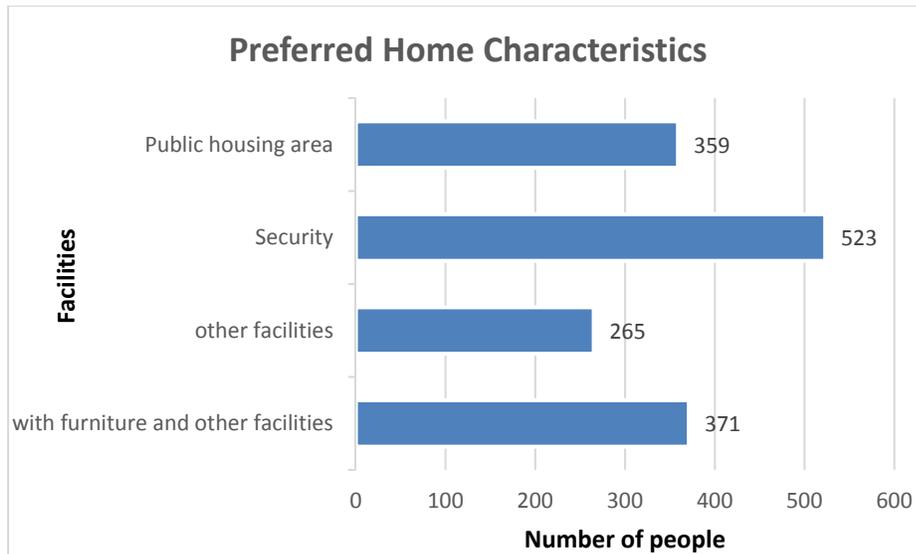


Figure 41: Preferred home characteristics



Majority of the participants indicated that the preferred type of housing scheme is government housing scheme (figure 41). Almost half (47.5%) of the respondents said that they want properties with three bedrooms (figure 42) and a similar percentage of people indicated that they want three toilets in the property (figure 43)

Figure 42: Preferred type of housing scheme.

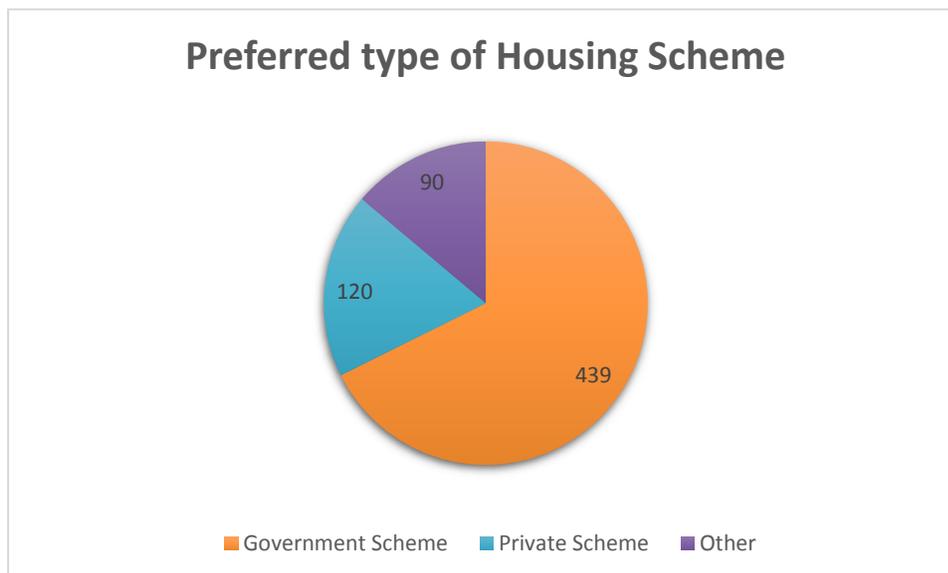


Figure 43: Preferred number of bedrooms

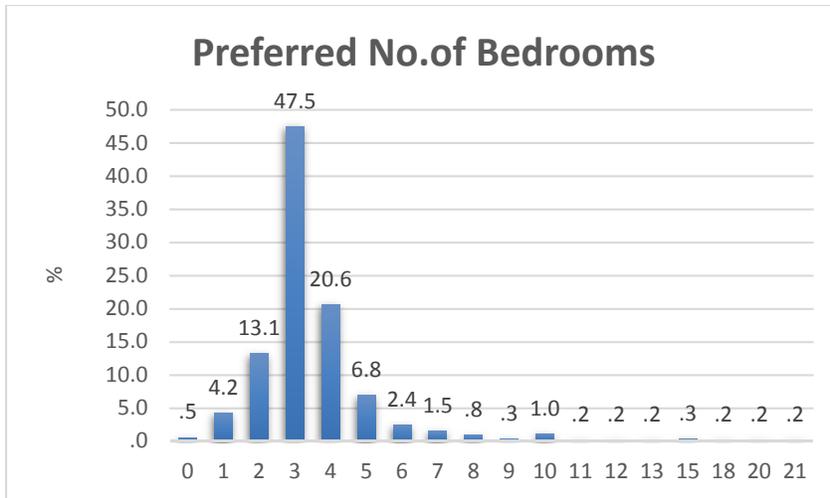
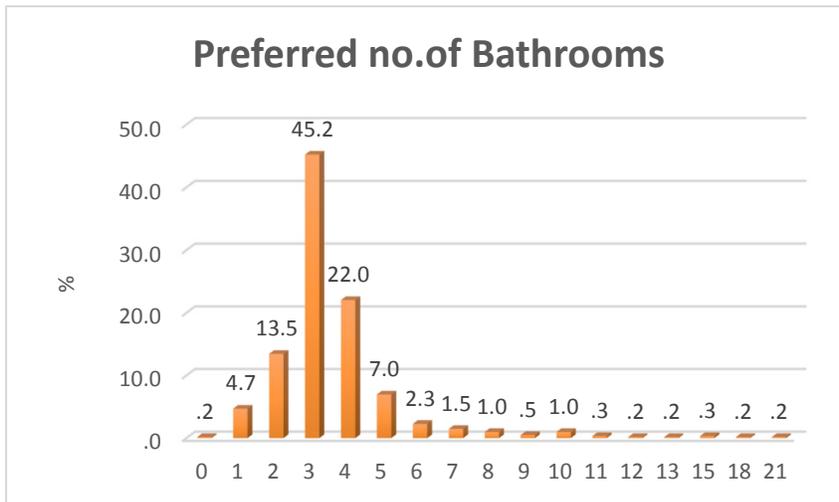


Figure 44: Preferred number of bathrooms

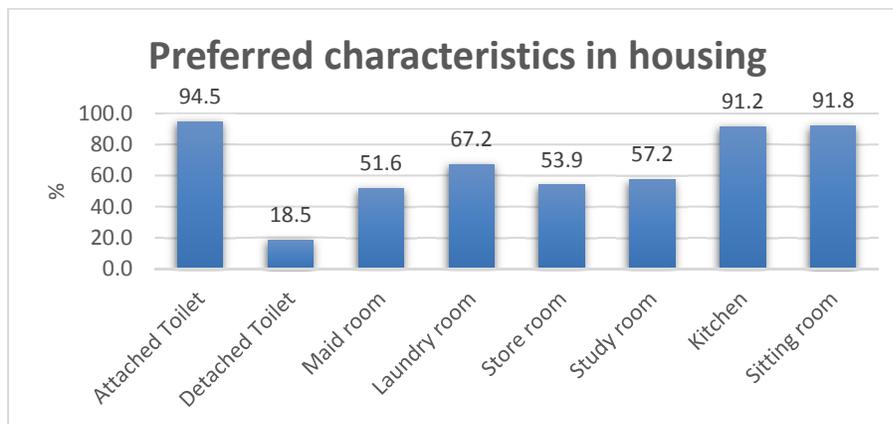


The government officials seem to be aware of people's preferences for 3 bedroom housing. Previously, most of the houses build under the social housing scheme generally consisted of 2 bedrooms but housing authorities are planning to standardize social housing to have a minimum of 3 bedrooms and eliminate 2 room options altogether.

*The Ministry will also standardize the social housing to have minimum 3 rooms and to eliminate other options like 2 rooms and so on*

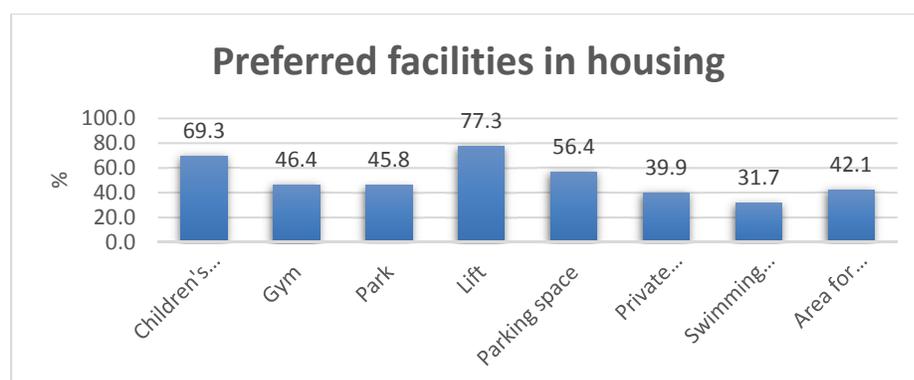
Most common preferred housing characteristics that needs to be in a property indicated by the survey participants are attached toilet, kitchen and sitting room (figure 44). Other than the characteristics shown in the figure, participants have mentioned that balconies, gardens, workplace, children play areas, garage, a space for washing and drying, lifts, ventilation and kitchen with sitting rooms as important characteristics in a house or apartment.

Figure 45: Preferred characteristics in housing



For the most preferred facilities of housing people chose lifts and children's play area as the most common facilities (Figure 45). Fig 45 shows the percentage of people who have selected important facilities that need to be in housing. Other facilities that were noted by some participants include barbeque area, mosque, daycare facilities, city hall, education institutes for elderly, open learning areas, preschool, shopping areas and green environment.

Figure 46: Preferred facilities in housing



The most important 5 housing facilities/ characteristic people chose was “privacy”, “security”, “quietness”, “waste disposal” and “facilities for special needs people” (Table 1).

Table 1: The most important housing facilities

	Very important	Important	Moderately important	Somewhat important	Not important at all
access to transport	81.8	11.2	4.4	1.3	1.3
proximity to shops	74.7	15.7	7.3	1.6	.6
proximity to beach	39.4	18.6	21.1	11.5	9.4
proximity to hospital	69.2	11.2	13.8	4.4	1.5
proximity to ferry terminal	41.2	16.0	20.1	12.6	10.0
proximity to friends and family	47.6	14.4	18.2	12.8	7.0
proximity to garden area	44.4	17.7	14.1	13.5	10.4
sense of community	64.0	18.5	11.0	3.9	2.6
security	94.5	4.1	1.1	.2	.2
privacy	94.7	4.1	1.0	0.0	.3
quietness	89.5	7.0	2.8	.5	.3
live in same area as grew up	48.0	10.5	10.9	10.5	20.1
facilities for special needs people	82.5	7.1	4.9	1.9	3.6
no of bedrooms	80.4	13.1	5.0	1.1	.3
affordability	80.4	13.1	5.0	1.1	.3
pet friendly	14.3	6.8	5.0	9.4	64.3
maid room	43.4	14.9	10.9	7.5	23.2
waste disposal	85.3	7.8	3.9	2.3	.8
Parking area	70.5	14.3	4.5	5.7	5.1
sunlight	80.7	11.5	4.1	3.0	.8
store room	45.9	12.5	13.9	13.5	14.1
drying laundry	75.4	15.4	5.7	2.4	1.2
prayer space	69.9	6.8	7.5	9.4	6.5
study space	64.2	10.9	8.3	9.2	7.5

It is important to note that the majority (55.1%) of the survey participants are not satisfied with the current housing conditions (figure 46). Main reasons given for dissatisfaction include “too expensive”, “repairing is not affordable” and “sharing space with other people” (figure 47). In addition, to reasons mentioned in figure 47, people have expressed dissatisfaction about the size of space and the number of people who have to live there because of the expensive rent for renters and the small space inherited by house owners.

Figure 47: Satisfaction with current condition

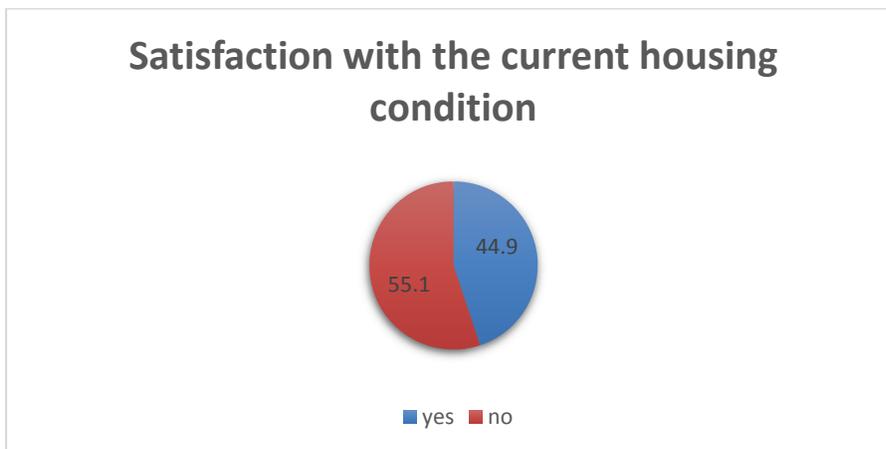
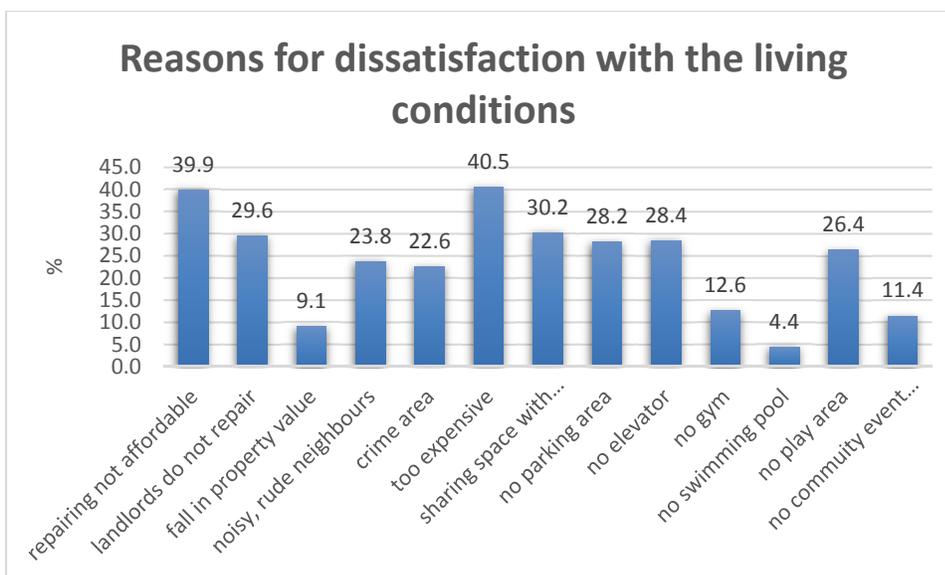


Figure 48: Reasons for dissatisfaction



More than half (58%) of the people have said that they want to live as a nuclear family and 37% said that they want live with the extended family (figure 48). In addition, the majority of the people have indicated that they would prefer to move to an island if health, education and other services are available (figure 49). When this information is disaggregated by location it is clear that it is not only the people who belongs to other islands who want to move. Even residents belonging to greater Male' prefer to move to an island given that good services are provided (figure 50). This shows that people living in greater Male', regardless of the location are not satisfied with the living conditions in greater Male'.

Figure 49: Prefer to with family

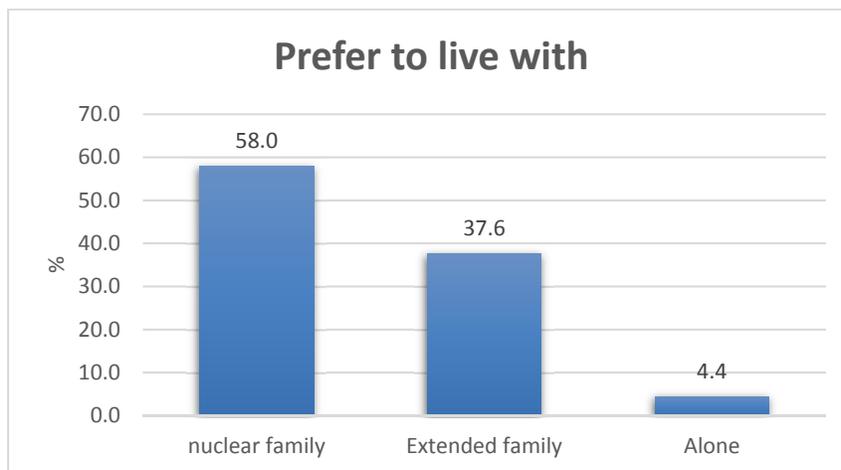


Figure 50: Percentage of people who prefer to move to an island

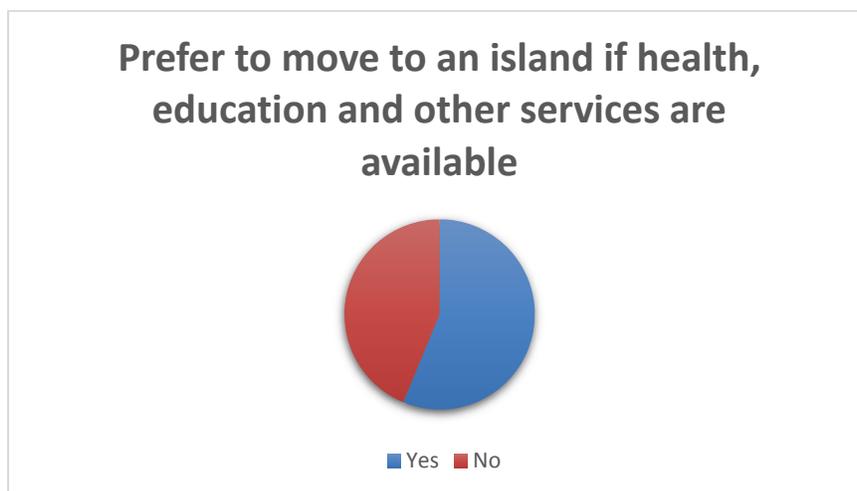
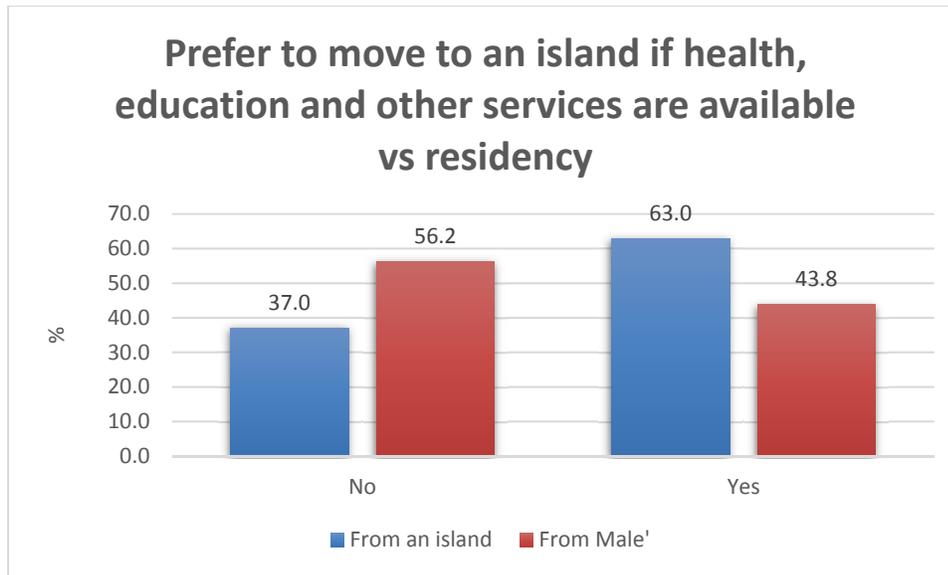


Figure 51: Location of people who prefer to move to an island



The whole study shows that people are not satisfied with the current housing conditions. There are also many families living in very poor housing conditions and the housing schemes are not accessible and affordable to all. According to housing finance officials there are many challenges in provision of better housing in greater Male'.

*The housing developers do not come up with enough funding, so they require progressive payments to continue the job. The banks and other financial institutions provide that progressive payments for the developers. However, in many cases, the customers who take the loans (to provide the payments) will not have the flats or houses yet and they would be renting at the same time. And in those houses or flats will probably have three families in three rooms. So, they would want to move out in order to have a decent housing. But the situation is they cannot move out as the housing is not ready yet. So, with the present income, they cannot afford to pay the loan and the rent of the present dwelling at the same time. That's an issue that we cannot address at the moment...*

*To solve that issue, our thinking is that we should lower the cost of the present housing. But it's difficult, because all the developers want to go for premium pricing because demand is there and supply is limited. They want to gain the maximum. We give loans to the contractors, but sometimes they don't deliver or maintain the quality. So, when the owner does not get on time or according to their set quality, financial bodies are stranded in-between. The finance is given to the owner and they decide if they want to contract. Sometimes owner also want to changes in the middle of the project. The payments are given to the owners and owner might decide to not to give it to the contractor. Their reason might be that their project has passed the time period. Starting many projects from one loan taken for one project and not completing any of them ending with a huge loss. Changing contractors is another very difficult issue. Especially, under Islamic finance because the financing contract is done directly made with the builders*

#### Housing Forecasts, equilibrium and Housing finance options to be taken to encourage growth of end user financing market

It is expected that social housing demands will increase in the near future as the medium and high level housing is too expensive for the general public. The current trend is that established companies and organizations buy the high and medium level houses in order to lease out for their own employees and other parties.

Officials from concerned authorities forecast that if 15,000 flats were built in the Greater Male' Region, the demand for housing within this region will be catered for, to a great extent. In addition to this, it was highlighted that currently there are two major categories; social housing (targeting low income) and high/medium housing (targeting the more affluent). There is a need to include an additional category to cater for specific sectors like housing targeted for nurses, teachers, the civil servants,

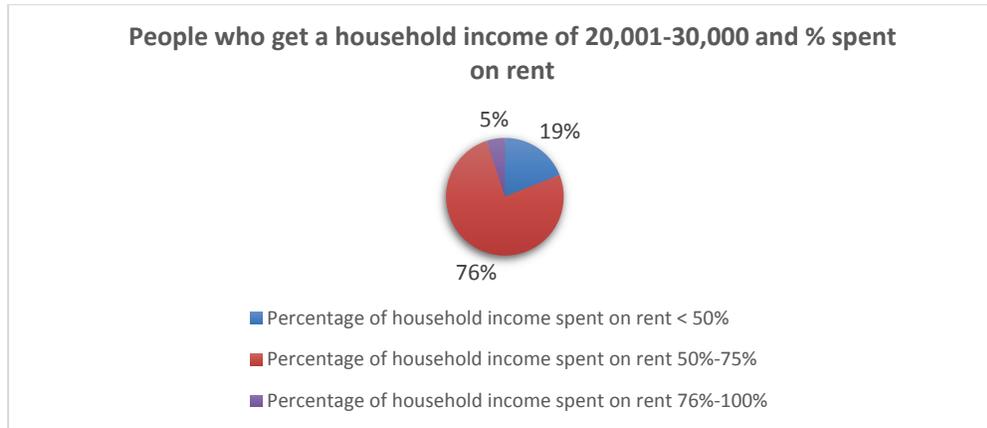
the uniform bodies like police and MNDF (i.e. sector based housing). This category of people can afford better quality housing than social housing.

According to housing finance experts the prices are high in housing because the demand is higher than the supply. This is because the government budget cannot cater for this so a way of financing housing needs is in dire need. When housing is dependent on loans and contracts, the cost for providing housing for the public increases. The public will have to spend more.

*We have many schemes under many contractors. If all the contractors are able to deliver by their due date, which is 2018, there will be a huge reduction in prices. But, I don't think it will be delivered as according to the schedule. The houses that started for a million now is worth 3 million, but the same population is there as customers and people with low salary cannot buy. When the concerned parties asked to put the prices down, the developers put more add-ons and still ask for premium prices. The prices will not go down if all the contractors deliver it at different times. But, if all the units come at the same time, prices will go down. Actually, buying and selling is not there in Maldives. Very rarely we will see a land or a flat on sale. Mostly, it's some selected scheme. They do not market well. For example, even a small family will want a three-bedroom apartment because they don't have any guarantee that they would get a second one. But we believe that a small family should be allowed to own a small one room apartment. Later they should be able to sell that and own a bigger apartment as their family grows. That concept is not there in the market. That way they can afford and save and for bigger apartment with other amenities like pools. Not at the start.*

Figure 52 shows the percentage of household income spent on rent within the group who gets a household income between MVR 20,000 to 30,000 (the most common household income). The chart shows that 19% of the participants spend less than 50%, 76% of the people spend 50-75% of the household income and 5% of the people spend 76%-100% of the household income. This is a concern since the government has planned previously that the rent should not be more than 25% of the household income. In developed countries like USA, the percentage of income spent on the rent is 30% which is actually an increase in the percentage brought about in 1981, during the Reagan administration, under budget constraints (Kaufman, A 2016). In developing countries like India, experts state that Ideally, people should not be paying more than 30% of their salary towards rent and utilities (such as maintenance/water/electricity expenses). However, in urban centres such as Mumbai, people spend 40% to 50% of the household income on accommodation (Sethi A, 2017) which is lower than the percentage people living in greater Male' spend. As discussed before the equilibrium rent price for a one bedroom apartment is MVR<10,000-15,000, two-bedroom apartment is between MVR 15,000-20,000 and three bedrooms' apartment is from 15,000 to 30,000 which are very high. In addition, the total number of people living in one bedroom apartments range from 1-8 (average 4), two bedroom apartments range from 1 to 18 (average 4) and 3 bedroom apartments ranges from 1 to 30 (average 3) which shows the poor conditions some people live in. Hence, the affordable rent price for people who get a household income between MVR 20,000-30,000 should be between MVR 6,000 to 10,000 (calculated using 30% of the household income).

Figure 52: Percentage of household income spent on rent



### Conclusions and Recommendations

The study focusing on the greater Male' region employed a mixed method research approach to study the housing conditions, to understand the trends and to determine housing market equilibrium. The quantitative phase of the study conducted using a questionnaire revealed interesting conditions and trends. Some of the key findings include the public dissatisfaction with the current living conditions in the greater Male' area, the difficulties authorities face in supplying for the housing demands, and the issues with current housing schemes. The interviews conducted during the second phase of the study with the government officials and those in the construction business are aware of the public concerns expressed through the questionnaire and authorities are exploring ways to alleviate the housing conditions to better cater to the needs of the public.

The following section presents the recommendations on how to better address the housing needs in the greater Male' region.

- One of the main findings of this study is the huge demand for housing due to the limited supply. Thus, housing supply should be increased through developer financed projects, public private partnership models as well as through government projects to cater for all income groups of the society.

- Affordability is another major issue in the housing sector according to this study. Therefore, there is a dire need to continue social housing schemes targeted to these groups. Government can facilitate funding for such projects through donor agencies or through soft loan schemes.
- Increase social housing by private sector. Private housing projects can be formulated in a way that a certain percentage of the housing has to be allocated for social housing at costs affordable to these groups.
- Government should play a key role in formulating and introduction of affordable mortgage schemes so that the needs of the disadvantage groups are met.
- Introduce housing improvement schemes for households that require repair of the dwellings to improve their housing conditions.
- Introduce housing finance safety nets with the support of annual budgetary allocations or other financing for the disadvantage groups that cannot meet the income criteria to qualify for social housing.
- Strengthen and regulate the means testing mechanism for allocating social housing to ensure that social housing is allocated to the targeted groups.
- The regulatory body has to play a regulatory role instead of getting involved in development. Getting involved in both development and policy might result in conflict of interest and negligence in regulating the sector.
- Create housing finance safety nets with the support of annual budgetary allocations. The safety nets can be used for creating guarantee facilities for housing loans for those who cannot afford the equity percentage required.

- The equilibrium market price for one bedroom apartment is <10,000-15000, two bedrooms apartments ranges from <15,000-20,000 and three bedrooms apartments ranges from 15,000-30,000. However, the conditions in which people live in these places are not desirable. Analysis also show that among the participants who gets a household income between MVR 20,000 to 30,000, 19% of the participants spend less than 50% of the household income, 76% of the people spend 50-75% of the household income and 5% of the people spend 76%-100% of the household income on rent in Maldives whereas in most countries only up to 30% of the income is spent on the rent. Hence prices need to be brought down according to different segmentations and according to income.
- Strengthen the legal framework to enable the formation of building societies so that the living conditions of the tenants in flats/ condominiums can be improved with shared responsibility.
- Development projects of individual sectors should align with a national development plan so that funding available for development projects can be managed better, more effectively and efficiently.

#### **Areas for further research**

- Assessment of the legal framework in Maldives to make recommendations for;
  - Protecting house buyers and tenants
- Need to identify the reasons why the families who received social housing do not live in social housing.

- Further research is required to see whether the goals of the projects by the government have been achieved and loopholes and drawbacks of these projects have to be identified for future projects.
- The study showed that migration is indicated as an important factor in the housing market. There is a need for the government to have an integrated, holistic and comprehensive developmental plan. Manifestos and development plans should align.
- In relation to the rapid development of the infrastructure, especially in Male', a further study on affordability and management of utilities as well as services is needed.

#### Limitation

- The data is self- reported hence may be subjected to bias.
- The true/ realistic housing demand and forecast cannot be found out as the study sample has to be restricted to greater Male' only. The study showed that to get a realistic housing demand, samples from the whole Maldives is required. Hence, further studies at a larger scale (country-wide) will be needed to explore this aspect.

## Reference list

1. Housing Development Corporation. (2017). Retrieved 7<sup>th</sup> July 2017 from <https://hdc.com.mv/hulhumale/>
2. Human Rights Commission of the Maldives. (2008). *Rapid Assessment of the Housing Situation in the Maldives*. Maldives.
3. Housing Development Finance Corporation. (2017). *Company Overview*. Retrieved 15<sup>th</sup> June 2017 from <http://www.hdfc.com.mv/hdfc/index.php/company/about-company>.
4. Kaufman A (2016). *There's No Golden Rule For How Much You Should Spend On Rent*. Retrived 1st August 2017 from [http://www.huffingtonpost.com/entry/rent-income-golden-rule\\_us\\_5706d315e4b0a506064eb434](http://www.huffingtonpost.com/entry/rent-income-golden-rule_us_5706d315e4b0a506064eb434)
5. Ministry of Housing and Urban Development. (2008). *Maldives National Housing Policy*. Maldives.
6. Ministry of Housing and Urban Development. (2012). *Yearly Report 2012*. Maldives.
7. Ministry of Planning and National Development. (2007). *Seventh National Development Plan 2006-2010*. Maldives.
8. National Bureau of Statistics, Ministry of Finance and Treasury. (2015). *Maldives Population and Housing Census 2014: Statistical Release: I Population & Households*. Maldives.
9. National Bureau of Statistics, Ministry of Finance and Treasury. (2015). *Maldives Population and Housing Census 2014: Statistical Release: VI Housing & Household Characteristics*. Maldives.
10. National Bureau of Statistics, Ministry of Finance and Treasury. (2015). *Statistical Pocketbook of Maldives*. Maldives
11. Pan Real Estate. (2017). *Pan Real Estate*. Retrieved 15<sup>th</sup> June 2017 from <http://premv.com/buy>
12. Sethi, A (2017). *How much of your salary should be spent on rent*. Retrieved 1<sup>st</sup> August 2017 from <https://housing.com/news/much-salary-spend-rent/>.
13. United Nations. (2008). *Universal Declaration of Human Rights*. Italy: United Nations Publications.