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**A STUDY ON THE SOCIO-ECONOMIC SITUATION OF
HOUSEHOLDS IN YUZANA LOW COST HOUSING,
DAGON MYOTHIT (SEIKKAN)**

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ABSTRACT

Low Cost Housing plays an important role in response to housing needs of low income households. The objective of the study is to identify the socio-economic situation of households who live in Yuzana low cost housing, Dagon Myothit (Seikkan) Township. The questionnaire survey is conducted to the households by means of random sampling in August, 2019. The survey data are analyzed by means of descriptive method. It is found that the main businesses of households are mostly related to private businesses. Yuzana Low Cost Housing becomes a convenient place for doing small businesses and it is one important place for retired persons who want to live peacefully. Using the bus system is convenient because the public transport (YBS System) is accessible for the whole day and bus-stops are situated near low cost housing compound. In order to develop the housing areas, the hospitals and the clinics are required for people. It is also found that the hospitals are not currently built in the compound of Yuzana Low Cost Housing. It would be better if the government could provide the public hospitals in the compound of low cost housing with low income group.

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LIST OF ABBREVIATIONS

CBD	Central Business District
CHIDB	Construction, Housing and Infrastructure Development Bank
CSHA	Commonwealth State Housing Agreement
DHSHD	Department of Human Settlement and Housing Development
DOP	Department of Population
DUHD	Department of Urban and Housing Development
MOC	Ministry of Construction
NHB	National Housing Board
PPP	Private Public Partnership
R.F	Revolving Fund
SEZ	Special Economic Zone
SPDC	State Peace and Development Council
TVET	Technical and Vocational Education and Training
UNFPA	United Nations Fund for Population Activities
YCDC	Yangon City Development Committee
YBS	Yangon Bus Service

CHAPTER I

INTRODUCTION

1.1 Rationale of the Study

In the historical times, urbanization and the growth of cities have occurred independently. Until the start of the modern period, most nations experienced modest urban growth because the increasing population caused their cities to expand steadily but few went through any significant urbanization. During the modern industrial period, the main development has been the appearance of rapid and large scale urbanization. A city is a geographic form, an economic organization, an institutional process. It has a distinct physical changes form over time. The physical form is based on social exchanges and it is predicted on specific networks.

Housing is generally the most important asset for every family and low-income housing solutions are deemed decisive in reducing poverty and vulnerability of the poor. Housing problems are the most visible indicators of poverty. According to the historical evidence, housing problem can never be absolutely solved but can only be eased. Globally, both developed and developing countries have been trying to be better in social housing provision. However, high poverty level and population growth are the major challenges for the government in developing countries.

Myanmar has been facing the same problems; the government has set an urgent action to provide the housing for citizens, especially in its most rapidly growing city of Yangon. The government has been planning to construct the “one million housing project” since 2011, which is expected to be accomplished by 2030 according to the Department of Urban and Housing Development. However, this target was not met for the first five-year fiscal plan. It is a question among the citizens whether the government will accomplish such a project in time (UN Habitat, 2011). In Yangon, more than a quarter of Yangon’s 7 million inhabitants do not possess their own homes.

Myanmar public housing provision was established in 1951 and totally 101,136 housing units have been provided in 2018 according to the Department of Urban and Housing Development. It has been 67 years that rental, low-cost, middle-cost and high-cost housings have been provided to citizens across the country, especially in Yangon. The largest economic city center of Myanmar, it is composed of 33 townships and a population of about 8 million in 2017 according to the Department of Population. Because of increasing urban population, housing shortage is inevitably encountered. In order to solve this problem, Myanmar government has announced “million homes plan” to fulfil the housing need for the citizens. The government housing department, Department of Urban and Housing Development (DUHD) has planned to provide 20 percent of total targeted housing units and 80 percent of housing units have been provided by the government and private sectors.

The population of Myanmar is increasing with growing urban population, from 35.3 million in 1983 to 51.48 million in 2014, nearly doubling over the period of 30 years (DOP, 2017). In urban areas, population has increased naturally due to migration from local and foreign countries. As a result, urban population growth has dramatically increased, necessitating an urgent need for housing provisions to accommodate the demand. According to 2014 census, the number of housing in Myanmar increased from 6.5 million in 1983 to 10.88 million in 2014. Based on an estimate number of homeless people, those living in other collective quarters, and the number of low-income people with deficient living conditions, a core housing need of 3.8 million units was estimated for the country. It is expected to reach 15.68 million housing units for 70.56 million people in 2040. Therefore, 4.8 million of additional housing units will be needed if it is assumed to be 4.5 people per housing units.

Improvements in Myanmar’s economic conditions will depend on new public investment in residential developments, energy and utilities, according to Timetric, with low cost housing projects expected to drive growth over the medium term. The government has been active in pursuing low cost housing projects in recent years; most of them are located in Yangon. Mahabandoola project, for instance, will provide an estimated 1200 new units to residents.

Meanwhile, the Department of Urban and Housing Development announced in September 2016 that more than 2000 low-cost apartments in Yangon would be available under a hire-purchase system. This enables low-income, first-time buyers to

purchase the MMK10m (\$8120) units on an eight year instalment plan, using accounts opened at the Construction and Housing Development Bank. That same month, the department said it had already handed the units, located in Hlaing Tharyar and Dagon Myothit.

Over the last three years, the Ministry of Construction has worked with the private sectors to develop low cost housing options such as the Shwe Lin Pan project at Hlaing Tharyar Township and Yuzanna project at Dagon Seikkan Township. It has also built low cost homes in Thanlyin Township and Mingalardon Township. Some of these units have been already completed and being sold for under K10 million each. Housing units worth around K10 million each are being developed in Yangon's outskirt townships of Hlaing Tharyar, Dagon Myothit and Shwepyithar for people who cannot afford homes according to YCDC.

The housing department provided 1,168 housing units in East Dagon Myothit Township, 2,976 housing units in South Dagon Myothit Township, 1,909 housing units in Dagon Seikkan Township and 1,200 housing units in Shwepyithar Township in 2015. The total number of low cost housing units in Yangon Region increased nearly 10,000 housing units in 2015 according to the YCDC.

Generally, houses supplied by the private sector have been sufficient for the high income group. However, houses supplied for the low income and middle income groups including people with special needs, senior citizens, single mothers and squatters are still insufficient. Hence, the government needs to continuously concentrate on the need to provide adequate and quality housing which is affordable for sales or rent especially for the targeted groups. Thus, this paper attempts to study the socio-economic situation of households in Yuzana Low Cost Housing, Dagon Myothit (Seikkan).

1.2 Objective of the Study

The main objective of the study is to identify the socio-economic situation of households who live in the Yuzana Low Cost Housing.

1.3 Methods of Study

This study is mainly based on a descriptive method by using primary data and some secondary data are also used. The major sources of some secondary data are

collected from DUHD, YCDC and other relevant institutions, published references and internet websites. To evaluate the socio-economic situation of households in Yuzana Low Cost Housing, data were collected by using structured questionnaire under simple random sampling method used in this study.

1.4 Scope and Limitation of the Study

This thesis is focused on the socio-economic situation of households at Yuzana Low Cost Housing in Dagon Myothit (Seikkan) Township. The survey is conducted with questionnaire for 150 households from Yuzana Low Cost Housing that were selected by random sampling method with face-to-face interview. The survey period is from July to August 2019.

1.5 Organization of the Study

This thesis consists of five chapters. The first chapter includes the rationale of the study, objectives of the study, method of study, scope and limitation of the study and organization of the study. The second chapter includes the literature review. The third chapter is the overview of housing situations of Yangon City. The fourth chapter presents survey analysis. The last chapter presents the conclusion in which findings and suggestions are presented.

CHAPTER II

LITERATURE REVIEW

2.1 Urbanization and Economic Development

Urbanization and development are identical concepts in that high levels of urbanization lead to higher levels of development. The structural changes in the economy that accompany the urbanization process and the demand and sustainability of the highest possible levels of services and equipment through higher levels of income contribute to make urban areas having better living standards (Spence et al., 2009). In addition, the experiences of many developing countries suggest that urbanization posed many social and economic problems forcing governments to devote considerable resources to addressing these problems. Therefore, although urbanization and development are intimately related, there is no direct relationship between two. (Narayan, 2014)

All human development and economic development indicators tend to be higher in urban than in rural areas. Past decades have witnessed an increasing rural to urban migration. Cities and towns have achieved better economic, political, and social mileages compared to the rural areas. Accordingly, urbanization is very common in developing and developed worlds as more and more people have the tendency of moving closer to towns and cities to acquire privileged social and economic services as well as benefits (Rinkesh, 2019). These include social and economic advantages such as better education, health care, sanitation, housing, and transportation (Brueckner, 1990). Moreover, urban areas also provide jobs, business opportunities, inputs and services to rural communities. Urban areas (towns and cities) exist because of the economic and social advantages of closeness and drive rural development by stimulating agricultural productivity and rural incomes which in turn generate demand and labor for more goods and services. (Spence et al., 2009)

Urbanization and economic development are intimately related and the concentration of resources such as labor and capital in cities is a part of this process. To the extent that movements of these factors represent a rational response to market

signals about scarcity, there is no reason for concern about the size of any city or the size distribution of cities in general. To the extent that external effects, such as pollution and congestion, are unpriced in cities, conurbations will be too large but not by much. Public concerns about pricing congested roadways and about water supplies and public health investments to decrease the chances of epidemic are well placed. (Marianne et al, 2000)

2.2 Definition of Low Cost Housing

Low cost housing refers to housing units that are affordable by that section of society whose income is below the median household income. Though different countries have different policies for low cost housing but it is largely the same. Low cost housing should address the housing needs of the lower or middle income households. Low cost housing becomes a key issue especially in developing nations where a majority of the population is not able to buy houses at the market price. Indeed, one definition of low cost housing is that it is housing which would not put the buyer into mortgage stress (Select Committee, 2008). Gabriel *et al.* (2006) introduces the concept of ‘home ownership affordability’ to differentiate the concerns of owner-occupiers from other groups.

The idea of low cost housing recognizes the needs of households whose incomes are not sufficient to allow them to access appropriate housing in the market without assistance (Milligan *et al.*, 2004). Thus, the term low cost housing describes housing that assists lower income households in obtaining and paying for appropriate housing without experiencing undue financial hardship (Milligan *et al.*, 2004). A range of publicly or privately initiated forms of housing may meet this specification (Milligan *et al.*, 2004).

The definitions of low cost housing usually focus on the relationship between housing expenditure and household income, typically to establish a standard in respect of which the amount of income spent on housing is deemed unaffordable. Evidence still suggests that the groups most affected by the increase in housing costs are low income households in the private rental market and moderate-income owner purchasers (Gabriel *et al.*, 2005).

Different countries have different low cost housing policies in making financing more accessible, providing mechanisms such as interest rate subsidies and favourable terms on par with infrastructure financing. Today, many governments

around the world realized it and have been planning to take more actions on it. In Canada and United States, local governments seem firmly committed to increasing the availability of low cost housing through a variety of innovative subsidy programs. In China, low cost housing involves the national construction program and organized by the real estate department of province government to provide a suitable housing environment for the low-income families (Jingchun, 2011). As a result, it becomes the increased responsibility of the government to provide the rising demand for low cost housing.

2.3 The Role of Government in Housing Development

Housing problems and issues in the urban areas begin from the process of urbanization and industrialization which bring in many immigrants from rural areas. Most of immigrants come from the lower and medium income groups. Although it creates high demand for housing, they cannot afford to pay rental or purchase houses at higher prices. Thus, it created socio-economic problems, especially in urban areas. To solve these problems, the government intervention is needed. Government intervention can be in the form of introducing various housing policies and regulations.

Recent housing policy experience in developed countries indicates that demand- side, income-related housing subsidy programs are generally more effective in getting decent and low cost housing to the needy than public housing and other supply-side programs (Olsen, 2003). Unfortunately, in most developing countries, household income cannot be measured at all accurately, which effectively prohibits broad-based, income-related demand-side housing programs, such as housing subsidies and housing vouchers, being employed. This consideration suggests that supply-side programs might be relatively more effective in developing countries than in developed countries.

The principal role of government with respect to housing should be to enable housing markets to work. Much of housing policy in developed countries is redistributive having the ideal of providing “decent and low cost” housing for all. Households know best how to spend their incomes and tend to favor income redistribution (which Tobin (1970) referred to as general egalitarianism) over redistribution in kind (specific egalitarianism). All households enjoy at least basic levels of “merit goods” – decent

housing, adequate nutrition, clothing, sanitation, health services, a safe and healthy environment, and affordable access to basic education. (Arnott, 2008)

In developing countries, the primary role of the central government in the housing sector should be to act as a facilitator, both enabling housing markets to work and taking a leadership role with respect to policy. By helping low-income households to find suitable housing, it must avoid costly, broad-based housing programs and, instead, must help local governments and community organizations to provide housing assistance to the neediest households. (Arnott, 2008)

Since the late 1970s, federal and state governments in Australia have been less engaged with providing housing for people encountering housing difficulties (Wilkinson, 2005). This is demonstrated by a substantial shift in government support away from the supply of low cost housing under the Commonwealth State Housing Agreement (CSHA), towards the demand side rent assistance programs. Rather than providing homes, governments have turned to providing small amounts of rent assistance as a means of alleviating the accommodation difficulties of those on low incomes (Wilkinson, 2005).

Like most countries, Malaysian Government imposes quota on ownership and house category to socially plan a balanced multi-ethnic community. The beginning of direct intervention by the government started as early as 1952 during the British colonial period whereby a Housing Trust was established to carry out the construction of low cost housing in the country (Ahmad, 1997). Since Malaysia gained independence in 1957, the Government has assumed a leading role through Public Low Cost Housing Program. Private developers are mainly involved in the provision of the medium and high cost housing. It was only until the early 1980s that the Government sought direct private participation through the involvement of private developers to build low cost housing. The role of private developers in low cost housing development was meant as total target units to be built by the private sector.

Until 1977, housing demand is higher than supply due to the high urbanization rate. The progress has been gradual and impressive. Constraints and weakness have hindered the achievement of housing targets, especially that of low cost housing. The Government takes a bold approach on intervening in the housing sector, especially in low cost housing (Hoang, 2007). The government intervention in housing market by urging the private sector to take the leading role in the provision of low cost houses and deregulation of approval of large massive housing projects in the 1990s have

brought about several issues and problems related to the mismatch of housing demand and supply, housing delivery and built environment. In order to correct the mismatch of housing supply and demand, government intervention in the housing market by encouraging private sector to provide low cost houses in the urban areas. (Hoang, 2007)

2.4 Impacts of Housing Development on Families and Communities

The biggest dream of every family is to have a home of their own. The housing development is essential need for every country. Housing development is always linked to urban development. Due to urbanization, more and more people moved to city and as consequence city turned to be crowded (Byrne et al, 2007). Most immigrants cannot afford to pay rent or a higher price for housing and create squatters in urban areas. Thus, low-cost housing for low-income families is an important sector for all countries. In developing country, they must provide better housing and related community services, especially for low to middle income groups in urban and rural areas.

Across Asia, households are forced to live in inadequate housing, mainly in slums and informal settlements because there is not a sufficient supply of better quality housing at a cost they can afford. In fact, all too often, poor households spend an excessive part of their income on housing. As a result, many have to reduce spending on other basic needs, such as food, education and health, to meet housing needs. (UN-Habitat, 2011)

The role of housing policy experiences significant changes in order to stimulate economic growth and redevelop under-performing areas. The informal sector of developing countries is more superior compared with that of developed countries. For this reason, government policies concerning the housing policies and housing supply are weakening in the developing countries (UN-Habitat, 2003). The pressures of housing deficiencies represent the future success of the country's economy. In fact, the role of housing policy in boosting growth and regeneration should be better aligned.

The large size of the informal sector relative to the economy in developing countries, as well as the high proportion of housing that is informal substantially alter the housing policy design problem so that policies that have succeeded in developed countries may not work well in developing countries (Arnott, 2008). In developing

countries, the bulk of the poor work in the informal sector. Informal employment is one aspect of the informal economy. Informal housing is another. Angel (2000) defines that unauthorized housing to be housing that is not in compliance with current regulations concerning land ownership, land use and zoning or building construction and squatter housing to be housing that is currently occupying land illegally.

Since the bulk of the poor in developing countries work in the informal sector, government cannot accurately measure their incomes. This severely compromises the effectiveness of broad income-related transfer programs and more generally limits the scope for redistribution (Arnott, 2008). At least in low-income countries, most households, and probably therefore the bulk of the most needy households, live in unauthorized housing. Since governments are reluctant to subsidize unauthorized housing, their housing programs, with the exception of public housing, are biased towards authorized housing and therefore against the neediest households (Angel, 2000).

Both firms and individuals decide whether to participate in the informal or the formal economy on the basis of perceived self-interest. All else equal, the government would like to increase the proportions of the economy and of the housing market that are formal, and recognizes that this can be achieved by making formal participation more attractive or informal participation less. This may involve some sacrifice of short-run efficiency. (Spence *et al.*, 2009)

Moreover, the impacts of housing on families and communities are positive from seeing lives and communities changed and a large and growing study on housing security. According to the U.S. Department of Housing and Urban Development, the majority of the nation's cost-burdened households are low-income, making them vulnerable to a wide variety of negative impacts caused by housing insecurity. Families that received housing vouchers were 74 percent less likely to stay in a shelter or on the street than families without a housing subsidy. Over the past two decades, homeless families who are discharged from shelters to subsidized housing are more stable, live in higher quality and safer environments and are less likely to return to shelter than families without a housing subsidy. Nearly 19 million U.S. households pay over half their income on housing, and hundreds of thousands more have no home at all. Access to decent, low cost housing would provide critical stability for these families, and lower the risk that vulnerable families become homeless. (Enterprise Community Partner, 2014)

High housing costs leave low-income families with little leftover for other important expenses, leading to difficult budget trade-offs. Low cost housing increases the amount that families can put toward other important household needs and savings for the future. Researchers have found that when families do not have enough income left over to cover the rest of their household budget, children experience poorer health outcomes, lower levels of engagement in school, and emotional and mental health problems. Families are also less likely to be able to afford the food they need for a healthy, active life.

Housing instability can seriously threaten children's performance and success in school, and contribute to long-lasting achievement gaps. Quality low cost housing helps create a stable environment for children, contributing to improved educational outcomes. Housing instability and homelessness have serious negative impacts on child and adult health. Low cost housing can improve health by providing stability, freeing up resources for food and health care and increasing access to services in quality neighborhoods. Green improvements to low cost housing can improve the health outcomes of low-income families – particularly children at risk for asthma (Enterprise Community Partner, 2014). This, in turn, can contribute to better school performance by reducing asthma symptoms and missed school days.

Energy efficient improvements reduce the long-term operating costs of subsidized multifamily buildings. This helps to stabilize the portfolios of low cost housing providers, preserve the low cost rental housing stock and protect tenants from instability. The proportion of household budget that goes towards paying for housing and transportation has risen dramatically over the last decade, leaving families with less money for other necessities. In addition, most cities lack well-planned transit access for low-income communities. Low cost housing located near public mass transit can help low-income residents save money, access better jobs, improve health and reach critical community services.

From the point of view of neighborhood quality, low cost housing contributes to significant economic impacts, including increases in local purchasing power, job creation and new tax revenues. Low cost housing has been shown to have a neutral or positive effect on surrounding property values. The number of homeless and unstably housed seniors is projected to grow, creating serious health consequences as they often face declining incomes, increased medical costs and housing that may not be designed for their needs. Quality low cost housing may promote better mental and

physical health, improved quality of life and independence for low-income seniors. (Enterprise Community Partner, 2014).

2.5 Urbanization and Low Cost Housing Development

Urbanization comes from human activities that gather for the distribution of food, the living standard and the provision of infrastructure to create a better environment for human survival. In addition, the expansion of housing is the symbol of urban development because housing is the central need for the social and economic development of all (Yoshino et al, 2016). Urbanization and the pace of urbanization have increased considerably in recent decades. Cities are developing rapidly, in terms of population and size, exceeding the limits of municipal jurisdiction. More and more towns are now becoming cities.

According to the United Nations Fund for Population Activities (UNFPA) in 2008, more than half of the world's population lives in cities. Urbanization tends to be felt everywhere in the world, but is becoming dominant in Asia. In India, there are many metropolitan cities, as well as tier two cities that are growing very fast due to migration from surrounding areas. Urbanization has many effects on the structure of the city. The increase in the population must be adapted to the city. The problems of slums, unauthorized construction and fortuitous development of marginal areas are therefore observed in most Indian cities. (Yoshino et al, 2016)

The main reason for urbanization is migration. In this process, the number of urban dwellers increases relative to the number of rural dwellers. The natural increase in urbanization can occur if the natural growth of the urban population is greater than in rural areas. This scenario, however, rarely occurs. A country is considered to be urbanizing when more than 50% of its population lives in urban areas. (Marianne et al, 2000) People in rural areas migrate to cities in search of jobs, opportunities, better facilities and equipment, and so on. This migration can be of two types. Firstly, immigration is called an urban attraction. This migration is due to the availability of employment in a city. Secondly, emigration is also called rural push, because of the lack of resources and opportunities in rural areas that drive people to migrate from rural areas to urban areas. Industrialization is a process moving from the agricultural economics to modernized economics. In the industrial revolution period, more people have been attracted to move from rural to urban areas in order to give people the chance to work in modern sectors. (Rinkesh, 2019)

Commerce and trade play a major role in urbanization. The distribution of goods and services and commercial transactions has developed the growth of towns and cities. The towns and cities offer better commercial opportunities and returns compared to the rural areas. Because of the numerous social benefits and services which are unavailable in the rural areas, more and more people are urged to migrate into cities and towns (Rinkesh, 2019). Examples include better educational facilities, better living standards, and better sanitation and housing, better health care, better recreation facilities, and better social life in general.

In cities and towns, there are abundant job opportunities to attract people from the rural areas in all developmental sectors such as public health, education, transport, sports and recreation, industries, and business enterprises. Moreover, services and industries create and increase higher value-added jobs, and this leads to more employment opportunities. Modernization makes people's life more comfortable such as highly sophisticated communication, infrastructure, medical facilities, dressing code, enlightenment, liberalization, and other social facilities availability (Rinkesh, 2019). In urban areas, people also embrace changes in the modes of living namely residential habits, attitudes, dressing, food, and beliefs. As a result, people migrate to cities and the cities develop by growing the number of people day after day.

To sum up, when the rural areas gradually transform to urbanism, the housing development will be needed together with better infrastructure, better education institutions, better health facilities, better transportation networks, establishment of banking institutions, and better governance. (Rinkesh, 2019)

2.6 Reviews on Previous Studies

Htay Htay Aye (1997) studied on An Analysis on The Housing Development of New Expansion Cities in Yangon. This study is based on the primary data obtained from Ward No.18 and Ward No.19, Dagon Myothit (South) and Kyuntaw (Middle) Ward, Sanchaung Township and the secondary data. This thesis intends to know the perception on the households' difficulties and advantages in South Dagon Myothit. The result showed that the government should provide not only the squatter resettlement but also urban basic infrastructure needs in solving the housing problem.

Sai Thet Naing Moe (2012) studied on A Study on Urbanization and The Role of Public Sector in Housing Development of Yangon City. This study is mainly based

on the secondary data collected from the DHSHD, Department of Immigration and Yangon City Development Committee. The result showed that the trend of urbanization of Yangon and public sector involvement in housing sector which is an important role because Yangon population has been rapidly increasing after 1980s. It also focuses on the threats and opportunities of urbanization of Yangon City from the periods 2000 to 2011.

Myint Swe (2015) studied on A Study on Affordable Housing Development in Yangon City. This study is based on the secondary data collected from the DHSHD and Yangon City Development Committee. This thesis intends to analyze the affordable housing development accessible to low and middle income households undertaken by DHSHD. In order to achieve this objective, he analyzed the current housing provision in Yangon City, the housing development process, housing policy and program, housing finance system and restructuring housing sector during 1989-2013.

Than Aung (2010) studied on Housing Development in East Yangon District. This study of the process of housing development is based mainly on primary data and secondary data assists to illustrate the general pattern of housing development. This thesis intends to identify all influential variables such as location, land values, population density and infrastructures affecting to housing development of East Yangon District. It also focus on the controlling factor such as policy, physical condition, social aspects, land use for public and government department and private sector. To present the housing situation in East Yangon District, single house and apartment flats development implemented by the public and private sector is studied and analyzed for the period 2000-2009.

Win Yu New (2006) studied on the Management of Housing Development Projects in Yangon City. This study is based on the available secondary data from public sector housing providers namely, DHSHD and YCDC. This thesis aims at identification of an appropriate and effective management system development for implementation of housing development projects in Yangon. In order to achieve this aim, the management system currently applied in implementation of housing projects of Yangon City from 1989 to 2004 and its gaps and short comings. This study specifically emphasize on slum and squatter upgrading (hut to apartment) and urban redevelopment projects. It pointed out that the envisaged future plan of the city should

be considered carefully with emphasis on the real development priorities and goals of city.

Khin Soe Soe Moe (2014) studied that labour migration and its socio-economic impacts on their respective families in Rakhine State. This study is original empirical work to insight discussion on labour migration of rural poor and remittance pattern of households, any positive or negative effect on families left behind; the study is focused on situation of rural poor and relationship of poverty and illegal migration but also migration effect on families left behind economically and socially. This study attempted to examine driving forces of labour migration from rural poor and its impact on socio-economics of the poor community.

Moe Thae Phyu (2015) studied that socio-economic condition of migrants in Hlaingthayar Township. Hlaingthayar Industrial Zone is the most developed and largest zone in Yangon Division. Hlaingthayar Township was interested for this study because long historical challenges at population registration system in Myanmar and the increasing number of migrants has become substantial from different places of the country to Hlaingthayar Township in Yangon Region. This study attempted to analyze the causes and effects of migration in the study area and its impacts on the socio-economic conditions of migrants after reaching to Hlaingthayar Township, Yangon Region.

CHAPTER III

HOUSING SITUATION OF YANGON CITY

3.1 Housing Policy in Myanmar

In Myanmar, the 2008 Constitution was promulgated, guaranteeing basic rights to all citizens including the right to own and use lawfully acquired properties, the right to pursue trade of own choice, protection of the privacy and security of home and prohibition of forced labor. The country aims to achieve development goal focusing on all three key aspects of sustainable development that is economic, social and environment.

The Government has taken a renewed focus on urban development and housing issues and developed a wide-ranging and action-oriented plan for its future. The new approach integrates

- Provision of housing for low income groups as part of the one million houses program by 2030.
- Poverty reduction in rural and urban areas.
- Empowerment of local government and decentralization.
- Urban rural linkages and connectivity.
- Rural road connections for growth of rural economy.

3.1.1 Formulation of National Housing Policy

DUHD study how the department can act as an enabler of privately constructed and developed housing. Housing development is closely linked with sectors such as land management, water and sanitation, roads, transportation and finance and industry. To help meet the housing needs, the DUHD has recently announced a one million house policy, aiming to meet the housing need generated in the coming years. (National Housing Policy White Paper, 2017)

3.1.2 Legal and Regulatory Framework Affecting on the Housing Sector

At the time of NHB period, there were two effective laws in housing sector. These two are the National Housing Rehabilitation and Town and Country Development Act (1951) and the Government Premises (Eviction) Act (1955). In recent years, two major legal initiatives affecting the housing sector are the Condominium Law and the National Housing Development Law.

The previous Union Parliament passed the Condominium Law in January 2016. The Condominium Law only addresses residential high-rise buildings with six floors or more. The land on which the building is erected must be registered under the category “collectively owned land or common land”. Plot size minimum is 20,000 sq-ft (0.5 acre or about 2000 sq-m). Collectively owned land is land that is owned by persons who have obtained an apartment ownership registration certificate from local authorities in charge. The condominium developer must be licensed and obtain a special building permit for the condominium from the Ministry of Construction. Up to 40 percent of all apartments within each building can be sold to foreign nationals.

In addition, the condominium law establishes a legal foundation for strata titles and for their official registration with specialized registrars for condominiums. The Condominium Law implies significant legal steps towards strengthening property rights in general. (National Habitat Report, 2016)

The draft of the National Housing Development Law has been discussed for a number of years now. Its focus is completely different from the Condominium Law, which provides a regulatory framework for market-based private sector activities. The National Housing Development Law predominantly provides framework rules for housing-related public sector bodies and their activities. It serves as a legal basis for setting up the National Level Housing Development Committee and outlines the committee’s tasks. (National Housing Policy White Paper, 2017)

The National Housing Development Law defines the primary set of duties assigned to Department of Urban and Housing Development. Those are

- Formulating housing development policies
- Planning and implementing housing development projects
- Providing technological assistance to implement housing projects nationwide
- Cooperating, coordinating and communicating with international organization in the area of housing development

- Conducting housing research and fostering technological development.

3.2 Facilities of Housing Provided by DUHD

3.2.1 Improvement of Housing Finance System

The financial sector in Myanmar was largely designed for a closed socialist style economy. The domestic landscape of banking is still dominated by four major state-owned banks. In addition, about twenty minor private banks and semi-government banks exist. At present, private banks provide loans of up to 70 percent of the total cost for some development projects. Construction, Housing and Infrastructure Development Bank (CHIDB) has been established and has come into operation since January 2014. CHIDB is a joint-venture between MOC/DUHD and private sector construction firms. CHIDB is a profit motive business and provides loans to individual customers at interest rates as currently set by the Central Bank of Myanmar. (National Housing Policy White Paper, 2017)

3.2.2 Housing Program of DUHD

DUHD has been pursuing a long-term program called the One Million Housing Units Plan, of which (20%) 200,000 dwelling units shall be provided through the delivery system of DUHD. The remaining 80 percent have to be provided by developers. The total plan period is divided into four five-year-plans. Quantitative target for the period 2011-2015 are 100,000 units and for the period 2016-2020, 180,000 units. 300,000 units shall be provided in 2021-2025 and 420,000 units in the last period from 2026-2030. On average over the entire plan period, aggregate annual output in Myanmar is expected to amount to 50,000 units. Annual output targets of DUHD's affordable housing program are 4,000 units in the first five year plan period and 8000 units in the second five-year plan period. (National Housing Policy White Paper, 2017)

At present, the funding for DUHD's housing program is mainly based on a Revolving Fund (R.F) which amounts to about 100 billion MMK (72 million USD). This fund was established in 2014. Revenue flows into this fund mostly come from sales of housing units. From this amount, 50 billion MMK (36 million USD) are used for low cost housing. A separate fund of about 10 billion MMK (72 million USD) from the national budget is used for housing-related infrastructure of low cost housing. In details, land costs are not included in the calculation of project cost of low

cost housing. Therefore, the land input is a government subsidy for low income people.

Table (3.1) Twenty Years Long Term Plan of DUHD (One Million Housing within Twenty Years)

Year Plan	Housing Units
The First Five Year Plan (2011-2015)	0.10 million
The Second Five Year Plan (2016-2020)	0.18 million
The Third Five Year Plan (2021-2025)	0.30 million
The Forth Five Year Plan (2026-2030)	0.42 million
Total 20 Years Plan	1.00 million units

Source: Department of Urban and Housing Development

3.2.3 Informal Settlements

The growth of illegal urban areas or unplanned development outside the formal land delivery systems is one of the biggest challenges for urban land management. The most common informal land supply system is the illegal subdivision of farmland and agricultural land in peri-urban areas to be used for housing. Under this practice, individual farmers who own a large area of land on the perimeter of urban areas subdivide the land and lease it to individual households. (National Housing Policy White Paper, 2017)

The characteristics of informal settlements are

- (1) **High settlement density** – dwelling units that are overcrowded and constructed without compliance with planning and building regulations.
- (2) **Low durability of houses** – dwelling units that are made of substandard construction materials such as bamboo poles, woods, thatches, corrugated iron sheets, and plastic sheets.
- (3) **Lack of a systematic road and drain network** – settlements that are typically characterized by dirt or unpaved roads, narrow foot bridges, constructed with substandard material and roads without drains in or around settlements.

- (4) **Lack of piped water supply and poor sanitation conditions.**
- (5) **Lack of solid waste management systems** – settlements that have no access to either municipal or community organized solid waste management services.
- (6) **High vulnerability to hazards** – settlements where homes are erected as bamboo poles and located at or near geographically hazardous locations such as lowlands, swamps, drainage lines, river banks, creeks, ponds that are highly susceptible to flooding and/or housing collapse.

Four out of six criteria had to be met for categorizing a settlement as informal.

Based on these criteria, informal settlements are noted as follow;

1. Roadside Settlements
2. Riverside Settlements
3. Peri-urban Land Settlements
4. Resettlement Area Subdivisions
5. Village Tract Subdivisions
6. Inner Urban Infill
7. Slum Settlements

According to the statistics of Yangon Regional Government, there are about 160,000 households (nearly 440,000 populations) of informal settlement in Yangon City area. Most of them are migrants from Ayeyarwaddy Delta Region.

3.2.4 Urban Basic Services and Infrastructure for Residential Area

Data from the census of 2014 indicates that in residential areas, the level of basic urban services needs to be improved and extended. Due to the absence of wastewater collection networks, households are used septic tanks, which frequently leak contaminated seepage in the ground water. However, from the same ground water, many households pumped their drinking water through tube wells. As a result of urbanization increases, population densities in townships and public health risks grow. (National Housing Policy White Paper, 2017)

3.3 Background History of Yangon City

Yangon has been in existence for a long time as a small town in comparison to places such as Dynasties of Hantharwaddy, Bago, Pyay or Thaton. Yangon Business City was established as Dagon and it was evidenced that Dagon became a small town

in Hantharwaddy era by some records of foreigners who arrived Dagon in 1583. In 1755, King Alaungpaya, the first monarch of Konbaung Dynasty and the third founder who reunited the whole Myanmar, conquered Dagon and renamed it Yangon literally means and as a good omen of his conquest over lower Myanmar. At that time, Yangon boundaries consisted of the Sule Pagoda in the north, the site of the present Theinbyu Street in the east, the Yangon River in the south and the site of the present 30th street in the west. Its total area was a mere 6 square furlongs with the population of 10,000. In 1756, with the destruction of Thanlyin across the river, Yangon became an important seaport.

In 1841, the city was virtually destroyed by fire; the rebuilt town again suffered extensive damage during the Second Anglo-Burmese War in 1852. The city design was drawn up by Dr. Willian Montgomerie, superintendent surgeon and improved and implemented by a Lieutenant A. Fraser of Bengal Engineer. The plan is known as Fraser Plan which composed the six townships of Botataung, Kyauktada, Lanmadaw, Latha, Pabedan and Seikkan. The area of the Yangon City at that time was about 10 sq. miles. Later, the system of issuing land lease was initiated in 1872 with the land management under the control of the Town Magistrate. In 1874, Yangon Municipal Committee was formed to retrieve land plots. As Myanmar totally fell to the British in 1885, Yangon has become the capital city and the model city in Southeast Asia, both in planning and building design.

Urban population as a whole and Yangon's population continued to grow even faster after Myanmar gained her independence in 1948. The total population of the city was around 400,000 in 1931 and it had grown up to over 720,000 in 1953. The total population of Yangon reached up to 1.2 million in 1962. Due to the tremendous demand in land, National Housing Board was set up to tackle land development in Yangon. Squatter clearance and resettlement programme was initiated in Tharkata, North and South Okkalapa in 1958. In 1962, the five suburb townships of Thingangyun, Kanbe, Insein, Kamaryut and Thamine were added in Yangon Municipal boundaries. The total area was 78 sq. miles. In 1965, Thuwunna Township was built for government employees and its area was 2.5 sq. miles. In 1968-1969, Myinthar Housing was built in the Southeastern part of Okkalapa with the areas of 0.2 sq. miles.

In 1970s, there were 42,204 slums and 54,916 squatters on the land of public and private in Yangon City. Since 1981, in order to possess the characteristics

befitting a commercial city and to enhance the appearance of the city, Yangon Municipal had arranged to move and settle the squatters. National Housing Board (NHB) planned residential areas which composed of 7,348 land plots for squatters, fire victims and government employees until 1986. The land plots were located in the western part of North Okkalapa, Mingaladon Pyinmapin, Mingaladon Padamyar Village, Thitseintkone, Insein Okpho (now Shwe Pyi Thar). Thus, Yangon City's area was expanded from 80.55 sq. miles in 1974 to 133.64 sq. miles in 1985.

Geographically, Yangon is located in the southern part of the country and is surrounded by Hlaing River in the West, Ngamoeyeik Creek in the East and Yangon River in the South. Because of the water constraints, the development and extension of Yangon City had always been towards the North. In the period of The State Peace and Development Council (SPDC) government in 1988, in order to get balance development, the Department of Human Settlement and Housing Development (DHSHD) extended Yangon City with the new townships outside the Yangon City area. During the early of 1990s, attention was focused on the Yangon squatter clearance and resettlement programme launched. Major land development schemes were implemented in four new suburban townships. Two new settlements, South and North Dagon, are located in the northeastern part of the Central Business District (CBD) and the other two, Shwe Pyi Thar and Hlaingtharya, are in the north and northwest respectively. At that time, the city area had reached up to 223.22 sq. miles. According to Yangon City Development Committee, in 2013, the city area became 794.43 sq. kilometers and the population 5.14 million. In 2019, Yangon City area is 10,277 sq. kilometers. It is expected to increase due to urbanization and employment opportunities in the city.

3.4 Demographic Condition of Yangon City

The biggest city of Yangon has 8.2 million of population more than Mandalay over 6.5 million and Naypyitaw 1.2 million in 2019. Among these cities, Yangon City is a growing urban center as it is one of the fastest growing metropolitan areas in Myanmar. Due to the urban opportunities and economic development, Yangon population increases by labor migration year after year. Yangon population is growing after 1948 as many people migrated from other states and regions since 1950.

In 1959, the government built three new satellite towns in North Okkalapa, South Okkalapa and Thakata as part of the slums clearance program. In 1989, the

government initiated large scale new township development to the west, east and north of Yangon by Dagon Myothit (North, South, East, Seikkan and Extension), Shwepyithar and Hlaingtharyar. The city built-up area increased from 132.44 sq. km in 1970 to 272.73 sq. km in 1990 and 432.84 sq. km in 2000. Yangon City had a total population of 2.02 million in 1973, nearly 2.5 million in 1983, 3.5 million in 2000 and 4.3 million at the end of 2010.

The Yangon City is divided into four districts and 33 townships. The four districts are the northern district, the eastern district, the southern district and the western district. In terms of urban development characteristics, these 33 townships may be classified as the inner city, outer city, old suburbs, new town and countryside. The inner city area is composed of Botathaung, Kyauktada, Lanmadaw, Latha, Pabedan, Pazundaung and Seikkan townships. The outer city area is Ahlone, Sanchaung, Kyeemyindine, Tamwe, Hlaing, Kamaryut, Bahan, Mingalartaungnyunt, Dagon and Yankin townships. South Okkalapa, North Okkalapa, Mayangone, Thingungyung, Thakata, Insein and Dawbon townships are included in old suburb area. Hlaingtharyar, Shwepyithar, Dagon (East), Dagon (South), Dagon (North), Dagon (Seikkan) and Dagon (Extension) townships are new town area. The countryside area is included Dala, Seikkyikhanaungto and Mingalardon townships.

The distribution of Yangon City population in townships is shown in table (3.2). In Yangon City, the populations increased from 5,259,029 in 2014 to 5,377,416 in 2015 and 5,498,534 populations in 2016 and 5,622,163 populations in 2017 and 5,748,083 populations in 2018. The population is largely concentrated in several townships such as Insein, Thingungyung, Thakata, North Okkalapa, South Okkalapa, Hlaing, Tamwe, Mayangone and Mingalardon. On the other hand, the townships located at the fringes towards northwest and eastern part of Yangon City such as Hlaingtharyar, Shwepyithar, Dagon (East), Dagon (North), Dagon (South), Dagon (Seikkan) and North Okkalapa had experienced rapid increase in population.

Table (3.2) Population Distribution by Townships of Yangon City, 2014-2018

No.	Townships	2014		2015		2016		2017		2018	
		Pop	%	Pop	%	Pop	%	Pop	%	Pop	%
1	Ahlonge	55,917	1.06	57,251	1.06	58,604	1.07	59,979	1.07	61,375	1.07
2	Bahan	97,402	1.85	99,740	1.85	102,110	1.86	104,515	1.86	106,950	1.86
3	Botathaung	41,333	0.79	42,314	0.79	43,312	0.79	44,331	0.79	45,362	0.79
4	Dagon	25,265	0.48	25,853	0.48	26,453	0.48	27,057	0.48	27,668	0.48
5	Dagon (East)	167,253	3.18	170,895	3.18	174,642	3.18	178,493	3.17	182,440	3.17
6	Dagon(North)	205,798	3.91	210,504	3.91	215,386	3.92	220,433	3.92	225,634	3.93
7	Dagon(Seikkan)	169,293	3.22	172,975	3.22	176,756	3.21	180,613	3.21	184,535	3.21
8	Dagon (South)	375,384	7.14	383,510	7.13	391,869	7.13	400,447	7.12	409,234	7.12
9	Dala	174,732	3.32	178,369	3.32	182,138	3.31	186,036	3.31	190,057	3.31
10	Dawbon	76,049	1.45	77,728	1.45	79,458	1.45	81,231	1.44	83,045	1.44
11	Hlaing	161,591	3.07	165,406	3.08	169,290	3.08	173,238	3.08	177,249	3.08
12	Hlaingtharyar	694,768	13.21	709,916	13.2	725,299	13.19	740,858	13.18	756,558	13.16
13	Insein	308,011	5.86	314,946	5.86	322,042	5.86	329,296	5.86	336,699	5.86
14	Kamaryut	85,174	1.62	87,243	1.62	89,320	1.62	91,403	1.63	93,488	1.63
15	Kyauktadah	30,097	0.57	30,847	0.57	31,604	0.57	32,383	0.58	33,166	0.58
16	Kyeemyindine	112,578	2.14	115,130	2.14	117,749	2.14	120,432	2.14	123,168	2.14
17	Lanmadaw	47,469	0.9	48,657	0.9	49,849	0.91	51,040	0.91	52,229	0.91
18	Latha	25,212	0.48	25,859	0.48	26,510	0.48	27,158	0.48	27,811	0.48

Table (3.2) Population Distribution by Townships of Yangon City, 2014-2018 (Continued)

No.	Townships	2014		2015		2016		2017		2018	
		Pop	%	Pop	%	Pop	%	Pop	%	Pop	%
19	Myangone	199,742	3.8	204,321	3.8	208,993	3.8	213,748	3.8	218,575	3.8
20	Mingalartaungnyunt	133,713	2.54	136,842	2.54	140,041	2.55	143,307	2.55	146,637	2.55
21	Mingalardon	334,671	6.36	342,011	6.36	349,521	6.36	357,191	6.35	365,000	6.35
22	North Okkalapa	336,214	6.39	343,737	6.39	351,449	6.39	359,327	6.39	367,370	6.39
23	Pabedan	33,606	0.64	34,403	0.64	35,221	0.64	36,055	0.64	36,903	0.64
24	Pazundaung	48,833	0.93	50,014	0.93	51,216	0.93	52,445	0.93	53,693	0.93
25	Sanchaung	100,339	1.91	102,784	1.91	105,263	1.91	107,771	1.92	110,306	1.92
26	Seikkan	2,851	0.05	2,915	0.05	2,977	0.05	3,043	0.05	3,108	0.05
27	Seikkyikhanaungto	34,389	0.65	35,099	0.65	35,840	0.65	36,608	0.65	37,402	0.65
28	Shwepyithar	346,961	6.6	354,478	6.59	362,194	6.59	370,098	6.58	378,177	6.58
29	South Okkalapa	162,413	3.09	166,185	3.09	170,048	3.09	173,993	3.09	178,020	3.09
30	Tamwe	166,709	3.17	170,696	3.17	174,767	3.18	178,914	3.18	183,135	3.19
31	Thakata	222,465	4.24	227,509	4.23	232,682	4.23	237,975	4.23	243,386	4.23
32	Thingungyung	211,275	4.02	216,084	4.02	221,022	4.02	226,078	4.02	231,243	4.02
33	Yankin	71,522	1.36	73,195	1.36	74,909	1.36	76,667	1.36	78,460	1.36
	Total Yangon City	5,259,029	100	5,377,46	100	5,498,534	100	5,622,163	100	5,748,083	100

Source: Population Census

3.5 Implementation of Housing Provision by DUHD

3.5.1 Housing Provision to Low Income People

There are two different types of housing practiced in Myanmar, commercial housing and public housing. Commercial housing is operated by the private sector for high-end market and public housing in both ownership and rental is operated by the public sector for low income people who cannot afford housing in the market supply. The Department of Urban and Housing Development is the public agency mainly responsible for urban and housing development to fulfill the housing needs of the people, especially for low income people. The Department of Urban and Housing Development implemented several housing projects for different income level of people. Among them, some of the housing projects are designed and developed for low income people and are valuable to low income families in need of shelter. These housing projects can be summarized as land development (site and service) scheme (1989), slum upgrading schemes (1994), hut to apartment schemes (1994) and low cost housing projects (1999). The housing projects provided by DUHD between 1993 and 2011 are shown in table (3.3).

Apart from the under housing projects, (40 feet x 60 feet) 233,444 land plots were developed under the site and service scheme in new towns of Hlaingtharyar, Shwe Pyi Thar, Dagon North, Dagon South, Dagon East and Dagon Seikkan from 1989 to 2010. Prior to 1993, the department produced 20,000 rental housing units for low income people, particularly government employees. But after 1993, the development of rental housing units went down and a few housing units could be produced due to limited government budget.

Although 3448 low cost housing units were developed for low income families, the development stopped after 2004. There were no housing projects targeted to low income people from 2004 to 2011 and housing supply dramatically decreased due to poor housing policy. Hut to apartment scheme was a successful program producing 11,441 housing units for low income families. However, after 2002, the program was terminated.

Table (3.3) Housing Projects Provided by DUHD between 1993 and 2011

No.	Year	Low cost housing (Units)	Hut to apartment housing (Units)	Redevelopment housing (Units)	Rental housing (Units)	High class housing (Units)	Total (Units)
1	1993	-	-	322	-	-	322
2	1994	-	351	231	-	-	582
3	1995	-	1402	618	-	-	2020
4	1996	-	2223	694	-	-	2917
5	1997	-	3617	2457	-	-	6074
6	1998	-	1838	3619	-	-	5457
7	1999	128	666	3709	-	-	4503
8	2000	1072	576	3512	20	-	5160
9	2001	1287	314	3115	-	-	4716
10	2002	299	454	2633	24	-	3410
11	2003	115	-	2741	-	-	2880
12	2004	547	-	2806	24	80	3457
13	2005	-	-	2205	-	203	2432
14	2006	-	-	2307	24	236	2567
15	2007	-	-	1065	-	353	1442
16	2008	-	-	617	-	520	1161
17	2009	-	-	775	24	618	1417
18	2010	-	-	788	24	463	1275
19	2011	-	-	739	-	221	984
Total		3,448	11,441	34,953	140	2,694	52,776

Source: Planning Division, Department of Urban and Housing Development

Starting from the fiscal year of 2013-2014, the Department of Urban and Housing Development provided the low cost housing units increasingly year after year. Many housing projects are being implemented by the public and private sectors, but the Department of Urban and Housing Development implemented low cost housing projects in Yangon Region including Shwe Lin Pan Low Cost Housing, Hlaing Tharyar Township in 2013-2014, Yuzana Low Cost Housing, Ayarwon Yadanar Housing and Kanaung Low Cost Housing, Dagon Seikkan Township in 2014-2015. From the table (3.4), it was found that 25,197 units for high cost housings, single housings and apartments as well as 19,910 units for low cost housings among the total housing supply of 45,107 units for different income levels. The housing supply for low income and middle income families increase due to the fact that the government housing policy shifts universal approach that is focused on all people, the CHID Bank has provided loan to construction companies and to home buyers and private housing developers are more interested to participate in the public private partnership projects.

Table (3.4) Housing Projects Provided by DUHD between 2012 and 2016

Year	Units				
	High Cost	Single	Apartment	Low Cost	Total
2012-2013	-	17	1,030	-	1,047
2013-2014	-	62	1,558	1,896	3,516
2014-2015	-	119	21,520	3,588	25,227
2015-2016	344	-	547	14,426	15,317
Total	344	198	24,655	19,910	45,107

Source: Planning Division, Department of Urban and Housing Development

3.5.2 Low Cost Housing Projects in Yangon

Housing provision was starting to increase in 1997. Low cost apartment housing units have been constructed in Thakata, Dagon, Hlaingtharyar, North Okkalapa and Danyingone targeting lower and middle income people. These housing units were designed and developed in conformity with international low cost housing

standard of housing design and floor area in order to reach the housing units offered for low income people. Projects were provided with basic infrastructure and social services. Housing type is mostly four stored walk-up building with two bedrooms and average per unit floor area of 600 square feet. Source of fund for these projects is housing revolving fund which is important for housing developments of the DHSHD. Under this program, around 3000 units of low cost housing were accommodated to the people needing housing.

Although the needs of housing become higher and higher, the Department of Human Settlement and Housing Development contribution was decreasing because of the land resource limitation and financial constraints. Therefore, private sector role is more and more dominant for implementation of housing units. After 2004, there was less pay attention to develop hut to apartment and low cost housing projects. The department concentrated on middle income housing and high class housing development.

From the experience of low cost housing program, it was found that although it was targeted to low income people, most of housing units are not accessible to low income people for two reasons:

- (1) Although the government subsidized the land, majority of low income people cannot afford the housing as housing price is high while they had no saving for housing and low income level.
- (2) Although payment was allowed in installment, housing sales was practiced with the lucky draw system and there is no prescription of eligible criteria for home buyers and lack of housing mortgage loan system.

In 2011, the government aims to develop urban system continuously towards balanced and sustainable development of housing across the nation and to upgrade living standard and provide adequate housing for all citizens. Due to one million housing program (2011-2030), low cost housing projects are restarted through Private Public Partnership (PPP). It will motivate the construction sector as well as generate the cities' economy through improving socio-economic condition of the people. The housing provision by DUHD is shown in appendix (I).

CHAPTER IV

ANALYSIS ON SURVEY DATA

4.1 Survey Profile

Dagon New Town is located in the Southeastern part of Yangon City. It has an average elevation of 9 meters above sea level. The climate is tropical and monsoon rainfall is abundant. Topography is low land, flat, alluvial plain. The area is totally undeveloped green field area. The type of soil cover is alluvial. As a result of sea water levels, the quality of underground water is poor. Because of the low cost housing developments created in this low density area, population burden of Yangon inner city area might decrease and this is a good solution to reduce housing shortage and traffic congestion. Yuzana Construction Co., Ltd introduced 11,540 family units of low cost apartment during 1999 to 2009. It was the biggest low cost housing provided by private sector.

In 2015, Department of Urban and Housing Development (DUHD) announced to provide 4,256 family units in Yuzana Housing Project area by using government fund. Low-cost Phase 1 is composed of 864 units and Phase 2 is 1,152 units and then Phase 3 is 1,456 units. Phase 4 is 320 units and transit shelters 464 units would be constructed. Currently, Phase 1 and Phase 2 have already implemented and Phase 3 is in under construction. Yuzana Housing Estate compound is composed of various types of apartment. There are three types of building in the new Yuzana Low Cost Housing as follows: 8 units 4 storied apartment, 6 units 4 storied apartment and 12 units 4 storied building. Yuzana Low Cost Housing Project is a typical low cost housing for low income families in Myanmar. Home buyers who are interested to buy low cost family unit appreciate more Yuzana Housing due to its good location and living environment. Yuzana Low Cost Housing could be occupied by applying housing mortgage scheme of Construction, Housing and Infrastructure Development Bank (CHIDB). DUHD set the room prices as shown in table (4.1).

Table (4.1) Room Prices of Yuzana Low Cost Housing Units

Room type	Sales price (Million Kyats)	Down payment	Mortgage Loan	Payment term	Remark
484 sq. feet	10 to 13.5	20%	80%	15 years	CHIDB
522 sq. feet	11.5 to 14	20%	80%	15 years	CHIDB

Source: Department of Urban and Housing Development

Eligible criteria of low income families are supported to buy Yuzana Low Cost Housing units. These criteria are as follow: (i) home buyers must be Republic of the Union of Myanmar's nationality, (ii) home buyers have the aggregate household income between 300,000 and 500,000 maximum per month, (iii) home buyers have to pay 20% down payment at CHID Bank and the remaining 80% is payable in monthly repayment within 15 years with the annual interest rate of 8%.

4.2 Survey Design

The descriptive study was conducted to get primary data by using structured questionnaires. Before data collection, study purpose was explained and discussions were asked to complete the questionnaires. There are around about 471 households are living in the Yuzana Low Cost Housing and thus the targeted sample size is 150 households through face-to-face interview using questionnaires on the impacts of low cost housing development in Yangon City, whether there are differences in socio-economic conditions between current living condition and previous living condition.

The questionnaire consists of main three questions. The first question is about the household profile of respondents with ten sub-questions also. The second question is about the conditions and difficulties of households before moving with fourteen sub-questions and the third question is about the conditions of households after moving into the Yuzana Low Cost Housing with thirty sub-questions.

4.2.1 Sample Size

Sampling of analysis was conducted for survey questionnaire. The survey had done 150 households in Yuzana Low Cost Housing, Dagon Myothit (Seikkan) Township in Yangon City. Total numbers of households cover 150 respondents out of 471 households (30%).

4.3 Survey Data Analysis

4.3.1 Demographic Characteristics of the Respondents

Total of 150 households were surveyed in Yuzana Low Cost Housing at Dagon Myothit (Seikkan) Township during July to August 2019. The respondents from two phases such as Phase 1 and Phase 2 were interviewed by using structured questionnaire. According to the survey data, the age of respondents range from 18 years to above 60 years and the highest proportion of respondents (28.67%) was from the age group of 31 years to 40 years. Moreover, the two age groups of 51-60 years and above 60 years have the same percentage of 22 as the second largest. The working age group is more than the dependency ratio that is between the number of dependents and the number of people in the potential labor force. It can be said that the labor force is high. Thus, it causes the increase of per capital income. At this time, the increasing level of per capital income leads to the high demand of the low cost housing especially for the low income families.

Among 150 respondents, majority of the respondents (91.33%) were men and the remaining (8.67%) were women as shown in table (4.2). As a marital status, the highest proportion of all respondents (89.34%) was married. The single group and widowed group have the same proportion of 5.33%. There are no divorced respondents.

The educational level of respondents was categorized into eight groups. They are illiterate, primary school, middle school, high school, undergraduate, graduate, postgraduate, and vocational school. According to table (4.2), the highest proportion of all respondents (52.67%) was graduated; the second (39.33%) was high school education and just (1.33%) was vocational school education. There are no respondents who are illiterate and primary school. From the survey data, it is found that 39.33% of respondents had completed high school education and due to the bad families' economic condition, they cannot afford to continue their education. So, the amount of earning they could earn is lower compared with the 52.67% of the respondents who are graduated. Table (4.2) summarizes the profile of the respondents in Yuzana Low Cost Housing selected for this study.

Table (4.2) Demographic Profile of the Respondents

Particular		Respondents	
		Number	Percentage (%)
Age of Respondents	18-30	13	8.66
	31-40	43	28.67
	41-50	28	18.67
	51-60	33	22
	Above 60	33	22
	Total	150	100
Gender of Respondents	Male	137	91.33
	Female	13	8.67
	Total	150	100
Marital Status of Respondents	Single	8	5.33
	Married	134	89.34
	Divorced	0	0
	Widowed	8	5.33
	Total	150	100
Education Level of Respondents	Illiterate	0	0
	Primary School	0	0
	Middle School	4	2.67
	High School	59	39.33
	Undergraduate	1	0.67
	Graduate	79	52.67
	Postgraduate	5	3.33
	Vocational School	2	1.33
Total	150	100	

Source: Survey Data, August-2019

4.3.2 Occupation after Moving into Yuzana Low Cost Housing

Occupation of respondents after moving included government employee, company employee, private business, service, shop and market sales workers, daily wages workers, retired persons and others that included taxi drivers and seaman. It was found that the government employees were 16% and the retired persons were 19.34% after moving as shown in table (4.3). The respondents of 27.33% have private businesses such as small grocery shops, handicrafts shops, tea shop and tailor shop so that Yuzana Low Cost Housing becomes a convenient place for doing small businesses.

Table (4.3) Occupation after Moving into the Yuzana Low Cost Housing

Occupation of Respondents	Respondents	
	Number	Percentage (%)
Government Employee	24	16
Company Employee	33	22
Private Business	41	27.33
Service, Shop and Market Sales Workers	8	5.33
Daily Wages Workers	3	2
Others	12	8
Retired persons	29	19.34
Total	150	100

Source: Survey Data, August-2019

4.3.3 Family Income per Month before Moving and after Moving

Family income of respondents before moving and after moving was shown in table (4.4). Total incomes of the whole family income per month range from 50,000 – 100,000 kyats to above 250,000 kyats. According to the survey data, there are no change between 50,000 and 100,000 kyats before moving and after moving. Before moving, the majority of the respondents (62%) had total family income of above

250,000 kyats per month. After moving, the majority of the respondents (69.33%) earned total family income of above 250,000 kyats per month because they opened small grocery shops, handicrafts shops, tea shops and tailor shops so that Yuzana Low Cost Housing becomes a convenient place for doing small businesses and the Thilawa Special Economic Zone creates employment for households who move to Yuzana Low Cost Housing. Therefore, their income became higher than their previous income before moving. There are known that no differences between income group by their occupation and numbers of employers.

Table (4.4) Family Income per Month before Moving and after Moving

Family Income per Month (Kyats)	Previous		Current	
	Number	Percentage (%)	Number	Percentage (%)
50,000 to 100,000	3	2	2	1.33
100,001 to 150,000	7	4.66	3	2
150,001 to 200,000	16	10.67	10	6.67
200,001 to 250,000	31	20.67	31	20.67
Above 250,000	93	62	104	69.33
Total	150	100	150	100

Source: Survey Data, August-2019

4.3.4 Causes of Moving to Yuzana Low Cost Housing

In this study, the major causes of moving are due to cheap housing, economy and other causes. Table (4.5) shows the causes of moving to Yuzana Low Cost Housing. According to the table (4.5), 13.33% of the respondents indicated that the households decided to move because of the economy. They moved from the villages and other towns due to the poor employment and business condition. In Dagon Myothit Township, there are many small and medium industries. They create jobs for semi-skilled workers and Yuzana Low Cost Housing is located near Thanlyin-Kyauktan Special Economic Zone (Thilawa SEZ).

The respondents of 1.33% moved due to the fire as a natural disaster and followed by about 6.67% of the respondents moved to Yuzana Low Cost Housing by the government because of the national project. These households did not buy the

housing units and did not need to pay the rental cost. However, they incurred the other expenses such as the electricity bills and the cost of solid waste. The highest proportion (44.67%) of respondents moved due to cheap housing price. The households lived in the rental housing before they moved. So, after moving into the Yuzana Low Cost Housing, they could save money more because they had no more rental costs and they could do their businesses comfortably.

Table (4.5) Causes of Moving to Yuzana Low Cost Housing

Causes of Moving	Respondents	
	Number	Percentage (%)
Economy	20	13.33
Health	9	6
National project	10	6.67
Natural disaster	2	1.33
Cheap housing	67	44.67
Others	42	28
Total	150	100

Source: Survey Data, August-2019

4.3.5 Situations of Household Families before Moving and after Moving

A. Economic and Social Condition

The economic and social condition of the household families before moving and after moving is shown in table (4.6). According to the table, the households have fairly access to education before moving. 94 households lived near their schools in other townships of Yangon City and those 56 households lived in rural areas and middle and high school is situated in another village and town so that they cannot afford for the cost of travelling and other costs for their school children. For health, the households have good access and 51 households thought bad as they were not able for medical treatment cost and transportation cost are high to get the government hospital and private clinics before. 104 households answered that the situation to invest for business is bad and 46 households thought fair. Only 14 households had small amount of saving money and 65 households mentioned that fair and 71 households had no saving as shown in table (4.6).

Table (4.6) Economic and Social Condition before Moving and after Moving into Yuzana Low Cost Housing

Economic and Social Condition	Previous				Current			
	Good	Fair	Bad	Total	Good	Fair	Bad	Total
Education	12	82	56	150	40	84	26	150
Health	66	33	51	150	90	52	8	150
Investment for Business	0	46	104	150	71	46	33	150
Saving	14	65	71	150	45	66	39	150

Source: Survey Data, August-2019

In table (4.6), the households have good access to education after moving. 124 households mentioned that the households' income has increased and their economic condition becomes more comfortable so that they can afford for the cost of travelling and other costs for their school children. For health, the households have good access as they can afford the medical treatment cost and the transportation cost to get the government hospital and private clinics. 71 households answered that the situation to invest for business for households is improved after moving. 111 households had saved money more than they did before and 39 households had no saving.

B. Living Condition

According to the table (4.7), it is found that living condition of households before moving and after moving into Yuzana Low Cost Housing. Most of the households' living condition improved after moving. Before moving, the majority of 110 households (73.33%) had good living condition and 24 households (16%) had fair living condition with the community. But 16 households (10.67%) stated that they had bad living condition with the community because they were poor and their living standard was lower than their neighbors. They always struggled to meet the need of the family so they could not participate the community activities.

Table (4.7) Living Condition before Moving and after Moving into the Yuzana Low Cost Housing

Living Condition	Previous		Current	
	Number	Percentage (%)	Number	Percentage (%)
Good	110	73.33	115	76.67
Fair	24	16	29	19.33
Bad	16	10.67	6	4
Total	150	100	150	100

Source: Survey Data, August-2019

C. Transportation

Table (4.8) states the transportation before moving and after moving into the Yuzana Low Cost Housing. According to the table, 44% of households expressed that their transportation is bad before moving into the Yuzana Low Cost Housing while 17.33% of households expressed that their transportation is no change. 38.67% of households expressed that their transportation is bad. After moving into Yuzana Low Cost Housing, 76% of households expressed that the transportation is in good condition. The respondents mainly use the bus system because the public transport (YBS System) is accessible for the whole day and the bus-stops are situated in the Yuzana Low Cost Housing compound.

Table (4.8) Transportation before Moving and after Moving into the Yuzana Low Cost Housing

Transportation	Previous		Current	
	Number	Percentage (%)	Number	Percentage (%)
Good	58	38.67	114	76
No change	26	17.33	24	16
Bad	66	44	12	8
Total	150	100	150	100

Source: Survey Data, August-2019

D. Improvement in Life of Living after Moving

The following table (4.9) shows the improvement in life of living after moving into Yuzana Low Cost Housing. Based on the questions concerning perception main factors such as economic, health, living condition, transportation and future expectation, perception score was assessed using likert scale.

Table (4.9) Improvement in Life of Living after Moving

Factor	Mean	Standard Deviation
Improvement in economic condition after moving	3.57	0.63
Improvement in health condition after moving	3.57	0.63
Improvement in living condition after moving	3.78	0.60
Improvement in transportation after moving	3.68	0.73
Future expectation of households	3.23	0.76

Source: Survey Data, August-2019

According to the table (4.9), the questionnaire design was to measure the respondents' opinion upon the improvement in life of living after moving into Yuzana Low Cost Housing. The data shows that the improvement in living condition has highest improvement level in which the mean score is 3.78 and the standard deviation is 0.60. It shows that the respondents' living condition is better in the community because their household businesses are more successful than they did business in the previous places and their income become higher. The second highest is the improvement in transportation which represents the mean value of 3.68 and the standard deviation is 0.73. The respondents mainly use the bus system because the public transport (YBS System) is accessible for the whole day and the bus-stops are situated in the Yuzana Low Cost Housing compound. The third highest is the improvement in health condition and the economic condition which has the mean value of 3.57 and the standard deviation is 0.63. According to the survey data, the respondents' income have increased because the respondents open the small shops and their economic condition becomes more comfortable. So, the respondents afford

the medical treatment cost and the transportation cost to get the government hospital and private clinics. The future expectation of households is the lowest mean level of 3.23 and the standard deviation is 0.76 because the households' income does not increase significantly and cannot spend enough money on education, shopping and social affairs although they do businesses before moving and after moving into Yuzana Low Cost Housing.

4.3.6 Satisfaction in Current Housing Condition of households

To explore the satisfaction of current housing condition of the households who involve in study population, containing three levels responses of satisfaction level (Much satisfy, Moderate satisfy, No satisfy) of question was included.

A. Satisfaction for Housing Condition

According to table (4.10), 50% of households felt satisfied with their living areas and 36% of households are not satisfied with the space for their family members. In this case, it may depend on the number of family members whether the housing is spacious or not. Most of the households felt most satisfied with regard to width of their living space, fresh air and natural light as shown in table (4.10).

Table (4.10) Satisfaction for Housing Condition

Level of Satisfaction	Much satisfy	%	Moderate satisfy	%	No satisfy	%	Total	%
Area	75	50	21	14	54	36	150	100
Fresh Air	131	87.33	15	10	4	2.67	150	100
Natural Light	88	58.67	43	28.67	19	12.66	150	100

Source: Survey Data, August-2019

B. Satisfaction for Environment Condition

According to the survey data, the sample households expressed their satisfaction regarding with the environment as shown in table (4.11). Most of the households have high satisfaction for peacefulness, cleanness and safety. But 25.33% of households felt dissatisfied with the safety due to the transportation and the breakdown of electricity.

Table (4.11) Satisfaction for Environment Condition

Level of Satisfaction	Much satisfy	%	Moderate satisfy	%	No satisfy	%	Total	%
Peacefulness	106	70.67	15	10	29	19.33	150	100
Cleanness	109	72.67	41	27.33	0	0	150	100
Safety	112	74.67	0	0	38	25.33	150	100

Source: Survey Data, August-2019

4.3.7 Opportunities and Challenges of Respondents in Yuzana Low Cost Housing

The survey data (150 households) was conducted among 471 households that are staying at Yuzana Low Cost Housing. There are many opportunities and challenges the respondents face, based on the survey data.

A. Opportunities for Respondents

From the survey data, it is found that 16% of head of households are government employees and most of the households have own businesses. The percentage of retired persons is increasing in Yuzana Low Cost Housing because they want to live in good and peaceful environment and can afford to buy the low cost housings with their retired money. So, the families open small shops and their economic conditions are at ease because of the cheaper housing price. The households can save money more because they have no more rental cost and they can do their own businesses. Moreover, because of the Thilawa SEZ that is located near the Yuzana Low Cost Housing, the households' economic condition could be in more convenient situation.

Almost all of the households have the good living condition after moving into the Yuzana Low Cost Housing. The main reasons are due to the increasing income that the households are doing businesses, improving living standard and living in own house. The primary schools and middle schools that are located near Yuzana Low Cost Housing lead to improved educational outcomes so that the education for the respondents' school children has been improved for academic outcomes.

B. Challenges of Respondents

There must be found many opportunities as well as many challenges for the residents of Yuzana Low Cost Housing. The first challenge for the respondents is that the quality of low cost housing is low compared to that of high cost and middle cost housings for the low income people. Although being cheaper housing price and living in own house, the government employees intend to live in downtown areas that are more convenient in transportation because they want to save the time of going from their home to offices and save the waiting time of insufficient buses. Even though the bus-stops are situated in Yuzana Low Cost Housing Campus, Yuzana Low Cost Housing is far away from downtown areas so that bus transportation system should be required for the families. 76% of households expressed that the transportation system is good and only 6.67% of households can afford to take a taxi. Although bus transportation is needed for Yuzana Low Cost Housing, the train system may be needed to consider as a crucial transportation in Dagon Myothit (Seikkan) Township.

The transportation system is also important in health sector. In order to develop the housing areas, the hospitals and clinics are required for people. The hospitals are not located near the Yuzana Low Cost Housing Campus so that people need to go to the hospitals in downtown areas. The government should need to build the public hospitals for low income families even though there have been many clinics in the compound. The hospital with full facilities should be provided near Dagon Myothit (Seikkan) Township.

The water is also the key issue in the health sector. So, one of the important key issue of the health sector is related to the water distribution for all residents of Yuzana Low Cost Housing. The water distribution and keeping the solid waste are also required to consider as a vital role to develop for the Yuzana Low Cost Housing. Based on the investigations, the households use underground water by using tube wells instead of YCDC's water supply. The water distribution system should be implemented more than before due to the high population densities.

CHAPTER V

CONCLUSION

5.1 Findings

The Department of Urban and Housing Development has been pursuing One Million Housing Units Plan. Low cost housing units has been constructed nearly 20,000 housing units in Myanmar until 2017. The first five year plan was not met the target of 100,000 units. Although the low cost housing target was not met, some of the low cost housings are built with the basic infrastructures especially the survey area, Yuzana Low Cost Housing.

From the survey data of respondents from Yuzana Low Cost Housing, there must be found the opportunities and challenges facing the respondents. Most of the households have private businesses such as small grocery shops and handicrafts shops so that it means small and medium enterprises (SMEs) sector has improved a lot and Yuzana Low Cost Housing becomes a convenient place for doing small businesses. The retired persons who live in Yuzana Low Cost Housing increase gradually because they want to live in good and peaceful environment and can afford to buy the low cost housings with their retired money. However, the percentage of middle aged who are working in government and private sectors is less. Because of the traffic jam and distance from work and home is far, government employees want to live in downtown areas that are more convenient in transportation.

Most of the households leave their previous places because of the economic issue followed by housing and land expropriation issues. As they faced with difficulties to do business and income generation, they desired to leave their places. Some of them are tenancies; they cannot afford further for increasing house-rental fees and so they desired to move any other appropriate places. Nowadays, the living cost of urban households are continuously raising overtime. Most of them selects Yuzana Low Cost Housing mainly because of the ease of earning and the native place and ease of accessibility. As a result of previous housing development activity, Yuzana Garden City area has already the basic infrastructure and secured living

condition due to the existing population lives in Yuzana Garden City. As there are some markets located near Yuzan Low Cost Housing, the households can easily find jobs such as vending, portering, and trishaw driving.

Based on the survey, only three households had earned the monthly income between 50,000 kyats and 100,000 kyats before moving into the Yuzana Low Cost Housing. 93 households had earned the monthly income of above 250,000 kyats. After moving into the Yuzana Low Cost Housing, two households have earned between 50,000 kyats and 100,000 kyats and 104 out of 150 households have earned the monthly income of above 250,000 kyats. In above 250,000 kyats earner group, up to 8 lakhs kyats earners are also included. From this case, the earners of between 250,000 kyats to 800,000 kyats are able to live in Yuzana Low Cost Housing as the earnings from small shops have increased and their economic status becomes more comfortable.

The expenses and requirements of households are inclined by increasing daily income. According to the survey data, almost all of the households bought electronic appliance such as television, mobile handset and others. Although mobile phone is the necessity good, most of the households could be able to buy the expensive mobile phones. Therefore, good communication is improved among the neighboring and households. It is found that 76% of households expressed the good transportation because the public transport (YBS System) is accessible for the whole day and bus-stops are situated near low cost housing compound. The percentage of households is low by taking the taxi to go to the downtown areas. In order to develop the housing areas, the hospitals and the clinics are required for people. Currently, the hospitals are not built in the compound of Yuzana Low Cost Housing. To go to the hospitals in downtown, transportation is the main part for all families in low cost housing.

5.2 Suggestions

Based on the findings of this study, the suggestions are drawn as described in below.

In Yangon City, population growth and population density gradually increased in downtown and its neighbouring areas. Providing low cost housing has become an urgent task for Myanmar government. Low cost housing development targeted to low income people established in late 2013 is facing many weaknesses and challenges at its initial stage of development. For the sustainable development of low cost housing

available and accessible to low income people in terms of both supply expansion and increase in affordability, the targeted approach should be applied.

Changing the role of DUHD from a direct provider for housing sector to facilitator and regulator must be accelerated and emphasis will play in monitoring for the development process. It requires that a fundamental change of functions of DUHD from builder and administer of few dwelling units to that a regular and promoter of the housing market. In fact, government intervention in the housing industry is required to monitor and regulate the market distortion for the benefit of all people.

The role of government should not be to provide housing units but to enable housing activities to flourish. A key issue in the government's role from provider to enabler of housing activities is the provision of housing finance. Housing finance has played an important role to enhance the housing sector in most countries. It is essential that enabling access to housing finance, mobilizing saving and establishing housing finance system or bank geared towards the requirements of low income groups.

While the private sector focus more on overall market demand especially profitable housing projects, the public sector must focus to provide houses for sale or rent to the low income group and public sector employees. In order to achieve the objective that all people particularly the low income group have access to decent and adequate housing, the major housing approaches should be adopted as follows:

- (a) Emphasizing and encouraging the construction of more low cost and low medium cost houses in order to reflect more realistically the housing requirements of the majority of the people.
- (b) Encouraging the provision of more houses for rental with a view of meeting the more immediate need for shelter especially for the lower income workers.
- (c) Government will ensure the adequate provision of basic infrastructure and social facilities by developers of housing projects.
- (d) Greater participation of the private sector in housing development especially the provision of the low cost housing. In this connection, the government would provide as much assistance as possible to the private sector.
- (e) Strengthening the role of state in providing subsidized land, external infrastructure and electricity.

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APPENDIX (I)

Housing Provision by DUHD

No	Year	Location	Project	Units				
				High Cost	Single	Apt	Low Cost	Total
1	1997-1998	Hlaing Tharyar	Kyansitthar Housing				1248	1248
2	1998-1999	Hlaing Tharyar	Bo Aung Kyaw Housing				184	184
3	2001-2002	Insein	Danyingone Housing				432	432
4	2001-2002	Thakata	Kwema Housing				800	800
5	2001-2002	Dagon South	Aung Zeya Housing				784	784
6	2011-2012	Thaketa	Water Front Villa (3)		83			83
7	2011-2012	Thaketa	Kwema Housing		5			5
8	2011-2012	Dagon South	Town Center Housing			68		68
9	2011-2012	Insein	Mingyi Street Housng			45		45
10	2011-2012	Insein	Gyogone Housing			36		36
11	2011-2012	Insein	Aung Zeya Housing		47			47
12	2011-2012	Thingangun	Kyeepwarye Housing			312		312

APPENDIX (I) Continued

No	Year	Location	Project	Units				
				High Cost	Single	Apt	Low Cost	Total
13	2011-2012	Yankin	Yankin Development Housing			496		496
14	2011-2012	Okkalapa North	Wayponela Housing			64		64
15	2011-2012	Dagon North	Shwepinlone PR(5)Housing		14	16		30
16	2011-2012	Okkalapa North	Waybargi Part (2) Housing			36		36
17	2011-2012	Shwe Pyi Thar	Commercial (1) Housing			186		186
18	2012-2013	Thaketa	Myin Taw Thar Housing			64		64
19	2012-2013	Dagon South	Inwa Housing			674		674
20	2012-2013	Thingan Gyun	Thu Wuna 30 Ward Housing			12		12
21	2012-2013	Oakkalarpa North	Shwe Wut Hmone Housing		10			10
22	2012-2013	Oakkalarpa North	Baw Ga Bala Housing			96		96
23	2012-2013	Hlaing Tharyar	Htee Hlaing Shin Housing		7			7
24	2012-2013	Hlaing Tharyar	Shwe Lin Pan Commercial			184		184

APPENDIX (I) Continued

No	Year	Location	Project	Units				
				High Cost	Single	Apt	Low Cost	Total
25	2013-2014	Thaketa	Water Front Villa (2)			18		18
26	2013-2014	Dagon South	Town Centre Part (3)			1060		1060
27	2013-2014	Dagon South	65 Ward Housing			220		220
28	2013-2014	Tammwe	Dagon Lwin St. Housing			20		20
29	2013-2014	Dagon North	Shwe Pin Lone RP (6) Housing		11			11
30	2012-2014	Oakkalapa North	Than Dar 17th St. Housing		19			19
31	2013-2014	Hlaing Tharyar	Shwe Lin Pan Low Cost Housing Phase (1)				768	768
32	2013-2014	Hlaing Tharyar	Htee Hlaing Shin Housing		32			32
33	2013-2014	Shwe Pyi Thar	Commercial (2) Phase (1)			144		144
34	2013-2014	Dagon South	Yoma Yeikthar Hosuing			96	1128	1224
35	2014-2015	Than Lyin	Aung Chan Thar Housing		110			110
36	2014-2015	Shwe Pyi Thar	Commerical (2) Housing Phase (2)			260		260

APPENDIX (I) Continued

No	Year	Location	Project	Units				
				High Cost	Single	Apt	Low Cost	Total
37	2014-2015	Hlaing Thar Yar	Shwe Lin Pan Commercial Housing			112		112
38	2014-2015	Hlaing Thar Yar	Htee Hlaing Shin Housing			576		576
39	2014-2015	Hlaing Thar Yar	Shwe Lin Pan Low Cost Housing Phase (2+3)				1140	1140
40	2014-2015	Mandalay	Mya Ye Nandar Houing				432	432
41	2014-2015	Magwe	Chan Myae Thar Yar Housing				288	288
42	2014-2015	Dagon Seikkan	Yuzana (1)Low Cost Housing				864	864
43	2014-2015	Dagon Seikkan	Kanaung Low Cost Housing				864	864
44	2014-2015	Dagon South	Palaemon Housing			272		272
45	2014-2015	Okkalapa North	Shwe Pauk Kan 14 Housing			620		620
46	2014-2015	Okkalapa North	Bawgabala Housing			80		80

APPENDIX (I) Continued

No	Year	Location	Project	Units				
				High Cost	Single	Apt	Low Cost	Total
47	2014-2015	Okkalapa North	Thandar 17St. Housing		9			9
48	2014-2015	Dagon Seikkan	Ayarwon Yadanar Housing			19600		19600
49	2015-2016	Hlaing Thar Yar	Kyansitmin Low Cost Housing				3138	3138
50	2015-2016	Hlaing Thar Yar	Shwe Lin Pan Low Cost Housing				80	80
51	2015-2016	Mandalay	Mya Ye Nandar Housing				880	880
52	2015-2016	Monywa	Nandawun Low Cost Housing				440	440
53	2015-2016	Dagon Seikkan	Yuzana (2)Low Cost Housing				1152	1152
54	2015-2016	Dagon Seikkan	Yuzana(3) Low Cost Housing				1592	1592
55	2015-2016	Pathein	Ohmar Danti Low Cost Houing				568	568
56	2015-2016	Dagon South	Aung Myint Mo Low Cost Housing				1224	1224

APPENDIX (I) Continued

No	Year	Location	Project	Units				
				High Cost	Single	Apt	Low Cost	Total
57	2015-2016	Dagon South	Mahar Bandoola Rental Housing				1272	1272
58	2015-2016	Okkalapa North	Shwe Pauk Kan (10+11) Housing				1056	1056
59	2015-2016	Okkalapa North	Yoma Rental Housing				3024	3024
60	2015-2016	Yankin	Yanshin Highrise Housing	46				46
61	2015-2016	Minglar Taung Nyunt	Pansodan Up St. Highrise Housing	64				64
62	2015-2016	Dagon North	Ahnaw Yahtar Housing	56				56
63	2015-2016	Okkaplapa North	Thandar 17 St. Housing	24				24
64	2015-2016	Batataung	51 St.Highrise Housing	52		332		384
65	2015-2016	Bahan	Shwe Gone Hosuing	40				40
66	2015-2016	Dagon	Yaw Min Gyi Housing	20				20
67	2015-2016	Ahlone	Min Ye Kyaw Swar Housing	42				42
68	2015-2016	Mandalay	Seik Tara Mahi Housing			215		215

Appendix (II)

Yuzana Low Cost Housing Phase (1)

Phase (2)

Part One : General Information		
1	Name	
2	Address	
3	Age	
4	Gender (Male/Female)	
5	Education level of respondent	(1) Illiterate (2) Primary School (3) Middle School (4) High School (5) Undergraduate (6) Graduate (7) Postgraduate (8) Vocational School
6	Marital Status	
7	Occupation	
8	If the respondent is not a head of the household, please write the name of head of the households.	
9	Head of the household's occupation	
10	Family members of respondents	

**Part Two: Condition and Difficulties of Households before Moving
into the Yuzana Low Cost Housing**

11	Previous address	
12	Occupation	<ul style="list-style-type: none"> (1) Government employee (2) Company employee (3) Private business (4) Service, shop and market sales workers (5) Daily wages workers (6) Others
13	What is your average family income per month?	<ul style="list-style-type: none"> (1) 50,000 kyats to 100,000 kyats (2) 100,001 kyats to 150,000 kyats (3) 150,001 kyats to 200,000 kyats (4) 200,001 kyats to 250,000 kyats (5) Above 250,000 kyats
14	Family's incomes and expenditures	<ul style="list-style-type: none"> (1) Income > Expenditure (2) Income = Expenditure (3) Income < Expenditure
15	Saving condition	<ul style="list-style-type: none"> (1) Enough saving (2) Normal saving (3) No saving
16	Debt	<ul style="list-style-type: none"> (1) Repay (2) Non debt (3) Unable to repay

17	How is the economic status of the family?	(1) Fair (2) Normal (3) Poor
18	How is the investment for business?	(1) Good (2) Fair (3) Bad
19	How is the education system for the household?	(1) Good (2) Fair (3) Bad
20	How is the health condition for the household?	(1) Good (2) Fair (3) Bad
21	How is the household's social relationship?	(1) Good (2) Fair (3) Bad
22	How is the transportation system?	(1) Good (2) No change (3) Bad
23	Which connections did you have for moving into the Yuzana Low Cost Housing?	(1) Newspaper (2) Online (3) Friends
24	Who supported financially to move into Yuzana Low Cost Housing?	(1) Family (2) Friends (3) Bank loan (4) Others

**Part Three: Condition of Households after Moving into the Yuzana
Low Cost Housing**

25	How many years do the household live in the Yuzana Low Cost Housing?	<ul style="list-style-type: none"> (1) Less than 6 months (2) 6 months to 1 year (3) 1 year to 2 Years (4) 2 years and above
26	Which causes did the household have for moving to Yuzana Low Cost Housing?	<ul style="list-style-type: none"> (1) Economy (2) Health (3) National project (4) Natural disaster (5) Cheap housing (6) Others
27	What is the household's average income per month?	<ul style="list-style-type: none"> (1) 50,000 kyats to 100,000 kyats (2) 100,001 kyats to 150,000 kyats (3) 150,001 kyats to 200,000 kyats (4) 200,001 kyats to 250,000 kyats (5) Above 250,000 kyats
28	In which cases do the household spend the family income per month the most?	<ul style="list-style-type: none"> (1) Education cost (2) Healthcare (3) Social cost (4) Housing cost (5) Debt repayment (6) Others
29	How much did the family spend for education expenditure for month?	

30	Is the use of income on health expenditure good enough?	(1) Yes (2) No					
31	Can the household buy the luxury items? If so, please describe.	(1) Yes ----- (2) No					
32	Can the household save money?	(1) Yes (2) No					
33	Are there any advantages for the family because of moving into the Yuzana Low Cost Housing?						
(1) Much deteriorate (2) Deteriorate (3) No differences (4) Improve (5) Much improve							
34	Improvement in economic condition after moving	1	2	3	4	5	
35	Improvement in health condition after moving	1	2	3	4	5	
36	Improvement in social condition after moving	1	2	3	4	5	
37	Improvement in transportation after moving	1	2	3	4	5	
38	Future expectation of households	1	2	3	4	5	
39	What exercise do the household do?	(1) Regular exercise (2) Sports (3) Walking					
40	What kind of waste disposal system do the household have in the Yuzana Low Cost Housing?	(1) Systematic (2) No systematic (3) Plastic bag					

41	What kind of water supply system do the household have in the Yuzana Low Cost Housing?	(1) YCDC (2) Purified water (3) Well
42	What kind of phone do the household use for communication?	(1) Line phone (2) Mobile phone
43	What type of transportation do the households use mostly?	(1) By taxi (2) By bus (3) By car (4) By trishaw
44	How far is the market from housing?	(1) Near (2) Far (3) Intermediate
45	How far is the school from housing?	(1) Near (2) Far (3) Intermediate
46	How far is the hospital/clinics from housing?	(1) Near (2) Far (3) Intermediate
47	How far is the police station from housing?	(1) Near (2) Far (3) Intermediate
48	How far is the bus-stop from housing?	(1) Near (2) Far (3) Intermediate

49	Does the housing have enough space for the family members?	(1) Much satisfy (2) Moderate satisfy (3) No satisfy
50	Does the household get enough satisfaction related with the fresh air?	(1) Much satisfy (2) Moderate satisfy (3) No satisfy
51	Does the household get enough satisfaction related with the natural light?	(1) Much satisfy (2) Moderate satisfy (3) No satisfy
52	Does the household have enough satisfaction related with the peacefulness?	(1) Much satisfy (2) Moderate satisfy (3) No satisfy
53	Does the household have enough satisfaction related with the cleanness?	(1) Much satisfy (2) Moderate satisfy (3) No satisfy
54	Does the household get enough satisfaction related with the safety?	(1) Much satisfy (2) Moderate satisfy (3) No satisfy