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Assessment of Condominium Housing: Fitness to the Intended

Purpose (The Case of Mekelle City)

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Award
of Master of Arts Degree in Development Studies

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Declaration

I declare that this thesis work entitled "Assessment of Condominium Housing: Fitness to the Intended Purpose, the Case of Mekelle City, Tigray, Ethiopia." is my original work, has not been presented earlier for award of any degree to any other university and that all sources of materials used for the thesis have been duly acknowledged. I have produced it independently except for the guidance and suggestion of my research advisors.

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ABSTRACT

Mekelle is a city which needs to construct 38,000 houses up to 2015 to solve the accumulated and emerging housing problem. As a result, the government has established IHDP and planned to construct 14,647 condominium houses. However, comparatively low and middle income respondents were not able or willing to purchase it. This paper aims at assessing fitness to the intended purpose of the condominium houses constructed in the first cycle. To realize the objectives of the study, semi-structured questionnaire was administered to 188 respondents. Furthermore, interviews, focus group discussions were used as data collection tools and secondary sources were used as data sources. And then data outputs were produced using SPSS version-16.

The finding indicates that, the income of the residents and the costs of each condominium units were the main factors that determine the affordability of the condominium houses. Accordingly, the condominium units were affordable only for 34(18.1%) of the respondents. In addition to this, most of the respondents didn't have saving practice and get trouble to finance the down payment from different sources. Moreover, the respondents were not well informed about the process, advantages and costs of the condominium houses. As a result the provision of condominium houses became tiresome.

The program should only subsidize specific targeted group like women, disabled and relatively low income persons to avoid unnecessary cost burden of the government. It is also recommended, to rent the condominium houses for more extended years to support these specific targeted group households and to use as alternative provision of condominium housing. On the other hand, the housing agency should focus primarily on provision of affordable housing rather than creating job opportunity for MSE. Finally, the agency has to assess the effectiveness and efficiency of the existing condominium houses before starting

additional new construction. Furthermore, the government should facilitate housing provision than directly produce housing; by encourage private developers and non public organizations.

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Acronyms

ACI Affordable Community Initiative

BoFED Bureau of Finance and Economic Development

CAs Condominium Associations

CDBG Community Development Block Grant

CSA Central Statistics Authority

FGD Focus Group Discussion

GIS <u>Geographic Information System</u>

HUD Housing and Urban Development

IHDP Integrated Housing Development Program

MCDP Mekelle City Development Plan

MHA Mekelle Housing Agency

MDG Millennium Development Goal

MSE Micro and Small Enterprises

NGO Non Government Organization

PASDEP Plan for Accelerated and Sustained Development to End

Poverty

RIA Regulatory Impact Analysis

SPSS Statistical Package for Social Sciences

SRO Single Room Occupancy

Technical and Vocational Education and Training

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CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

Housing is one of the most essential material needs of humankind. Yet the need for housing is not balanced with its supply. In all developed countries of the world, governments attempt to reduce or eliminate the imbalance either by intervening in parts of the housing market for the first time or by remedying the weaknesses of existing policies or both. However, in developing countries quantitative and qualitative growth and rural-urban migration on an enormous scale-resulting in overcrowding, squalor and life-threatening in sanitary condition that staggers the imagination. Estimates by the World Bank indicate that for every unit of permanent housing built in low-income developing countries, nine new households are formed, Paul, et al.,(2000).

Over 100 million people around the world are homeless and over one billion are inadequately housed. Half of the population of the world particularly in the cities of developing countries, live in informal settlement, Dejene (2007, p.8). Already half of the world's population lives in urban centers and one third of them in slums. This figure is expected to increase by one billion in a decade and slums will grow at an accelerated pace unless 35 million housing units are made available annually, Yewoineshet (2007, p.2)

Ethiopia with population of 73,918,505, CSA (2007) is the second populated country in sub Saharan Africa with a total area of 1.1 million sq. km and diverse agro-economy. The population is predominantly rural. The structure of the economy shows that agriculture is a vital tool in providing employment for more than half of the population. When socio economic indicators are taken into account, Ethiopia appears to be one of the poorest countries in the world. The interim poverty reduction strategic plan shows that poverty in Ethiopia is widespread and multifaceted, Lealem (2007, p.2)

Ethiopia's urban centers are characterized by a poorly developed economic base, high levels of unemployment and incidence of poverty and slum habitation. Urban unemployment is estimated to be 16.7% and up to 28.6%, IHDP (2008, p.2) in Addis Ababa. IHDP indicate that nearly 40% of the nation's urban dwellers live below the poverty line. An indicator of the magnitude of urban poverty is the proportion of the urban population that lives in slums – about 70%, IHDP (2008, p.2) of the urban population is estimated to live in slum areas. It should be noted however that Ethiopian cities are not characterized by segregated settlement pattern and slums form an integral part of the city. Achieving Millennium Development Goal 7, Target 11 – improving the quality of lives of slum dwellers – is a major challenge in Ethiopia. Studies made in the last five years concluded that currently a housing shortage of between 900,000-1,000,000, IHDP (2008, p.2) in urban centers exists.

Many of the existing houses are below qualitative standard and lack sufficient space, *Housing for expatriates in Ethiopia* (Anon., 2007). The amount of provision for water supply, electricity, and drainage is very minimal. The lives and health of people living in housing of such poor quality and with such insufficient provision for water, sanitation, and drainage are under continuous threat. Nevertheless, in the developing world in general and in least developed countries like Ethiopia in particular the number of people living in such conditions is rising every year. Almost 85%, *Housing for expatriates in Ethiopia* (Anon., 2007) of the houses in Ethiopia are made of mud and stick or thatch walls, which can fall down easily. Homes are often cramped, with dirty floors, leaking roofs and no windows, leaving their residents vulnerable to adverse weather conditions, insects and rodents; *Housing for expatriates in Ethiopia* (Anon., 2007)

Substandard housing not only has an unfavorable effect on health but also on education, job performance and overall quality of life. Most families living in such circumstances have little possibility of improving their situations without assistance and life is a daily battle for most.

Ethiopian economy promoted a significant shift in economic policy making market oriented being the center of its policy framework. The government instituted several

reform measures including deregulating price, interest rates and exchange rates privatizing public enterprises decentralizing power, restricting the government provision of public goods and design policy in urbanization particularly in housing problem

One of the regions of Ethiopia is Tigray region which is found in the northern part. Tigray region's population is 4,314,458 with an estimated area of 50,078.64 square kilometer, CSA (2007). Mekelle is a city found in northern part of Ethiopia with a population of 215,546 out of which 104,758 are male and 110,788 are female. The city has an estimated area of 24.44 square kilometers, CSA (2007) which gives a density of 8,819.39 people per square kilometer.

Shortage of housing in many urban areas of Tigray is one of the critical problems facing cities. The development of regional housing strategy is designed to guide governments at the regional and local levels to stimulate and strengthen the housing sector. Any strategy is based upon the broader housing and urban development policies that have been established at the national and regional level, within the context of actual recent conditions and trends in the land and housing markets. Furthermore, a new housing strategy related to housing goals and strategies is adopted by the Tigray Region Urban Development and Construction Bureau, which articulates the detailed implications of general housing policies. Thus, Ethiopia has walked into the second five year national strategic plan named as a Plan for Accelerated and Sustained Development to End Poverty (PASDEP). Integrated housing development program (IHDP) is the eighth core component of the plan which will have a six years time span. Based on federal Condominium proclamation No 370/2003 September 2003, Federal Negarit Gazeta (2003) under housing agency tries to construct condominium houses in Addis Ababa. Similarly Tigray Housing Development Agency was also established by the proclamation 109/1998 in July 2006 to implement Integrated Housing Development program in this regional state, Tigray Negarit Gazeta (2006).

In view of that, the Agency has launched its operational activities in twelve major cities of the region i.e. Mekelle, Maichew, Adigrat, Adwa, Axum, Shire –Endaslssie, Setit-

Humera, Korem, Alamata, Wkuro, Abbyiadi and Sheraro to address the housing problem of low and middle income households, THDA (2007).

1.2 Statement of the Problem

Housing problem is one of the most challenging aspects of urbanization process in the developing world. In general, lack of proper institutions, appropriate financial system, legal and technical frameworks, political commitment among others, can be cited as the causes for not addressing the urban housing problem. The housing development program puts all these instruments in place, there is also a need for additional tool to build a cost efficient house with a better quality and quantity, Lealem (2007, p.1).

Housing in Ethiopia is not considered as a shelter only but as an asset, means of social security and indicator of social status. There were no housing policies as such except simple laws. The current slums and housing problems are the results of accumulated deficits of policies and practices for several years, Yewoineshet (2007, p.6).

The major ongoing explanation for the housing shortage is that family income is generally too low to afford costly housing. The cost of construction over the past several years in Ethiopia has increased drastically due to increased price of construction materials. Moreover, the accessible land for housing mismatches with the increasing population. As a result, there are waiting lists for land plots in the city, yet many of those who succeed in getting land title cannot afford to build a house in any reasonable period of time.

There are only 40,000 houses in Mekelle for the total population which needs the construction of additional 38,000 houses up to 2015, IHDP (2006). Thus, Mekelle Housing Agency has constructed 1410 condominium houses of different level in the first cycle and the total number of people registered in seven local administrations to get condominium house is 14,647.

Mekelle Housing Agency started construction of condominium houses under the objectives of building affordable and quality houses to increase homeownership opportunities of low and middle income households of the city and bring high employment opportunities by participating medium and small enterprise. However, there is no detail study made about the income and the preferences of the residents made as well as the affordability of the constructed condominium houses. And not clearly defined low and middle income households. Consequently, at the beginning from 1410 lottery winners only 215 paid the down payment: from these 90 of them asked to return back their down payment, only 92 sign the contract with the agency and the remaining were not yet decided whether to continue or terminate purchasing the condominium houses. This all indicates that the respondents were in doubt whether to purchase or leave the condominium houses. Therefore, the study aims in identifying the reason why the lottery winners are unable or unwilling to take the opportunity and also it assessed the fitness to the intended purpose of the already constructed condominium houses.

1.3 Research Objectives and Questions

1.3.1 Research Objectives

The general objective of the research is to assess whether the constructed condominium houses in Mekelle city are fit for the intended purpose.

Specific Objectives

- To check whether the condominium houses are affordable to relatively low and middle income dwellers.
- To assess the limitation of currently adopted transfer arrangements of condominium houses.
- To realize the role of banks and micro finance institutions in supporting the payment for condominium houses
- To identify the factors that affecting the residents to buy the condominium houses.

To verify the effectiveness of policy use in provision of condominium housing

1.3.2 Research Questions

The central research question aims to answer whether the condominium houses are affordable, the policies and transfer arrangements used are appropriate for relatively low and middle income households.

The specific questions are the following;

- 1. Are the condominium houses affordable to relatively low and middle income households?
- 2. What are the limitations of currently adopted transfer arrangements of condominium houses?
- 3. What are the roles of banks and micro finance institutions in supporting the payment for condominium houses?
- 4. What are the factors that affecting the willingness of the residents in purchasing condominium housing?
- 5. Are the policies used in provision of condominium housing effective?

1.4. Significance of the Study

This research has already tried to assess the affordability and transfer arrangements of the condominium houses. As to the researcher's understanding, there has been no significante research conducted so far in housing in Mekelle. Therefore, it will serve as a base for further study for those who have interest to make study in this area..

Moreover, it will be valuable to the Mekelle City Administration and Housing Agency to evaluate the existing situation and to take corrective measures by considering the findings, conclusion and recommendation.

1.5. The Scope and Limitation of the Study

The findings of the study have been more exhaustive if it would analyze the achievements of all objectives of Regional Housing Agency, but due to time and money constraints it was confined to the assessment of affordability, policy used and transfer arrangements of condominium houses constructed in the first cycle in Mekelle. A well organized and sound research requires information which mainly involves around the objectives and the problem already set. Therefore, the study needs to be supported by sufficient policies and previous researches. However, in this research since the program of constructing condominium housing is new for our region there is limited previous research made; consequently, it limits the availability of information.

Apart from this, the sample taken randomly may not be a good representative of the whole population as the data is collected from 188. Thus, the all cited factors might affect the quality of the study.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1. Urbanization and Housing Development

Urbanization is a development phenomenon that comes about with the development of a country's economy in general and industrialization in particular. It follows that the rate of urbanization is considered to be one of the indicators of a country's economic development. The rate of urbanization is directly related to the demand for houses. It is expected that as a country becomes more urban, more houses will be needed to accommodate the increasing population in urban centers. The practice, however, does not support this in that the acceleration in urbanization is not accompanied by the provision of adequate housing. This is one of the reasons for the development of informal settlements, which provide housing to most low-income groups, Jean (2007 cited in UN-HABITAT, 2002, p.27).

Almost 1 billion, or 32 percent Richard (2008, p.2) of the world's urban population, live in slums, the majority of them in the developing world. Moreover, the locus of global poverty is moving to the cities, a process now recognized as the "urbanization of poverty". Without concerted action on the part of municipal authorities, national governments, civil society actors and the international community, the number of slum dwellers is likely to increase in most developing countries. And if no serious action is taken, the number of slum dwellers worldwide is projected to rise over the next 30 years to 2 billion, Richard (2008,p.2).

2.2. Trends of Housing Policies in Developing Countries

In the housing sector of developing countries, there has been a trend since the 1970s to move away from traditional supply-side assistance to demand-side subsidies. Traditional supply-side housing program include government-built public housing and other so-called "bricks and mortar" subsidies given to the producers of housing such as subsidized financing, contributions of land and materials, and tax credits and deductions. If a program is to be efficient in situations without equilibrium, it's a prerequisite that producers pass on part of the subsidy to households by charging below-market rents for the units that they produce. If it is not demanded, the subsidy will most probably become capitalized. Nevertheless, in case of market equilibrium, the increased supply will itself drive the prices down, Lowe (2004).

From the perspective of households, the key characteristic of any supply side housing program is lack of choice: a household must take or leave what the producer offers. In contrast, demand-side housing program channel subsidies directly to the household through cash-like allowances or grants. Typically, the household pays the market price and is allowed to select its home from a variety of suppliers. One characteristic of this process has been that government-controlled agencies withdrew from direct subsidizing and lending in favor of provision for private lending practice, Dubel (2003). In market economies, demand-side subsidies have been used to increase the transparency and effectiveness of subsidies, Katsura. R(2002).

Generally there is a trend away from direct provision towards an enabling role. The World Bank program heavily supported this policy, but changes in national policies facilitate this trend as well:

Governments should be encouraged to adopt policies that enable housing markets to work. Governments have at their disposal seven major enabling instruments, three that address demand-side constraints, three that address supply-side constraints, and one that improves the management of the housing sector as a whole. The three demand-side tools are:

- (i) developing property rights: ensuring that the right to own and freely exchange housing is established by law and enforced, and administering program of land and house registration and regulation of insecure tenure;
- (ii) developing mortgage finance: creating healthy and competitive mortgage lending institutions, and fostering innovative arrangements for providing greater access to housing finance by the poor; and
- (iii) Rationalizing subsidies: ensuring that subsidy program are of an appropriate and affordable scale, well-targeted, measurable, and transparent, and avoid distorting housing markets.

The three supply-side instruments are:

- (i) providing infrastructure for residential land development: coordinating the agencies responsible for provision of residential infrastructure (roads, drainage, water, sewage, and electricity) in order to focus on servicing existing and undeveloped urban land for efficient residential development;
- (ii) regulating land and housing development: balancing the costs and the benefits of regulations that influence urban land and housing markets, especially land use and building, and removing regulations which unnecessarily hinder housing supply; and
- (iii) Organizing the building industry: creating greater competition in the building industry, removing constraints to the development and use of local building materials, and reducing trade barriers that apply to housing inputs.

These instruments are to be supported and guided by developing the institutional framework for managing the housing sector. This includes strengthening the institutions which can oversee and manage the performance of the sector as a whole; bringing together all the major public agencies, private sector, and representatives of non-governmental organizations (NGOs) and community-based organizations; and ensuring that policies and program benefit the poor and elicit their participation, Taffin, (2003).

2.3. Housing Program and Strategy Options

Programs and strategies that have been successfully implemented by localities to comply with State law and address their housing needs: Proactively build relationships with the building community, including non-profits and establish an array of regulatory and financial tools to assist residential development with a non-profit, including utilizing local trust funds and other local financial resources, donating land, supporting funding applications, assisting entitlements and expediting permit processing, Housing Programs: Assist in the Development(n.d.)

Housing strategies which are "action plans" to support implementation of housing policies by using housing planning tools to maintain existing or create new affordable Housing:

- Density bonus
- Housing agreements
- Comprehensive development zoning
- Support for resident initiatives to increase density in single family areas
- Lease of municipal land at market or at below-market values Housing reserve
 Funds
- Rental housing conversion protection.

Standards of maintenance bylaws, demolition control bylaws, unit replacement policies, assistance for displaced renters policies Grants and The provision of grants to non-profit housing providers, the write-down of sale of municipal lands, and the costs of managing partnerships are examples of how local governments contribute to the costs of housing production.

Direct provision of housing: by municipalities act as developers and builders of affordable housing, financed through capital funding. Municipalities partner with senior governments, and with non-profit societies in the provision of housing.

2.4. Overview of Condominium Housing

A condominium is a form of home ownership in which individual units of a larger complex are sold, not rented. These units may be renovated apartments, townhouses or even commercial warehouses. Contrary to popular belief, the word 'condominium' does not apply to the type of unit itself, but the legal ownership arrangement. Any multi-unit structure can 'go condominium meaning occupants must either vacate the premises or purchase their apartments outright, Michael (2003, p.1).

Those who may benefit the most from condominium living are veteran apartment renters who don't mind having close neighbors. Others may not want to be bothered with external maintenance or the responsibility of lawn care. The overall price of a condominium townhouse may be much lower than an equivalent single-unit home. Buying a condominium does allow equity to build, unlike paying monthly rent in an apartment complex, Michael (2003, p.1).

One thing to be aware of, when living in a condominium setting is the political reality of an owners' association. Decisions may be made in monthly meetings which will cost individual owners more money, but not necessarily deliver equal benefits for all. It can be nearly impossible to avoid being affected by at least one condo board decision, so active participation in meetings and discussions may be more compulsory than you might expect. Condominium living may be more advantageous financially than apartment rentals, but it does require more active participation in community events, Michael (2003, p.1).

The operation of condominiums is also governed by provincial or territorial legislation and the condominium corporation's own declaration, bylaws and rules. Once a condominium corporation has been established, a board of directors, elected by, and generally made up of, the individual condominium owners, takes responsibility for the management of the corporation's business affairs. There is usually a turnover meeting where this transfer of responsibility takes place. Each unit owner has voting rights at meetings. Your voting rights will generally be in proportion to your unit factor, Canada Mortgage and Housing Corporation (2009).

Condominium living can offer the prospective homeowner many desirable attributes, such as affordable housing and low maintenance requirements. Many condominiums have enhanced security features over there found in single-family houses. Condominiums can be complete communities within one complex offering a wide range of social, entertainment and recreational activities. However, buyers should be aware—before they buy—of many issues surrounding the purchase of, and the lifestyle in, a condominium, Canada Mortgage and Housing Corporation (2009).

2.4.1 Condominium Development Operations

The Government of Russia in developing the policy infrastructure needed to enable the formation and efficient operations of condominium associations (CAs). To do so, this demonstration project identified several buildings and trained their leaders and local staff. The project also identified the legislative and bureaucratic obstacles to the efficient operation of condominium associations, and worked with city administration representatives to address them. In the mid-1990s, residents of apartments and the government of Russia were interested in forming condominium association to address the following problems, Town-Base Urbanization Strategy Study (n.d.)

- Vandalism, thefts, and increased levels of wear and tear on buildings
- Poor quality and deferred maintenance on buildings, due to both a lack of funding and maintenance system deficiencies
- Lack of funding for capital repairs
- High resident dissatisfaction with current housing conditions, cleanliness, and utility provision (including poor water quality, plumbing)

Condominium associations organize private owners to improve management and maintenance of the buildings in which they live. Apartment owners are charged a fee, which is used to pay for repairs, cleaning, and routine maintenance of the property, as well as insurance on common property and the building structure. Condominium associations are jointly responsible for the safety and maintenance of common areas, including yards, hallways, and entrances. CAs are governed by their charter and bylaws,

and decisions are generally made by a Board of Directors. CAs also adopts rules and regulations which residents must obey (for example, when and where trash may be set out for collection). CAs may contract out for maintenance and management services. They may also sanction apartment owners for violating the CA rules (for example, failure to pay condominium fees or obey restrictions on construction internal to an apartment). CAs provides a method for apartment residents to jointly provide for the management and maintenance of their apartment buildings, without the involvement of the government, Town-Base Urbanization Strategy Study (n.d.).

Description of Activities Undertaken

The project began by identifying obstacles to the creation of condominium associations, including issues of city policy, incomplete and conflicting legislation, lack of understanding of the concept (including benefits and rights). From the resident's perspective, obstacles included the inability to enforce fee payments, excessive fees, fears that it would result in higher maintenance fees, and fear of city government interference.

To address these issues, the project conducted the following activities to establish the pilot program:

Housing Development Study:

- Evaluated current situation
- Identified city administration departments having a role in the approval and registration process
- Determined criteria for and selected pilot buildings
- Outlined steps necessary for establishing CAs and provided documents necessary to complete registration process
- Formed a working group with key supporters of the initiative
- Developed a training process
- Located and hired a team of local staff
- Determined and prioritized training needs

Prepared course materials

The Results of the Project:

- Detailed city policy on condominium formation in the form of a Mayoral Resolution
- Development of model condominium charter and bylaws, sample condominium rules and regulations, and operating procedures
- Step by step registration process adopted by city departments
- Education of city facilitators in the legal basis, concept, and operations of CAs
- Registration Handbook for distribution to residents
- Acceptance of city administration towards CAs

2.5. Affordability Housing

The term housing affordability has come into popular usage in the last two decades replacing housing need at the centre of debate about the provision of adequate housing for all. This is largely necessitated by the need to deal with the increasing evidence of housing crisis (housing market failures) brought about by current pro-market reforms within the housing sector in many countries. Despite its growing relevance, there is still no common consensus on how best to conceive and measure housing affordability. However, it is increasingly becoming evident that a more integrated approach to using different housing affordability measures could provide better analytical platform in housing affordability research and policy discourse, Jean (2007,p.16).

Federal Department of Housing and Urban Development (HUD) generally defines affordable rental housing as rent that does not cost more than 30 percent of the annual household income. They consider that paying more than 30 percent of income is a housing cost burden, Jean (2007, p.16).

A general term applied to public- and private-sector efforts to help low- and moderate-income people purchase homes. Usually the programs offer lower cash down payments, eased loan-qualifying rules, and/or below-market interest rates.

Many municipalities and states have affordable housing programs that provide low-interest-rate loans to first-time homebuyers with a moderate income level. Affordable housing loans purchased by feature down payments as low as 3%. Through the use of donations and volunteer labor, Habitat for Humanity provides affordable housing to those of limited means, Avigya (2006, pp.16-21).

Affordable housing is terms used to describe dwelling units whose total housing costs are deemed "affordable" to those that have a median income. Although the term is often applied to rental housing that is within the financial means of those in the lower income ranges of a geographical area, the concept is applicable to both renters and purchasers in all income ranges. Because of supply and demand, the most "affordable" places are where there is the least demand relative to supply. Where the supply of available housing is less than the demand, low- and moderate-income households often struggle to obtain housing that is affordable. In these housing markets, rising land values often outpace rising incomes. Such housing markets often have a limited supply of residential land, or a number of regulations that make it difficult or costly to increase housing supply at rents affordable to consumers at income ranges below the local average, Avigya (2006, pp.16-21).

A primary factor in housing affordability is household income. The most common approach is to consider the percentage of income that a household is spending on housing costs. Another method of studying affordability looks at the regular hourly wage of full-time workers who are paid only the minimum wage (as set by their local, regional, or national government). The hope is that a full-time worker will be able to afford at least a small apartment in the area that he or she works in.

The other major factor is the measurement of housing costs. Some organization and agencies consider the cost of purchasing a single-family home; others look exclusively at

the cost of renting an apartment. Many studies focus primarily on the median cost of renting a two-bedroom apartment in a large apartment complex for a new tenant. These studies often lump together luxury apartments and slums, as well as desirable and undesirable neighborhoods. While this practice is known to distort the true costs, it is difficult to provide accurate information for the wide variety of situations without the report being unwieldy. Normally, only legal, permitted, separate housing is considered when calculating the cost of housing. The low rent costs for a room in a single family home, or an illegal garage conversion, or a college dormitory are generally excluded from the calculation, no matter how many people in an area live in such situations. Because of this study methodology, median housing costs tend to be slightly inflated.

2.5.1 Attainable Housing Definition

Simply stated, attainable housing refers to a family's ability to afford a place to live with the income the family currently earns. USA federal guidelines indicate that an acceptable level of housing cost is 30% or less of a family's gross income. If a family spends greater than 30% of their annual gross income on housing costs, it is deemed cost burdened. Housing cost burden places a family's quality of life and ability to meet other necessary living costs in jeopardy.

Depending on a family's income, paying more than 30% of its gross income for housing could be more of a necessity than a choice. Data indicate that families at lower income levels typically pay more than 30% of their annual gross income on housing costs and are in greater jeopardy of being unable to meet other necessary living costs, Hillsborough County Affordable Housing Task Force (2006,p.16)

Income levels as defined by the U.S. Department of Housing and Urban Development

- An extremely low income household has an income less than or equal to 30% of the area median income.
- A very low income household has an income between 30% and 50% of area median income.

- A low income household has an income between 50% and 80% of area median income.
- A moderate income household has an income between 80% and 120% of area median income.
- An above moderate income household has an income greater than 120% of area median income.

2.6. Housing Finance

Housing loans are loans of a long-term nature provided for the construction of individual houses and business premises. The common practice is to provide housing loans to that section of the population that earns moderate to high incomes, provision of housing loans operates through specialized institutions (mortgage banks), and over a long-term. It is only in rare cases that commercial banks are called upon to engage in mortgage financing, Abraham (n.d.).

Mortgage institutions customarily provide housing finance to the middle and high-income segment of the population. This does not exclude, however, cases where these institutions offer long-term loans to lower income groups who can offer clear land title and certifiable income. This trend is outside the actual situation in developing countries including Ethiopia where the poor, low-and even middle-income majority of the population cannot afford a loan even for the least expensive, commercially built housing units. In Ghana, for instance, only 5 percent of those who want to own a house can do so from their own resources, 60 percent would need some form of financial assistance, and the remaining 35 percent are not capable of owning and building a house in their lifetime, Abraham (n.d.).

Banks are the core entities which support a large scale housing development industry in most of the world. Bank loans are accessible to households which earn a steady income and will not help solve the housing problems of the truly poor. However, by expanding the use of banks and microloan institutions as primary housing lenders a larger segment of middle income can benefits, Martha (2007).

- A. Bank lending standards become more flexible regarding loan security and informal employment by borrower. Cumbersome loan application and security features of bank lending could be streamlined for small size loans needed for simple, small home construction.
- B. Microlending should expand as a primary housing lending resource, especially for informally employed homeowners. Microfinance for housing is defined by several major characteristics that distinguish it from bank financing:
- C. Consumers get education and information about the requirements, costs, and advantages of bank loans
- D. Combining a local or regional government grant with a bank loan or microloan to help reduce the monthly payments required from the borrower, and make borrowing more affordable for the lower-middle class Local governments might consider establishing housing grant programs to be used in conjunction with loans, for several reasons:

2.6.1. Housing Subsidy

In advance capitalist countries there are two principal forms housing subsidy supply side subsides –sometimes refer to us object subsidies, and demand side subsides sometimes refer to us subject subsides. Governments subsidize the supply of hosing if they provide land free or at a reduced cost or provide finance at sub market rate of interest. grant can be also be made available to offset the cost of renovation new house building ,and tax allowances may be provided to help builders purchase construction materials. Assuming that these subsidies will not be retained by the developer, they will reduce the cost of use incurred by the ultimate consumer, Neil (2003, p.11)

In subsidizing housing demand, government can provide social security payments as a means of supporting income and thereby facilitating expenditure in general, but sinces payments might not be directly linked to the cost of accommodation they can not strictly be regarded as a housing subsidy. Housing allowances, however, are more specifically related to the cost of housing and are therefore a housing subsidy. Payments might also

be in the form of loans at sub-market subsidies which reduce the user cost; demand subsidies increase the ability to pay. The supply of owner-occupied housing is subsidies when governments provide: either free land or land at below market price for private development; low or tax- deductible interest loans; non repayment grant s; infrastructure at zero or sub –market cost, Paul, et al. (2000).

The form in which demand subsidies are provided depends up on whether owner – occupied housing is deemed a consumer good or an investment good. If housing is regarded as a consumer good, the subsidy equals the extent to which the interest on a housing loan is tax-deductible, but if housing is deemed an investment good, the subsidy is the failure to tax the imputed rent income of the dwelling. In some country housing is seen as both a consumer good and an investment good, interest on loans is tax deductible, while imputed rent income is exempt from tax. There are of course other housing subsidies. In countries where housing might be deemed a consumer good, housing allowances are paid to low-income buyers, while in many other countries where housing might be deemed an investment good, a household's principal residence is exempt from capital gains tax. In recent years there has been a general shift of emphasis from investment subsidies to consumption subsidies –a shift consisted with a similar shift of emphasis from supply side subsidies to demand subsidies. this has been intended to slow down the rate of new construction and to facilitate the consumption of the housing stock which already exists, Paul, et al. (2000).

2.7. Low Income Housing

Poor households face the greatest challenges with getting decent housing they can afford. For a poor family with monthly income of less than 500 Birr it is difficult to afford even a room rent of 100 Birr, Martha (2006). The government has limited options for assisting the very poorest households; a broader number of policies may help working poor people employed in the informal sector to gain a stable adequate housing. Several policies already enumerated in this strategy could work to facilitate housing for the working poor, Martha (2007).

Governments in high income countries place a great emphasis on directly assisting housing for low income people, often through demand-side subsidies such as vouchers that pay a portion of monthly housing cost for poor families. In a low income country, such a policy is difficult to sustain for two reasons: there is a huge potential demand for housing subsidy because so many people are poor, and government financial resources are very limited. Policies to either offer vouchers or directly construct and subsidize new housing are very expensive. The menu of recommended options discussed below are lower cost approaches that could work better in Ethiopia, building on many recommendations contained in earlier sections of this strategy, Martha (2007).

A. Land allocation rules with flexible plot sizes and cash requirements: Current local government rules for new plot allocation in many cities consistently allocate medium-sized plots and require significant proof of significant cash on account, in an attempt to ensure quick construction on the plot. An option for smaller plots could allow continued low, affordable land rental rates consistent with an affordable house. If the cash threshold were lower, it would put the qualification threshold in reach of more working poor households, who could then begin an incremental home construction process, continue to save money to continue construction in stages, and complete a house over several years. An important dynamic here is the greater incentive to save and invest for a homeowner who has land plot rights definitely in hand, compared with the uncertain success facing a family considering an application. The positive momentum created by having a plot can unlock additional savings or borrowing (informal or formal) to enable a poor family to build at least a one-room house.

В. **Allowing inexpensive building construction methods**: Coupled with the plot allocation process, the chances of success in completing a home construction are tied to the cost levels involved. A strategy which allows for use of traditional materials, depending on which local materials are in adequate supply, and simple toilets will reduce the cost of construction and enable more poor families to be successful. Strengthen microfinancing sector to serve low income and informally employed: International experience has shown that lending relatively small amounts (for example 5,000-10,000 Birr) over short terms (2-3 years), Martha (2006) for housing effectively can serve a portion of the low income market, where households have fairly consistent earning capacity which may not be well documented or totally regular each month. Means of expanding the availability of such loans should include working to modify the loan policies of current government-sponsored microcredit institutions to better match up with the needs of the housing market, and possibly Private NGOs or profit making expanding the number of such institutions. enterprises could be attracted to starting additional microlending organizations if consumers start to see the possibilities and effectiveness of borrowing to achieve a start in housing ownership.

C. Mixed income condominium or tract house development: Local governments which have land which is attractive for development could adopt rules which require that a certain portion of the units built be sold at affordable, below market prices as a condition of any development. The goal is to utilize part of the revenue earned from selling homes or flats at a market rate to cross-subsidize lower prices for the affordable segment of the project. Such rules could apply to private developers who take land at low rent rates or to a publicly developed project, and could govern development of a condominium or a large group of single family houses developed at one time. For the cross-subsidy concept to work as a catalyst for low income housing without a substantial independent subsidy source, the market-rate units need to be marketable to consumers at a price which exceeds the cost, thus generating the subsidy. Whatever entity undertakes the development must accurately project the actual costs of a project, the sales prices that realistically can be charged for the market-rate units, and the surplus that can be devoted to a reduction in cost for the affordable unit. Probably that surplus will only be sufficient to "write down" the price of a small number of units, perhaps 20% of the total. Whatever number of affordable units is projected, there should be a clear commitment in advance to achieving that goal; if a private developer is engaged, and there should be a contract with that developer requiring a specific number of sales of affordable units at prescribed prices. Appropriate roles for local government would be to lease the land at a low lease rate and to take responsibility for a large share of the utility and infrastructure installation costs. Such indirect subsidy from the local government should help reduce total development costs and thereby ensure a surplus sufficient to write down the requisite number of units.

CHAPTER THREE

3. Methodology of the Study

3.1. Site Selection and Description

Mekelle is the capital city of Tigray National Regional State in Ethiopia. It is located at the northern part of the country at a distance of 870 km from the capital Addis Ababa. Mekell city has a total populations of 215,546 of which 104,758 are male and 110,788 female. The total area of the city is 24.44 square kilometers with a population density of 8,819.39 persons per square kilometer, CSA (2007). It is found in 39° 28' East and 13° 28' North at an altitude of about 2084 meters above sea level, with an average mean temperature of 19°c and the annual rain fall varying between 50 to 250 mm.

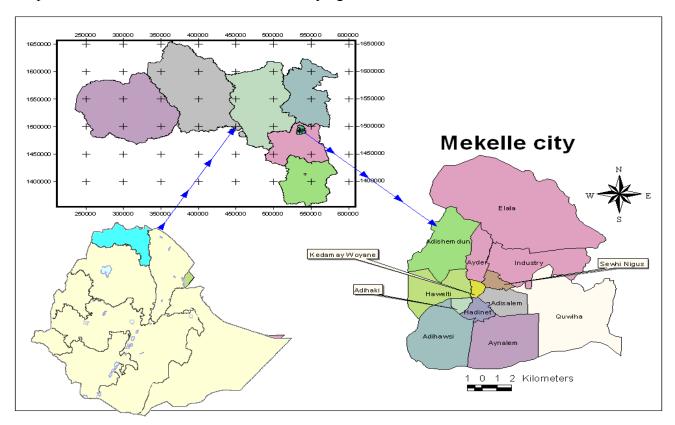


Fig.3.1: Location Map of Mekelle City

Source: Tigray BoFED, GIS Department.

The livelihood and occupation of the city population is principally based on the expansion and occupation of micro and small scale trade and industries. Moreover, more of the population of Mekelle was engaged in the informal sector.

The administrative territory of the city is divided into seven Municipal Service Areas: Hawelti, Aider, Semien, Hadnet, Kedamay Weyane, Adi-Haki and Quiha. The main functions of municipal services are mainly related to building permissions, land administration and tax collection activities. They are also responsible for mediating between the city administration and the population in carrying out certain administrative functions and play key roles in organizing the people during local development activities. Moreover, in the city housing development agency was established in 2006 it is now working on the 2006 and 2007 projects.

Mekelle is selected as the study area since it is the largest city in the region there is high population and housing problem accordingly to the agency plan to build 14,647(51.4%) of the total condominium house planed to construct in the region.



Fig. 3.2: Condominium Housing Constructed in Hadnet

Source: Own Survey

3.2 Research Methods and Procedures

3.2.1 Data Type and Sources

To conduct this research, the researcher used an explanatory survey. Both primary and secondary data sources were used for both qualitative and quantitative data type. Primary data were collected by distributing structured, closed and open ended questionnaires and conducting focus group discussions (FGD) and interview. The questionnaires were distributed to sample respondents who registered for condominium house and won the lottery.

Interviews were conducted with principals of Mekelle City Administration, Regional and Mekelle City Housing Agency, Construction and Business Bank, Commercial Bank and Dedebit Micro finance loan officers. Similarly, two focus groups were organized and discussion was conducted to get information regarding, condominium housing; construction plan, distribution, financing and achievements of its objectives with six purposely selected individuals in each group.

Secondary data also were collected regarding cost and transfer arrangements of each condominium unit. From regional and city housing agency; initial study documents, plans, progress report, brochures, applicant databases and documents available on the internet were used as data sources. Both published and unpublished documents were used in order to supplement the primary data and to achieve the objective set forth.

3.2.2. Study Design

In order to get appropriate information, the researcher used survey as the population is large in number and there exist financial and time limitations to conduct census. The survey design was based on 1410 constructed condominium houses of different level in the first cycle and the total number of people registered in the seven local administrations to get condominium houses. According to Mekelle Housing Agency 14,647 people were registered for the houses and 1410 of them won the lottery.

The sample was taken by stratified sampling in order to include respondents who they won houses of different unit which means studio, one bedroom, two bedrooms and three bed room in different locations and from different sub city. Accordingly, 33, 76, 65 and

22 respondents were selected from each stratum, type/unit of condominium house, (from studio, one, two and three bed rooms), proportionally, respectively by using systematic random sampling in order to have 196 respondents.

3.2.3. Data Collection

Primary data collection through questionnaire was a very difficult task as it possesses different procedures. It started by translating the questionnaires in to the language of the respondents which is Tigrigna. Then, three enumerators were selected for the six local areas and each was assigned into two local administrations according to their convenience. This task needs due attention because the enumerator must be well known by the community or person who lives for a long time in that local area, who knows more residents of that area. After that the enumerators were trained and understood the purpose of research, the questionnaires and feel responsibility to the task. Then, they were given the list of the respondents in their own specific areas and let them distribute and collect the questionnaire to the winners in the four types of condominium units according to the proportion within two weeks. The enumerators were responsible to help the respondents by answering procedural questions while answering the questions. And they were also expected to provide report about their work each day at 5 o'clock so that the researcher can have good supervision of them.

The number of questionnaires administered and collected was 188 while the remaining 8 questionnaires left uncollected. Since the respondents were not found in their home at the time of the questionnaires collection Therefore, 188 questionnaires were used for analysis and discussion..

Guidelines were used and data were collected by the researcher through interview, focus group discussion and from secondary sources. Accordingly, interviews were conducted with principals of Mekelle City Administration, Regional and Mekelle City Housing Agency, Construction and Business Bank, Commercial Bank and Deddebit Micro finance loan officers. This has taken about six days and carried out according to the time schedule.

The focus group discussions were conducted at suitable time and place chosen by the participants. It was conducted in a semi- structured way by posing open ended questions; facilitated in Tigrigana and short hand notice were used and then translated in to English. The participants in the one group consisted of one individual from urban development and construction office of each local administration of the city. The other group participants were selected from the city municipality, regional and Mekelle City Housing Agency. All the participants were degree holder, consisted of two female in each group and selected based on the relationship of their job in the provision of condominium housing.

3.3. Data Processing and Analysis

The data collected was analyzed and presented in tables, percentage, frequency and figures. In addition to this, chi-square test was used to testify the significance of results obtained from the respondents and to identify the effects of sex, age, education, family size, occupation, income, and location, floor level and size of condominium units on purchasing decision with the help of computer software package SPSS (Statistical Package for Social Science) version -16. Data obtained from FGD, interviews and secondary sources were also used to strengthen the overall understanding of the issue. Finally conclusions and recommendations were driven from the findings considering the affordability, transfer arrangements and objectives of condominium housing.

CHAPTER FOUR

4. PRESENTATION AND DATA ANALYSIS

4.1. Introduction

This chapter deals with the presentation and analysis of data gathered from respondents and secondary sources in Mekelle City. As it was proposed, questionnaires, interviews and focus group discussions were used to collect data from the respondent's inline with secondary sources. Regarding to the presentation and data analysis, graphs, tables, numbers, percentages and chi-square test were used.

4.2. Background Information of the Respondents

The demographic characteristics of the respondents play a very significant role on their decision to purchase the condominium house. This part comprises sex, age, educational level, income level and occupation of the respondents.

According to table 4.1 below, from the total 188 respondents, 76(40.4%) respondents earn monthly income of birr 300-750 and majority 54 (71.1%) of them are female which consists relatively significant respondents between 28-37 years age range. Similarly, from the 57(30.3%) respondents who earn between birr 751-1200 monthly income, 32(56.1%) are female between 28-37 years ages ranges. The other 21(11.2%) respondents earn monthly income between birr 1201-1650 and unlike the above majority of them are male respondents whose age is between 28 and 37 years. The other, 13(6.9%) respondents earn between the income ranges of birr 1651-2100 and also constitute more male within the age of 28-37 years. The remaining 21(11.2%) respondents earn birr 2100 and above and among them 16(76.2%) respondents are male and most of them constitute 28-37 years age range.

Table 4.1: Background Information of Respondents' Sex, Income and Age Level.

Source: Own Survey

| S/ | S/ Items | | | | | | | | | |
|----|--------------|------------|--------|-----------|-------|-------|--------|------------|------|------|
| N | Income Level | Sex | Age Ra | Age Range | | | | N <u>o</u> | % | |
| | (Birr) | | 18-27 | 28-37 | 38-47 | 48-57 | 58 and | - | | |
| 1 | 300-750 | M | 7 | 8 | 4 | 1 | 2 | 22 | 28.9 | 40.4 |
| | | F | 11 | 24 | 6 | 7 | 6 | 54 | 71.1 | 40.4 |
| 2 | 751-1200 | M | 8 | 10 | 5 | 2 | 0 | 25 | 43.9 | 30.3 |
| | | F | 1 | 22 | 8 | 0 | 1 | 32 | 56.1 | 30.3 |
| 3 | 1201-1650 | M | 1 | 8 | 2 | 2 | 0 | 13 | 61.9 | 11.2 |
| | | F | 1 | 4 | 3 | 0 | 0 | 8 | 38.1 | 11.2 |
| 4 | 1651-2100 | M | 1 | 5 | 2 | 0 | 0 | 8 | 61.5 | 6.9 |
| | | F | 0 | 4 | 0 | 1 | 0 | 5 | 38.5 | 0.9 |
| 5 | 2100 and | M | 0 | 10 | 5 | 0 | 1 | 16 | 76.2 | 11.2 |
| | Above | F | 1 | 3 | 1 | 0 | 0 | 5 | 23.8 | 11.2 |
| | | N <u>o</u> | 31 | 98 | 36 | 13 | 10 | 188 | | 100 |
| | | % | 16.5 | 52.1 | 19.2 | 6.9 | 5.3 | 100 | | |

On the other hand, according to Mekelle Housing Agency manager, female headed households were given chance first to purchase 20% of the constructed condominium houses and also they drew lottery to get additional chance equally with male headed households. However, the above finding shows female are less than male respondents in purchasing condominium houses.

In sum, majority of the respondents in the lowest two income ranges are female, in contrast to, the highest three income levels consisted with more of male respondents. On the other hand, the number of respondents in the two lowest income ranges are high in number than the respondents in the three highest income levels. Regarding the age of the

respondents, 98(52.1%) respondents are within 28-37 age range and as we can see from table 4.1 when the age of respondents increases the demand for condominium houses decreases.

Table 4.2: Background Information of Respondents' Occupation, Sex and Educational Level.

| S/ | Item | | | | | | | | |
|----|------------|------------|---------------|----------|---------|--------|-------------|------|------|
| N | Occupation | Sex | Educational I | Level. | | | | | |
| IN | | | 12 Grade | 10+1 and | Diploma | Degree | N <u>o</u> | % | |
| | | | And Blow | 10+2 | | and | 11 <u>0</u> | 70 | |
| 1 | Government | M | 4 | 2 | 13 | 36 | 55 | 53.4 | 510 |
| | Employed | F | 10 | 10 | 15 | 13 | 48 | 46.6 | 54.8 |
| 2 | Self | M | 7 | 4 | 1 | 1 | 13 | 31.7 | 21.0 |
| | Employed | F | 22 | 3 | 3 | 0 | 28 | 68.3 | 21.8 |
| 3 | NGO | M | 10 | 2 | 0 | 2 | 14 | 38.9 | 10.1 |
| | Employed | F | 18 | 1 | 1 | 2 | 22 | 61.1 | 19.1 |
| 4 | Unemployed | M | 2 | 0 | 0 | 0 | 2 | 25 | 4.3 |
| | | F | 6 | 0 | 0 | 0 | 6 | 75 | 4.3 |
| | | N <u>o</u> | 79 | 22 | 33 | 54 | 188 | | 100 |
| | | % | 42 | 11.7 | 17.6 | 28.7 | 100 | | |

Source: Own Survey

As in table 4.2, 103(54.8%) of the respondents are government employees, 55(53.4%) of them are male and first degree holders and above. The other 41(21.8%) of the respondents are self employed unlike, the government employed, majority 28(68.3%) of them are female and high school completed and below. On the other hand, from 36(19.1%) respondents 22(61.1%) of them are female respondents employed in non government or private organizations and most of them are high school completed and below. Only 8(4.3%), 6(75%) of them are female, are least educated and are unemployed.

The above table indicates most, male respondents, and respondents with high academic status are employed in government organization. On the other hand, most female respondents are high school completed or below and self employed or employed in private organizations.

4.2.1. Chi-Square Tests for Independence

This test is used to verify whether gender, age, education, family size, occupation, and income have an impact on making decision to purchase a condominium house.

Table 4.3; Pearson Chi-Square Test for Independence

| S | Respondent Characteristics | Value | D | Asymp, Sig. (2-tailed) |
|---|----------------------------|--------------------|---|------------------------|
| 1 | Gender | 0.476ª | 1 | 490 |
| 2 | Age | 1.439 ^a | 4 | 837 |
| 3 | Education | 7.305 ^a | 3 | .063 |
| 4 | Family Size | .430a | 1 | .512 |
| 5 | Occupation | 1.862ª | 3 | .602 |
| 6 | Income | 20.55a | 4 | .000 |

Source: Own Survey

Table 4.3 tests the independence of respondents' demographic characteristics in purchasing condominium houses. Accordingly, when we see the p-value of gender, age, education, family size and occupation it is greater than 0.05 that means they are insignificant or not affect purchasing decision of condominium houses. On the other hand, the p-value of the income of the respondents' show as it is less than 0.05 which is 0.000 that means it is extremely significant or the purchasing of condominium house is extremely dependent on income of the respondents.

4.3 Housing Problem and Provision of Condominium Houses

It is perceived that there is shortage of housing in Mekelle, Poor quality of much of the existing houses, over crowded families and limited numbers of newly constructed houses are manifestation of this shortage. The need for construction of new housing and the

governments' initiation for compact condominium house development aroused from this fact.

Table4.4. Demand for Condominium Houses

| S/n | Local Administration | Number of Applicants |
|-----|----------------------|----------------------|
| 1 | Hawelti | 2678 |
| 2 | Aider | 2073 |
| 3 | Semien | 2295 |
| 4 | Hadnet | 3138 |
| 5 | Quiha | 632 |
| 6 | Kedamay Weyane | 2515 |
| 7 | Adi-Haki | 1316 |
| | Total | 14,647 |

Source: Tigray Housing Development Agency

Table 4.4 above confirms the existing demand for condominium houses. It also shows the number of residents registered for condominium houses in each local administration.

Table 4.5.Detail Information about Constructed Condominium Houses in the First Cycle

| S/n | Type of Condominium units | N <u>o</u> | % |
|-----|---------------------------|------------|------|
| 1 | Studio 0 Bed Room | 235 | 16.7 |
| 2 | 1 Bed Room | 547 | 38.8 |
| 3 | 2 Bed Room | 468 | 33.2 |
| 4 | 3 Bed Room | 160 | 11.3 |
| | Total | 1410 | 100 |

Source: Tigray Housing development Agency

Table 4.5 indicates the type of condominium units constructed in the first phase of the program. It shows the agency constructed more 547(38.8) condominium units with one bed room when compared with 160(11.3) three bed rooms. This indicates the government

focused in constructing of more of condominium units with one bed room to reduce the space.

4.3.1 Information about Housing Problem

Regarding housing problem, 160(85.1%) respondents agreed about the existence of housing problem in Mekelle city because of the following reasons: shortage of land, shortage of house, increase in population, rent related problem and lack of consideration to solve housing problem. On the other hand, only 28(14.9%) said there is no shortage of housing in Mekelle.

Concerning their current accommodation, about 156(83%) respondents live in rental houses. Among them, 93(59.6%) were not satisfied by the current housing because of continuous increment in house rent, lack of freedom, not owning their own houses, a lot of restrictions to children and not convenient to dwell. Out of 32(17%) respondents living with their families, 16(50%) of them were not satisfied because of similar reasons stated above.

About the reasons that make the respondents to apply for the condominium houses, 113 (60.1%) respondents replied that they expect it was less costly than other private houses and 75(40%) of them applied not because it was less costly because they don't have other alternatives. Other respondents also said it is because they are unable to get or buy land and ever increasing cost of construction materials were the constraints that made them unable to own their house.

Moreover, the respondents suggest the agency ought not to start other condominium house construction before finishing the first cycle and transferring to the residents'. More over; it should focus on infrastructure development around the condominium house and on effective resource utilization. And also, they advise to solve housing problem the government shouldn't focus only on condominium house but also on real estate development by private developer, housing cooperatives and other effective and efficient land use programs.

The Regional Housing Agency manager has also been affirmed that condominium housing can never solve the housing problem of the city totally nor is the aim of this program; it was to reduce the problem by 50%. Therefore, still there is a need for supplementary housing production options so as to address the problem fully.

4.3.2 Information about Provision of Condominium Houses

The agency tried to distribute the condominium houses that were constructed in the first cycle to the residents who applied for it during the initiation of construction of condominium houses. Accordingly the respondents replied that they were provided with the requested condominium unit. However, the location, size of the unit and the floor were not given exactly according to their choice, rather it was distributed based on a lottery system. Therefore, the detail information about location and floor number of condominium unit of the respondents' won in relation to their request or interest is presented below using graphs and tables.



Fig.4.1: Purchasing Condominium Houses, location Choice Achieved and Failed Source: Own Survey

Figure 4.1 shows the location respondents won in relation to their preference. From the total respondents only 52(27.7%) respondents won the location they prefer and from these, 25(48.1%) of them purchased the condominium house while the 27(51.9%) respondents refused to do so because of other factors like cost, floor, quality...etc. The other 136(72.3%) respondents were not provided the location they preferred. Among them, 35(18.6%) respondents purchased condominium house even though they were not provided the location they preferred. This shows that they give up some of their interest, and 101(53.7%) respondents did not purchase the condominium house. Therefore, it indicates us the respondents purchasing decision was affected by location of the condominium houses they are provided.

Table 4.6: Phi Cramer's Chi-square Test of Location Preference

| Purchased Condominium House | | Value | Approx. Sig. |
|-----------------------------|------------------|-------|--------------|
| Yes | Phi | .913 | .002 |
| | Cramer's V | .408 | .002 |
| | N of Valid Cases | 60 | |
| NO | Phi | .432 | .528 |
| | Cramer's V | .193 | .528 |
| | N of Valid Cases | 128 | |

Source: Own Survey

In addition to the above finding Phi Cramer's test shows the Phi value for these respondents who were purchases the condominium houses is close to 1(0.913) which indicates the existence of strong relationship between location of condominium houses and decision making and the p-value that is 0.002 also significantly supports the relationship of location preference and purchasing decision.

On the other hand, the same statistical test of those who did not purchase condominium house that the indicates Phi value is not close to 1(.0.432) which means it is a weak association of providing unselected location and purchasing condominium houses and the p-value 0.528 also did not support strong association of winning unselected location

to purchasing decision. This statistical test indicates individuals are unwilling to purchase a house which is not in the location of their choice.

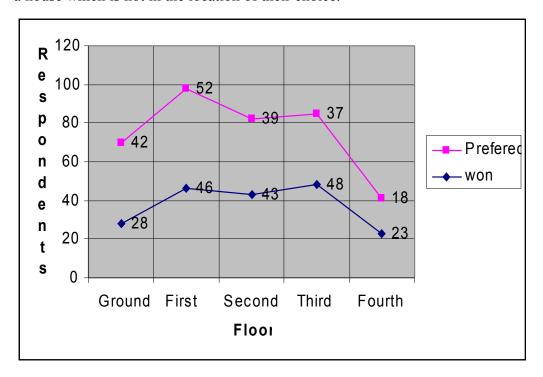


Fig. 4.2: Comparison of Floor, the Respondent Won and their Preference. Source: Own Survey

As it is indicated in figure 4.2 above, majority 52(27.7%) of the respondents' first choice was the first floor while few 18(9.6%) choose the fourth floor. However, only 46(24.5%) are provided in the first floor and 23(12.2%) are provided in the fourth floor. Moreover, the majority 48(25.5%) are provided with condominium unit in the third floor while only 37(19.7%) preferred it, only28 (14.9%) provided in the ground which is very small number in relation to the number of individuals who preferred it which is 42(22.3%). Generally, the figure shows mismatch between the demands and access to a floor.

Table 4.7: Purchasing Condominium and Floor Choice

| | Items | | | | | | |
|-----|-------------|--------------|--------------|------------|------|--|--|
| | Purchasing | Floor Status | Floor Status | | | | |
| S/N | Condominium | Floor Choice | Floor Choice | | % | | |
| | | Achieved | Failed | N <u>o</u> | | | |
| 1 | Yes | 31 | 29 | 60 | 31.9 | | |
| 2 | Not | 45 | 83 | 128 | 68.1 | | |
| | N <u>o</u> | 76 | 112 | 188 | 100 | | |
| | % | 40.4 | 59.6 | 100 | | | |

Table 4.7 shows the relationship between the respondents purchasing decision of condominium house and their floor choice. Thus, from the total respondents only 76(40.4%) respondents are provided the floor they prefer and from these respondents, 31(40.8%) purchased the condominium house and 45(59.2%) respondents, even though, they were provided the floor they prefer did not purchase the condominium house that may be because of other factors like cost, quality, location...etc. The other, 112(59.6%) respondents were not provided the floor that they preferred. However, 29(25.9%) of them purchased condominium house. This indicates the respondents purchasing decision was affected by location of the condominium unit they were provided

Table 4.8 below illustrates the number of respondents who were successful in location and floor preferences. That is from 188 respondents only 22(11.7%) respondents were able to secure their choice of location and floor. The majority 166(88.3%) respondents were not provided according to their preferences. In sum, this indicates that the agency did not distribute based on their choice and this makes the respondents to hesitate in purchasing condominium houses.

Table 4.8: Respondents' Success in Both Location and Floor Preference

| S/N | Items | | | | | | | |
|-----|------------|----------|-----------|-----|-----|-----|------------|------|
| | Location | Floor Wo | Floor Won | | | | | |
| | Won | Ground | G+1 | G+2 | G+3 | G+4 | N <u>o</u> | % |
| 1 | Hawelti | 1 | 2 | 3 | 1 | 2 | 9 | 4.8 |
| 2 | Aider | 1 | 2 | 1 | 0 | 1 | 5 | 2.7 |
| 3 | Semien | 0 | 1 | 0 | 2 | 0 | 3 | 1.6 |
| 4 | Kuha | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | Hadnet | 1 | 0 | 1 | 0 | 0 | 2 | 1.1 |
| 6 | Adi-Haki | 0 | 1 | 2 | 0 | 0 | 3 | 1.6 |
| | N <u>o</u> | 3 | 6 | 7 | 3 | 3 | 22 | 11.7 |
| | % | 1.6 | 3.2 | 3.7 | 1.6 | 1.6 | 11.7 | |

4.3.3. Respondents' Feeling about the Condominium Houses

As, construction of condominium houses in our country and in this region is new, the residents have different feelings towards it and their feeling is affected by the cost, size, quality, location, floor, infrastructure and the distance from the center of the city. Some of them feel that it is effective in addressing the housing problem of low and middle income individuals. The other believes that it is both poor in quality and costly.

Assessing respondents feeling in terms of floor choice in relation to their family size is very important. Accordingly, the family size of the 188 respondents can be categorized into two; relatively small family size (1-4) and relatively large family size (5-8). Therefore, the majority 119 (63.3%) of the respondents have 1-4 family size, and the remaining 69(36.7%) have 5-8 family size. The floor choice of the respondents who have 5-8 family size (in decreasing order of interest) is ground and first floor. Secondly the one who prefer the second and the third floor, and their last choice is the fourth and this is

because of the respondents with more family size want to access their home without walking up and down stairs.

Table 4.9: Respondents' Feelings about the Condominium Units they Won.

| S/ | Items | | | N <u>o</u> | % |
|----|-------------------------------------|------|------|------------|------|
| N | Purchasing Condominium | Yes | No | | |
| 1 | Not Convenient | 15 | 38 | 53 | 28.2 |
| 2 | Less Convenient | 5 | 15 | 20 | 10.6 |
| 3 | Neither Convenient nor Inconvenient | 22 | 60 | 82 | 43.6 |
| 4 | Convenient | 12 | 9 | 21 | 11.2 |
| 5 | Very Convenient | 6 | 6 | 12 | 6.4 |
| | N <u>o</u> | 60 | 128 | 188 | 100 |
| | % | 31.9 | 68.1 | 100 | |

Source: Own Survey

Table 4.9, above depicts the feelings of respondents towards the location and floor of condominium houses. Accordingly, 60(31.9)) of the respondents purchased the condominium house. As far as respondents feeling, 53(28.2%) of the respondents replied the location of condominium units they won were not convenient, 20(10.5%) of the respondents replied less convenient, majority of the respondents 82(43.6%) feel neither convenient nor inconvenient, 21(11.2%) and 12(6.4%) of the respondents replied convenient and very convenient, respectively. From this finding we can infer that for 15(25%) of those paid the down payment and 38(29.7%) of those did not, said the condominium unit is not convenient. Similarly, 5(8.3%) and 15(11.7%) respondents who were purchased and didn't purchased the condominium units, respectively replied less convenient. On the other hand, for 18(30%) and 15(11.7%) of those respondents who

purchased and didn't purchased condominium houses respectively responded the condominium units are convenient and more convenient.

The respondents also suggest the agency needed to consider provision of different service facilities within the each condominium housing sites, such as, animal slaughtering room, coffee grinding room, and spice drying areas, children's play ground, and traditional utilities like kitchens. However, the FGD indicates the above services are not considered because of the experiences observing from Addis Ababa it creates disagreements among the neighbor. On the other hand, the discussion points out setback in provision of water and electric services even after transfer of the condominium houses

Moreover, the FGD also indicated at the beginning the location, size and floor of condominium houses were not provided based on the need of the residents but they were distributed by lottery method. However, later the location choice becomes base on their choices while the size and the floor remain randomly still now. According the discussion this is because it is impossible to match the demand and supply in all aspects.

4.4 Financial Capacity of the Respondents and Cost of Condominium Houses.

Ownership of a condominium consists of two parts: owning one's own unit and owning a percentage share of the common areas. The cost of living in a condominium has three components: the individual cost of purchasing or paying for a mortgage loan for the unit; individual cost of upkeep and repairs; and a monthly condominium fee. That fee must cover the costs of maintaining common areas; payment of a professional property manager to handle finances and common business; insurance for the building as a whole; and a recommended replacement reserve to build up funds to pay for future replacement of major items (roof, windows, septic tank, parking lot, etc.) Condominiums do not offer an inherent cost saving feature, but rather provide a means for a group of owners to share common costs. It is critical that potential buyers of a condominium understand that they are obligated to pay their share of the common expenses on an ongoing basis.

According to the housing agency manager, the condominium houses were built to solve the housing problem of low and middle income residents. In this section the financial capacity and income of the respondents in relation to payment arrangements for the cost of condominium unit was presented

4.4.1: Income of Respondents and Total Cost, Down Payment and Monthly Payment of the Condominium Units.

One of the objectives of the construction of condominium houses is to build affordable and quality houses for relatively low and middle income residents. As to the manager of Tigray housing agency, "providing affordable and quality house is not an easy task due to continually increasing construction input price without major change/increase in residents' income." However, with numbers of incentive and subsidy packages like subsidizing the administrative cost, providing affordable and quality houses might be possible. This is what the government is doing currently. On the other hand, the housing agency manager said, condominium housing is cost effective due to the following reasons:

- Economy of scale is ensured because of bulk purchase and mass construction.
- Using low cost construction technology
- Subsidy elements contribute a lot in minimizing the construction cost.

Moreover, the manager said that different financial subsidies have been made so far, which include:

- 30% of the cost of the studio type housing units have been subsidized
- Infrastructure development cost & administration cost is subsidized by the regional government
- Interest free five years loan is allowed by the government to the lottery winner

Table 4.10: Income of the Respondents and Condominium unit they preferred

| S/N | Items | | | | | | | | | | |
|-----|----------------|-------|--------|------|--------|------|------|-------|-----|-----|------|
| | Income | Bed 1 | Room T | ype | | | | | | | |
| | Level(Birr) | Studi | 0 | Oı | ne Bed | Two | Bed | Three | Bed | | |
| | | | | Room | | Room | | | | | |
| | | M | F | M | F | M | F | M | F | | |
| 1 | 300-750 | 6 | 14 | 4 | 26 | 8 | 12 | 4 | 2 | No | 0/0 |
| 1 | 300-730 | | 14 | | 20 | 0 | 12 | | 2 | 76 | 40.4 |
| 2. | 751- 1200 | 2 | 4 | 13 | 15 | 9 | 11 | 1 | 2 | 57 | 30,3 |
| 3 | 1201-1650 | 2 | 0 | 2 | 6 | 4 | 1 | 5 | 1 | 21 | 11.2 |
| 4 | 1651-2100 | 3 | 2 | 2 | 1 | 3 | 1 | 0 | 1 | 13 | 6.9 |
| 5 | 2100 and above | 0 | 0 | 2 | 1 | 11 | 3 | 3 | 1 | 21 | 11.2 |
| | N <u>o</u> | 13 | 20 | 23 | 49 | 35 | 28 | 13 | 7 | 188 | 100 |
| | % | 39. | 60.6 | 24.0 | 60.4 | | | | | | 100 |
| | | 4 | 60.6 | 31.9 | 68.1 | 55.6 | 44.4 | 65 | 35 | | 100 |
| | | 17.69 | ⁄o | 38.3 | | 33.5 | | 10.6% |) | | |

Table 4.10 above describes the respondent bed room preferences in relation to their income level. Thus, among 17.6% respondents who applied to have studio type, 60.6% are female, and majority earn birr 300-750, 38.3% residents preferred one bed room which includes 68.1% of female respondents and most of them earn birr 751- 1200. On the other hand, 33.5% respondents required two bed rooms, and female respondents are 44.4% less than men respondents and similarly they are low earner. With regard to three bed room it is demanded by 10.6% of the respondents, among of them only 35% respondents are female. The table presents most female respondents preferred to live in studio or in one bed room than male respondents. This is because female respondents are fewer earners than male, as it could be difficult for female respondents to pay for two or three bed rooms.

Table 4.11: Average Cost of Condominium House

| SN | Type of Rooms | Total Cost | Down Payments | Monthly Payments |
|----|----------------|-----------------------|---------------------|------------------|
| 1 | Studio | 29,136.63-32,525.15 | 2, 913.66-3,252.52 | 211.15-235.70 |
| 2 | One Bed Room | 64,839.25-85,324.5 | 6,483.93-8,532.45 | 506.41-666.40 |
| 3 | Two Bed Room | 89,573.14-157,182.64 | 13,435.97-23,671.9 | 660.72-1,164.07 |
| 4 | Three Bed Room | 124,995.20-182,094.22 | 24,999.04-36,418.86 | 984.66-1,434.42 |

Table 4.11 above describes the total cost, down payment and monthly payment of the four types of condominium units. The affordability of the condominium houses can be checked by calculating the percentage of each condominium unit the residents won from the income of the residents.

Table 4.12: Condominium Units and its Affordability

| S/N | Items | | N <u>o</u> | % | |
|-----|------------------|------------|--------------|-----|------|
| | Condominium Unit | Affordable | Unaffordable | | |
| 1 | Studio | 13 | 20 | 33 | 17.6 |
| 2 | One Bed Room | 3 | 69 | 72 | 38.3 |
| 3 | Tow Bed Rooms | 14 | 49 | 63 | 33.5 |
| 4 | Three Bed Rooms | 4 | 16 | 20 | 10.6 |
| | N <u>o</u> | 34 | 154 | 188 | 100 |
| | % | 18 | 82 | 100 | |

- a) 33 (17.6%) respondents who required studio type of room were expected to pay average monthly payment of Birr 223. 45. For 20(60.6%) of them who earn monthly income of less than Birr750, the price of the condominium unit become more than 30% of their monthly income. Therefore this makes them unable to afford. For the other 13 (39.4%) respondents who earn more than Birr 750 monthly it is less than 30% of their monthly income so that they can afford it.
- b) 72(38.3%) residents replied that they preferred to have one bed room and on average the monthly payment is Birr 586.40, this indicates for 69(95.8%) of them who earn monthly income less than Birr 2100 respondents are expected to pay above 30% of their monthly income. Only, for 3(4.2%) respondents who earn more than Birr 2100 possible to pay for it.
- c) The other, 63(33.5%) respondents who required two bed room need to make Birr 912.4 birr average monthly payment which is above 30% of their monthly income for 49(77.8%) respondents who earn monthly less than Birr 2100. However, for 14(22.2%) more than Birr 2100 earner respondents it is affordable
- d) With regard to three bed room it was chosen by 20(10.6%) respondents and they were expected to pay Birr 1,209.54 monthly payment and it was above 30% of their monthly income for 16(80%) respondents who earn less than Birr 2100. Whereas for 4(20%) respondents possible to pay for it and they are also more than Birr 2100 earner.

In general, the condominium units were affordable for 34(18%) respondents among of them 14(41.2%) were these who required two bed room and most of them are above Birr 2100 earner. Moreover, to make it more clearly it is depicted in the following pie-chart.

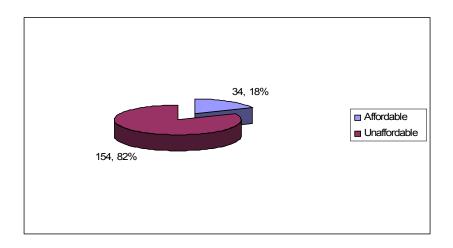


Fig. 4.3: Affordability of the Condominium Units

According, Hillsborough County Affordable Housing Task Force (2006, p.16) and $\mathcal{D}_{avid}\mathcal{I}$, housing is affordable if the monthly payment is not more than 30% of buyer's average monthly income and it is considered affordable if the purchase price is not more than 2.5 times higher than the buyer's annual income. However, the above finding indicates that the monthly payment for condominium house is above 30% of their average monthly income to the 154(82%) of the respondent that means the respondents have low income and it is the main constraint.

Table 4.13: Chi-Square Tests of Affordability

| | Value | Df | Asymp. Sig. (2-sided) |
|--------------------|---------------------|----|-----------------------|
| Pearson Chi-Square | 37.003 ^a | 12 | .000 |
| N of Valid Cases | 188 | | |

Source: Own Survey

In addition to the above finding, the statistically test of Chi-square test shows the p-value (0.000) is less than 0.05 that is below significant level, This implies the cost of

condominium unit is unaffordable especially for those whose monthly income is less than Birr 2100.

4.4.2 Respondents' Income and Sources of Finance for Down Payment

To get started as homeowners' respondents need to invest only 30% of the total payments of the condominium unit since they are unable to pay the full cost at once. The respondents' finance the condominium house not only from own saving but also they use different sources like from bank loan, family loan (support) and employer (Governmental) inters free loan.

This implies the respondents had no enough saving for the down payments. Though some of them paid the down payment from their own saving, most of them have better source, were from family support; in addition, bank loan and employers' loan have equal contribution in financing the down payment. However, high cost and high interest rate of bank loans is the main source of hesitation of the applicants

Accordingly, only 60(31.9%) of the respondents the down payment but 128(68.1%) of the respondents did not pay due to shortage of money, high cost and interest rate of bank loans.

Regarding the monthly payment in relation to the respondents' income of those who paid the down payment 30(50%) of them replied it was impossible or less possible to pay from their own income and still they are unable to identify what could be their financial source for the monthly. The other 11(18.3%) respondents replied it is fairly possible and for the rest 20(33.3%) respondents forwarded it is possible or highly possible to pay from their own income.

On the other hand about the respondents', down payment, monthly payment and the interest rate of condominium house and its arrangement indicate, 74 (39.4%) respondents replied condominium house is less expensive than other house, 48(25.5%) respondents consider it is equal and the other 66(35.1%) perceive it is more expensive than any other houses

Table 4.14: Respondents' Feeling about the Costs of Condominium House

| S/N | Income | Items | Items | | | | | | | |
|-----|-------------------|-----------|-----------|------------|-----------|-----------|-----|------|--|--|
| | Level | Not | Less | Moderately | Expensive | Very | | | | |
| | Level | Expensive | Expensive | Expensive | | Expensive | | | | |
| 1 | 300-750 | 3 | 13 | 18 | 26 | 16 | 76 | 40.4 | | |
| 2 | 751-1200 | 3 | 15 | 17 | 12 | 10 | 57 | 30.3 | | |
| 3 | 1201-1650 | 2 | 7 | 3 | 8 | 1 | 21 | 11.2 | | |
| 4 | 1651-2100 | 0 | 3 | 4 | 3 | 3 | 13 | 6.9 | | |
| 5 | 2101 and Above | 0 | 7 | 4 | 6 | 4 | 21 | 11.2 | | |
| | N <u>o</u> | 8 | 45 | 46 | 55 | 34 | 188 | 100 | | |
| | % | 4.3 | 23.9 | 24.5 | 29.2 | 18.1 | 100 | | | |

Table 4.14 presents the feeling of respondents about the costs of condominium unit. Accordingly, most of the low earners 8(4.3%) believe that it is not expensive, 45(23.9%) of the respondents perceive the cost is less expensive, 46(24.5%) of the respondents replied moderately expensive, 34(18.1%) of the respondents replied very expensive. Majority of the respondents 55(29.2%) replied the cost of the condominium is expensive and 26(47.2%) of them gain between Birr 300-750 monthly income earners.

Regarding the interest rate of monthly mortgage payment, 25(13.3%) of the respondents feel it is not reasonable as to solve the housing problem of low and middle income individuals, 70 (37.2%) are replied it is less reasonable, 23(12.2%) consider it is fairly reasonable, the other 40(21.3%) and 30 (16%) replied it is reasonable and more reasonable respectively.

Moreover, 68(36.2%) respondents replied paying the down payment in cash is appropriate for low and middle income residents, 40(58.8%) of these respondents are female respondents and they believed that suitable to pay in cash. The other 120(63.8%) respondent which include 64(53.3%) female respondent replied it is inappropriate. The following options of paying the down payment are suggested by the respondents. The payment arrangement is better to be compensated by the labor work of the respondents instead paying in cash.

- The banks loans are better to be interest free or reduce.
- The total cost of each condominium unit is better to be covered through monthly payment in order to solve the income constrains of the low income. The government ought to identify ways to subsidize and reduce the cost and the interest rate of condominium house by rising funds for housing from donors.
- They also would like to be organized in housing cooperative or in other social association like 'Eqube' in order to raise their fund and so as to be able to afford the required payment.

Based on the manager of Housing Agency response, only for condominium unit with three bed rooms, relatively better income residents were expected to pay 20% of down payment from the total cost of the condominium unit. For the others it has been already improved in the revised housing transfer proclamation. Accordingly, for studio and one bad room condominium unit it has been cut to 10% and for two bed room type of housing units also cut to 15%.

4.5. Role of Banks and Financial Institutions in Supporting the Payment for Condominium Houses

Low and middle income families required to invest first the down payment for the cost of condominium unit, rather than paying 100% of the cost at a time. However, paying the down payment for low and middle income household is difficult. In this case, banks and other financial institutions are core entities that are accessible to residents as primary housing lenders. Thus, in this section the role of financial institutions like Commercial Bank, Business and Construction Bank and Dedebit Microfinance were assessed.

Table 4.15: Respondents' View about Taking Credit and Saving Practice.

| S/N | Items | | | | | | | | | |
|-----|-----------|-------------------|------------------|-------------|------------|---|--|--|--|--|
| | Responces | Taking Credit for | Saving Practices | For Housing | N <u>o</u> | % | | | | |
| | | | Yes | No | | | | | | |
| | | | | | | | | | | |

| | | Down Payment | M | F | M | F | | |
|---|----------------|--------------|------|----|------|-----|-----|------|
| 1 | Purchase | Yes | 12 | 10 | 9 | 7 | 38 | 20.2 |
| | condominium | No | 8 | 7 | 0 | 7 | 22 | 11.7 |
| 2 | Not purchase c | ondominium | 17 | 24 | 38 | 49 | 128 | 68.1 |
| | Ng | 37 | 41 | 47 | 63 | 188 | 100 | |
| | % | 19.7 | 21.8 | 25 | 28.1 | 100 | | |

Table 4.15 indicates 60(31.9%) respondents paid the down payment to purchase the condominium houses. From those 38(63.3%) explained that they obtain credit for condominium house from bank, employer and from individuals lenders and 22(36.7%) respondents forwarded they do not obtain credit, they paid the down payment from their own saving and their family support. From this table we can infer that more of those respondents, who have saving practice, took credit than the other and this may be because they need small amount of money to add to their previous saving and may because they have already developed confidence to take credit through their previous saving.

On the other hand, 128(68.1%) respondents did not paid the down payment among them 55(43%) are male and 73(57%) are female respondent. 41(32%) of the respondents have saving practice while 87(68%) didn't have saving practice. When we compare the saving practice of these respondents who purchased condominium house with these they did not purchase, the saving practice of these who purchased condominium houses was more by 29.7% and this implies respondents which have better saving practice are able to purchase condominium house.

With regard to saving, credit and purchasing of condominium house, even though female respondents are less earner. , they have better saving practice than male. In contrast, even though they have better saving practice, male respondents took more credit for the down payment.

Table 4.16: Respondents' View about the Role of Financial Institutions

| S/ | S/ Items | | | | | | | | | | | | |
|----|------------------|-------------|-------|--------|-------|---------|-------|--------|------|--------|------|------------|------|
| N | Education | Information | | | | | | | | | | | |
| 11 | | Not | | Less | | Moder | ately | Suffic | ient | More | than | N <u>o</u> | % |
| | Level | Suffic | cient | Suffic | eient | Suffici | ient | | | Suffic | ient | | |
| | | M | F | M | F | M | F | M | F | M | F | | |
| 1 | II. 1 C 1 1 | | | | | | | | | | | | |
| 1 | High School | | | | 1.0 | | , , | | _ | | | 70 | |
| | and Below | 9 | 21 | 11 | 18 | 0 | 11 | 3 | 5 | 0 | 1 | 79 | 42 |
| 2 | Certificate | 2 | 8 | 3 | 5 | 0 | 0 | 2 | 1 | 1 | 0 | 22 | 11.7 |
| 3 | Diploma | 8 | 8 | 3 | 6 | 0 | 3 | 3 | 1 | 0 | 1 | 33 | 17.6 |
| 4 | Degree and Above | 8 | 4 | 12 | 6 | 5 | 1 | 9 | 4 | 5 | 0 | 54 | 28.7 |
| | N <u>o</u> | 27 | 41 | 29 | 35 | 5 | 15 | 17 | 11 | 6 | 2 | 188 | 100 |
| | % | 36.2 | | 34 | | 10.7 | | 6.8 | | 4.3 | | 100 | |

Table 4.16 refers the knowledge of respondents about the cost and benefit of bank loan for condominium house. Accordingly, 68(36.2%) of the respondents replied they have no sufficient information about process, cost and advantage of bank loan and 30(44.1%) of them are high school complete and include more female respondents. Almost similar number of respondents replied they have less sufficient knowledge. Although few in number 28(6.8%) of the respondents responded they have sufficient information and 13(46.4%) of them are degree holders and above. Similarly, 8(4.3%) of the respondents replied they have more than sufficient information and majority 5(62.5%) of them are male degree holders and above. The above finding indicates that respondents who have better education status have enough information about the process, cost and advantages of bank loan. Generally, majority of female respondents and low educated respondents have inadequate information than male and better educated respondents about the cost and benefit of bank loan.

Based on Commercial Bank officials recommendation, the condominium house buyers are expected to full fill the following preconditions to get credit access for condominium housing,

- Being the winner of the lottery
- Saving account at the stated branch.
- Identify card, payment receipts and Birr 500.

Regarding the role of the bank in providing information Commercial Bank Officials replied that they provide some information but not sufficient. Residents need to get more information from the agency about the detail requirements of the costs and advantages of bank loans so that they can make their choices. Moreover, officials of Commercial Bank, Dedebit Microfinance, Business and Construction Bank said, the level of understanding of the customers is different. Some individuals may not understand easily about the costs and interest rate because of their level of education or do not give due attention while others are able to understand easily. This is main constraint of communication.

Table 4.17 illustrates the feeling of respondents towards taking bank loan for housing in relation to their sex and age. Thus, majority of the respondents 52(27.6%) and 61(32.5%) considered bank loan is useful and more useful, respectively, and most of them are between age of 28-37 and female respondents. To this contrary, 31(16.5%) and 21(11.1%) of the respondents responded it is not useful and less useful, respectively. Similarly, most of respondents are found between the age of 28-37 and they are female. This implies that female respondents between the ages of 28-37 took bank loans for housing than the other age and sex groups.

Table 4.17: Respondents' view about Feeling to wards Taking Bank Loan for

| S/N | Items | | | | | | | | | | | | |
|-----|--------------|-------|-------------------------|--------|----|--------|--------|------|-----|--------|----|------------|------|
| | Age | Feeli | Feelings of Respondents | | | | | | | | | N <u>o</u> | % |
| | | Not | | Less | | Mode | rately | Usef | ul | More | ; | | |
| | | Usefi | ul | Useful | | Useful | | | | useful | | | |
| | | M | F | M | F | M | F | M | F | M | F | | |
| 1 | 18-27 | 3 | 4 | 4 | 2 | 2 | 3 | 0 | 3 | 2 | 8 | 31 | 16.5 |
| 2 | 28-37 | 5 | 14 | 6 | 4 | 1 | 8 | 7 | 25 | 6 | 22 | 98 | 52.1 |
| 3 | 38-47 | 2 | 1 | 0 | 3 | 3 | 4 | 1 | 8 | 2 | 12 | 36 | 19.2 |
| 4 | 48-57 | 0 | 2 | 0 | 0 | 1 52 | 0 | 1 | 3 | 3 | 3 | 13 | 6.9 |
| 5 | 58 and above | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 4 | 2 | 1 | 10 | 5.3 |
| | N <u>o</u> | 10 | 21 | 11 | 10 | 8 | 15 | 9 | 43 | 15 | 46 | 188 | 100 |
| % | | 16.5 | | 11.1 | | 12.3 | · · | 27.6 | · · | 32.5 | | 100 | |

According to officials of Dedebit Micro finance responses, their organization can not provide loan for condominium because of its compactedness, it is high risk and difficult to manage. However, they provide loan for cooperative housing development. There are different privileges that the institution provides to the cooperatives. These privileges are different from the privileges in banks. These are simple declined interest rate, which is 9.9% for housing while it is 10%, 19% and 18% for others and interest rates are not flat and are compounded for housing similarly there is less paperwork than others.

According to the respondents, there are different problems encountered in the process of provision of loan for housing which includes the following

- Individuals use the money for other purpose other than for housing.
- In balance between the loan to be taken and the potential capital or salary of individuals.
- The institution lack information about the customers
- The process of taking loan for housing is not easily understandable by the customers since most of them are illiterate. Discontinuity in repaying the loan.

Beside this Business and Construction Bank Mekelle Branch manager said at this time there is no framework to support condominium housing .However, formerly lent at 4% interest for other housing The bank manager also noted this was possible because the government had an outside source of low interest funds available for the program, and that source is now gone.

4.6. Distribution of Condominium Houses to the City's Inhabitants

The process of owing condominium houses was difficult from registration up to transferring; there was a lot of waiting line in the registration and after declaration of winning. Similarly according the responses of the respondents, there was no direction and awareness creation on how to live in condominium houses as well as lack of adequate information about the process of owing the condominium houses.

Table 4.18: Respondent's View about Distribution Method (Lottery) of Condominium Houses

| S/N | Items | | | | | | | | | |
|-----|--------------------|------------------|---------------------|-----------|-----------|----------|-----|-----|--|--|
| | Responses | Income L | ncome Levels (Birr) | | | | | | | |
| | | 300-750 751-1200 | | 1201-1650 | 1651-2100 | 2101 and | | | | |
| | | | | | | above | | | | |
| 1 | Appropriate | 59 | 52 | 18 | 11 | 16 | 156 | 83 | | |
| 2 | Not Appropriate | 17 | 5 | 3 | 2 | 5 | 32 | 17 | | |
| | N <u>o</u> | 76 | 57 | 21 | 13 | 21 | 188 | 100 | | |
| | % | 40.4 | 30.3 | 11.2 | 6.9 | 11.2 | 100 | | | |

Table 4.18 above presents the feeling of respondents about using lottery method in distribution of condominium house, majority of the respondents 156(83%) replied that the distribution method is appropriate and among these respondents most 59(37.8%) and 52(33.3%) gain between Birr 350-750 and Birr 751-1200 monthly income respectively. But 32(17%) of the respondents replied the distribution method is not appropriate and majority of them 17(53.1%) are within the lowest income range that is Birr350-750.

Table 4.19: Pearson Chi-Square Test for Lottery Method

| Appropriateness of | Value | Df | Asymp. Sig. (2-sided) |
|--------------------|--------|----|-----------------------|
| lottery method | 5.106ª | 4 | .277 |
| N of Valid Cases | 188 | | |

Source: Own Survey

From the above Pearson Chi-Square test of appropriateness of distribution (lottery) method we can see the P-value is greater than 0.05(0.277) so that it was not statistically significant and it was not accepted. This implies, the transfer arrangement is appropriate.

Therefore, the above finding indicates that the distribution (lottery) method of the condominium house is appropriate. However some respondents who said lottery method is inappropriate suggest the following points:

- The agency should give priority for low income earner, prostitutes and disable persons. Each administration of the city should play their role and clearly identify the individuals who are suffering because of housing problem and accordingly offering the condominium house directly with out lottery is what should have done.
- Some of the respondents also, suggest since the inhabitants have low and middle income the cost and the interest rate of the condominium should be reduced to be affordable.

In the other hand according to agency manager response the distribution of condominium house was made according to priority. Individuals with housing in their name or spouse's name are excluded and priority is given to the inhabitants with no housing and this is clearly stated in all the lows and regulations enact about condominium house.

In addition to this, the researcher asked the respondents' information about the time elapsed from paying of down payment till now, accordingly 21(35%) respondents said that they paid before five months, in comparison to 3(5%) who paid before two months, 13 (21.7%) explained as they paid before four months, 13(21.7%) replied they paid before three months and the other 10(16.6%) paid before one months.

Due to the delay the respondents were facing the following problems:-

- 1. Most of them incur double cost, in one hand they paid down payment on the other hand still they are paying house rent rather than paying their loan
- 2. In addition many family change their children's, school to the nearest of the condominium house they purchased however, because of delay they incurs a lot of transportation cost or their child suffer from walking long distance to their school.

These all things are hidden or implicit cost of condominium houses that create cost burden to the respondents and this makes the other respondents to be uncertain to pay for a condominium house. Similarly, the respondents complained the condominium houses have no quality and it is ready to transfer to the residents with out finishing the doors and other fixtures fully. And also, some of the respondents complain that the cost and process of transfer is not the same; it is costly and difficult as compare to other regions. Finally, the residents put forward the condominium houses must be transferred to the residents on time right after paying the down payment, the government had better to do the finishing part of the construction completely and its process should be clear, transparent and easy as well.

On the other hand, the manager of Housing Agency stated that, even though the houses remain with some finishing tasks, they are habitable for living so that the residents can live in them and accomplish the tasks gradually when their income gets better. More over, according to the manager' explanation, the construction of condominium house has not accomplished according to the plan. Rather, the other objectives of the Agency like creation of job opportunity to urban poor and participating cooperatives and other small firms in the construction and supply of materials were better achieved. Through, the participation of cooperatives and small firms contribute for the delay of the accomplishments of the construction.

Similarly, the FGD implied the provision (construction) of condominium housing was not according its plan it is delayed. The discussion indicated the reason for the delaines was a problem in resource supply and in participation of MSE. As a result because of inflation additional budget was required, interest increased and the residents suffered of waiting to receive their house. Moreover, in the discussion it was observed that the agency gave more emphasis on employment generation through participations of MSE than provision of low income housing to the residences.

CHAPTER FIVE

5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary of the Findings

The study is entirely focusing on identifying the reason why the lottery winners are unable or unwilling to take the opportunity. It is also assessed the affordability, policy used and transfer arrangements of the condominium houses. The already identified findings are summarized as follows.

About 20% of the condominium houses are reserved to female applicants to draw the lottery. However, the analysis of the background of the respondents shows that from 104(55.3%) female respondents only 31(29.8%) and from the other 84(44.7%) male respondents 29(34.5%) were able to make the down payment for the condominium units

they won. In other words, even if female headed households are given priority, they are still less beneficiaries of the program than their male counterparts.

Regarding the age of the respondents, the majority 98(52.1%) of the respondents are between the age of 28-37 and from those only 32(32.7%) were able to make the down payment. On the contrary, 10(5.3%) are in the age of 58 and above and 2(20%) were able to make the down payment for condominium unit. Furthermore, the analysis shows when the age of respondents increases the demand or purchase decision of the condominium houses decreases.

According to the analysis most of the respondents are relatively low income earners, government employed and less educated. The majority of better educated and relatively more income earner respondents paid the down payment to purchase condominium than less educated and relatively less earner respondents. The statistical data made in the analysis also shows that the purchase decision for condominium houses is highly affected by the income of the respondents.

In addition to this, most of the respondents agreed that they are not provided with the location, size and floor of a condominium unit they preferred. The statistical test made also shows that the purchasing decision of the respondents is partly affected by the location, size and the floor type of condominium units they won. Moreover, even though the regional housing agency manager believes that the houses are liveable as it is, most respondents believed that it is not liveable and are worried about the finishing cost.

Commercial Bank of Ethiopia plays a great role in providing loan for condominium housing. But, as it is well explained in the analysis, most of the respondents lack information about the process, advantages and costs of bank loans that they have not any knowledge and experiences of taking bank loans. On the other hand, some individuals who had saving practices are more confident enough to take bank loan than others. However, there is no saving arrangement that encourage the residents to save for housing.

The transfer of condominium houses was carried out by using lottery method that most respondents explained it was best and fair. However, the finding shows that the process of transferring or handing over of the houses is very tiring, time taking and no orientations or guideline on how to live in it. Some respondents paid the necessary payment and fulfilled other requirements five months before securing the house and some of them also not yet equipped with water, electric services and other facilities that may used in common by the residents at the same site. As a result they exposed to additional costs and inconveniences.

The focus group discussions made indicates that, the agency was not prioritizing provision of affordable housing as primary objectives rather focused on creation of job opportunity. As a result the provision of affordable housing was scarified to create job opportunities for MSE.

In general, the factual findings identified above show that the purchasing decision of individuals is highly affected by the mismatch of income of the respondents and the cost of a condominium unit, most respondents have relatively low income that they couldn't afford it and the finishing cost which is far beyond the respondents capacity, has significant effect on the purchasing decision of the respondents. Furthermore, the location, size and floor level of a condominium unit that the respondents provided also have an effect on their decision.

5.2. Conclusions

Based on the findings of data the following conclusions are driven.

The main focus of this study is to analyse the affordability and the effectiveness of policy and transfer arrangement of condominium houses. Depending on the finding, the following conclusions are drawn.

As it is identified in the finding, most of the respondents are female as they were given more opportunity by the government. However, the numbers of female respondents who decided to buy the house and paid the down payment are less than male respondents who did so. In addition to this, both male and female respondents who were able to make the down payment are all relatively higher income earners and well educated. This indicates that one of the objectives of construction of condominium house, enabling the low, middle income and female headed house holds own their own houses, is not achieved.

The affordability of, the monthly payment, down payment, and the total cost of the condominium units, is far beyond the income levels of most of the applicants. This is because no efforts have been made to define and identify the low and middle income residents in advance so as to make effective the provision of condominium housing. Moreover, the additional unexpected finishing cost also creates additional cost burden to the residents.

Most of the respondents didn't have previous saving experience and so are not confident to take bank loans for buying the house. In addition to this, unlike government employed, applicants from private and nongovernmental organizations are not provided with interest free loan to pay the down payment. Commercial Bank of Ethiopia provide loan for condominium housing however, the applicants were not provided with information about the process, advantages and cost of bank loans so that they hesitate to take loan and some of them also asked their down payment to take back. On the other hand, detail studies hasn't been made to identify banks and micro financial institutions to support the provision of housing for relatively low and middle income households, to identify the possible financial sources the residents could have and make arrangements for saving before or right from the beginning of the program.

As it is explained in the analysis, the government has already subsidized the administration cost of the construction, assuming supporting the low and middle income residents to make them owner of a house. However, the residents with this level of income are not identified and became beneficiaries of the subsidy. Individuals who are not refined in their administration at the initial need assessment directly applied to purchase the houses are able to buy regardless of their income level and having other residential house. This means that the program is unable to meet its purpose.

The transfer of condominium houses has some problems, for one thing the size, location and floor level of the condominium units which the respondents won didn't match with their choice. Secondly, the process is too long and complicated. As a result, individuals are not motivated to go through this complicated and long process. Therefore, the transfer arrangement contributed a lot for the dissatisfaction of the applicants and so is in achieving the objective.

Moreover, the condominium houses are not constructed and transferred on time according to the plan of the agency and; as a result, many are exposed to additional costs, the other thing, there is absence of orientation or minimum awareness creation on how to live in each condominium units and tackle the existing socio cultural accommodation problems. Moreover, passive participation of the residents and non public bodies at the different levels of the process has made the provision of condominium houses tiresome. Some of the condominium houses are also transferred with out installing the necessary water, electric and other common services as a result some of the residents didn't use their condominium house and still they are paying for house rent.

The approach creates job opportunity by participating micro and small firms, use low cost technologies of housing construction, demonstrate efficient land uses and attempts to change the mentality of the residents in way of accommodations. However, the plan or objective was made without considering the income of the residents, didn't take its capacity and resource into account and despite the comprehensive study made by federal IHDP, there were no specific studies made at regional level. More over, the agency gave more due attention for creation of jobs rather than provision of affordable housing.

5.3. Recommendations

Based on the above conclusions and the knowledge attained from the literature, the following recommendations are suggested. As the problem of housing in the city as well as in the region is very grave, there is a need for further compacted housing provision. As it is known, the government has already designed future housing provision programs in the city. In order to promote and introduce efficient land use and address to the housing

problem of, relatively low and middle income households, the following suggestions are recommended based on the findings.

- Accommodating the applicant's location, size and floor choice is very crucial. Political commitment, good governance, appropriate planning and management tools are important to achieve success in housing provision. Using participatory planning and management approaches, building partnerships with multi-sectors including the private developers, non-profit organizations, international funding and technical aid organizations are significant in order to create equitable, transparent and easy housing development by targeting government assistance to the relatively low and middle income residents.
- The culture of the residents has certain characteristics, such as the extended family living arrangements in many households, which require unique housing arrangement and features of family composition and household operation, for instance, the cooking tradition may require certain access to outdoor space. Therefore, analyzing the contextual, cultural, socio economic and environmental characteristics of the residents to influence positively the perception of the residents towards the acceptance of condominium housing. More over preparing condominium handbook directory to guide the neighbor how to live with others in the condominium housing.
- Providing adequate information about the requirements, costs, advantages of loans from banks and microfinance institutions for condominium housing is mandatory. A sustained joint information campaign by housing agency and banks could help the residents to understand more about borrowing, particularly for condominium housing, and try to overcome the resistance of the residents to borrow. Changing the perception that interest costs are exorbitant and giving actual calculations of payment so as to help them to make decision; use of reader-friendly brochures that summarize the loan application process and highlighting the advantage of using loan are important. Accessible information can encourage broader use of a new idea. Brochures should be made available through local government offices, bank offices, post offices, and other high traffic locations. Information should also be made available on the Internet.

- Subsidizing the provision of condominium houses for all residents at all income level is difficult to manage for the following reasons: there is a huge demand for housing financial assistance because so many people are poor, and government financial resources are very limited. Policies to either offer vouchers or directly construct and subsidize new housing are very expensive. So that, government resources should not be used to subsidize the relatively higher income residents or other house owners. To the extent as resources are available, government should subsidize housing or lending for selective relatively lower income households to achieve the equity goals
- Working with the administration of the city and identify the residents with real housing problem and couldn't afford the down payment. And then providing supplementary public subsidy for housing with out competition selectively or else similar to what was done in Addis Ababa, offering an alternative labor work on the construction of the condominium houses to compensate the down payment partially or if possible totally. Moreover, considering rent as alternative housing provision for expanded years for these households not able to pay the down payments.
- Establishing a new lending framework for lenders to expand housing program such as; considering capitalization of different banks and microfinance institution and establish program parameters, find the funding required. Incorporate technical assistance into lending process by providing advice, explain the loan process and handle collection difficulties. Moreover, encouraging cooperative (member-owned) or social associations to participate in saving and lending for housing
- The agencies have to primarily focus on provision of affordable housing than creation of job opportunity. And then to decide whether to start additional new construction or not the agency should assess the effectiveness and efficiency of the condominium housing. Moreover, as soon as possible the government should be an "enabler" of solving housing problem, not a direct producer. Minimizing workload of government by redirecting the effort in working with the private sector to become more active in housing development. Limiting government role in policy setting, insuring the land allocation for low income housing purposes by guiding the location,

size, and style of housing built and cultivating private developers by giving incentives to build low cost housing rather than expanding production by government agencies. Generally, government program should make a transition into a program for private developers to create housing within affordability guidelines based on land or other subsidies provided.

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Appendix

Questionnaire Design

College of Business and Economics Department of Management Graduate Studies Program

Introduction

This questionnaire is designed to study condominium housing: affordability, payment arrangement, efficiency and effectiveness - fitness to purpose in Mekelle city by a postgraduate student for the partial fulfillment of the requirements for the award of master's degree in development studies. The information which is expected from the respondents has a great role for the success of this study. And the researcher will be responsible for keeping the information you provide confidential. I would like to give too much thanks in advance for your cooperation.

Direction: - On the following pages you will find Different questions. Please read each question and provide appropriate response.

- No need of writing your name
- Mark '✓' in the boxes to indicate answer of choice
- Write your answers briefly on the blank spaces.

| A. (| General and personal information: | | |
|------|-----------------------------------|--------------------------|--|
| | Sex | Male | |
| 1 | | Female | |
| 1 | | | |
| 2 | Age: | | |
| | | High school and below | |
| 3 | Educational level: | Certificate (10+1, 10+2) | |
| | | Diploma | |
| | | Degree and above | |
| 4 | Family size | | |
| 5 | Household head; | Male headed | |

| | | Female headed | |
|-------------|--|-------------------------|----------|
| | | | |
| | | Government employee | |
| 6 | Employment type; | | |
| U | | Self employed | |
| | | | |
| | | Non government employee | |
| | | others (specify) | |
| | | | |
| | | | |
| B. 1 | Information about the housing problem and | l condominium house | |
| 1 | What type of house are you currently living in? | Rented house | |
| | | | |
| | | with family | |
| | | | |
| | | others (specify) | _ |
| | | | _ |
| | <u>l</u> | | |
| | | | |
| 2 | Are you satisfied with your currently living | Yes | |
| | Accommodation? | No I | |
| | | | |
| 3 | If your answer to question two is No, what makes yo | ou dissatisfied? | |
| | J | | |
| | | | |
| | | | |
| 4 | | Tv | <u> </u> |
| 4 | Do you think the reason that makes you apply for | Yes | |
| | condominium house is because it is less costly? | N | |
| | | No | |
| | | | |
| 5 | If you answer to question number four is No . | what is your reason? | |
| | | | |
| | | | |
| | | | |

| 6 | What is the location | on, typ | es of bed room ar | nd floor of co | ondom | inium house yo | u won |
|---|----------------------|-----------|-----------------------|----------------|----------|-----------------|-------|
| | respectively? | | | | | | |
| | Hawelti | | Studio | | | First floor | |
| | Aider | | Studio with one | bed room | | second floor | |
| | Semien | | Studio with two | bed room | | third floor | |
| | Kuha | | Studio with three | e bed room | | | |
| | Dejen | | | | | | |
| | Kedamay Weyane | | | | | | |
| | Adi-Haki | | | | | | |
| 7 | What do you feel abo | out the s | ite (location) of the | Very conveni | ent | | |
| | Condominium house | you wo | n? | | | | |
| | | | | Less conveni | ent | | |
| | | | | | | | |
| | | | | Neither conve | enient n | or inconvenient | |
| | | | | Not conven | ient | | |
| | | | | Very convenie | | | |
| | What do you feel | about | the floor of the | | | | |
| 8 | condominium house | you woi | 1? | Less conveni | ent | | |
| | | | | Neither conve | enient n | or inconvenient | |
| | | | | Not conven | ient | | |

| | write the location, types of bed room and | floor of condominium house yo | u want |
|-------------|---|--------------------------------|---------|
| 9 | to have | | |
| | with its reason. | | |
| | • Locationreason | | |
| | Types of bed roomreasonreason | | |
| | | | |
| | Types floorreason | | _ |
| | Do you think there is housing problem in | Yes | |
| 10 | Mekell? | No | |
| | | NO | |
| | | | |
| 11 | If your answer to question nine is Yes, Why do yo | ou think the reason? | |
| | | | |
| | | | |
| C. I | nformation about financial capacity of th | e respondent and Affordability | Į |
| | and payment arrangements of the condon | | |
| | and payment arrangements of the condor | From Salary | _(birr) |
| 1 | How much is your average monthly net income? | From Business | (birr) |
| | | From | others, |
| | | (specify) | |
| | | (birr) | |
| 2 | | 4:) | —(birr) |
| 2 | How much is your total monthly expenditure? | (birr) | |
| 3 | If you are currently living in rented house how | much is | |
| | your monthly rant aynangag? | (birr) | |
| | your monthly rent expenses? | (OIII) | |
| | your monumy rent expenses? | Yes | |
| 4 | Did you pay the down payment after you won the | Yes | |

| | | | | Impossible | | |
|---|---|------------------------|----------|---------------|--------------|-----------|
| 5 | If your answer to question possible for you to make the | _ | | Less possible | e | |
| | | | | Possible | | |
| | | | | Easy | | |
| | | | | Verv easv | | |
| 6 | If your answer to question nu | umber four is yes, are | | 7 01 1 0007 | | |
| | You able to cover the finishing | - | | Impossible | | |
| | | | | Less possible | 2 | |
| | | | | Possible | | |
| | | | | Easy | | |
| | | | | Very easy | | |
| | If your answers for question | number six above is l | No, why? | | | |
| | | | | | | |
| 7 | | | | | | |
| | | | | | | |
| 8 | | | | | | |
| | If your answer for question r | number four above is, | yes from | where did you | get the mone | y for the |
| | down payment and the finish | ning cost? | | | | |
| | Sources | About 75-100% | Abo | ut 50% | About | 25% |
| | From own saving | | | | | |
| | From bank loan | | | | | |
| | From family | | | | | |

| | Other sources (specify) | | | | | |
|----|---|----------------------|------------|--|------------|---|
| 9 | Do you think purchasing conthan purchasing other house | | ess costly | Less costly Equal Costly | 7 | |
| 10 | What do you feel about the o | costs of condominium | | Moderate Expensive Expensive Very Expensi | pensive | |
| 11 | How do you evaluate the monthly mortgage payment? | | y in your | Not reasonable Fairly reasonable More reasonable | able | |
| 12 | Do you think the payment of possible for low and middle | | ish is | Yes No | | |
| 13 | If your answer for question r | number twelve is, No | what other | | ı suggest? | |
| | Role of Financial institut House | ions in supportin | g the pay | ment for co | ndominiun | n |
| 1 | Are you currently able to house? (skip if you didn't pa | | | Yes No | | |

| If yoi | | | | | |
|--------|---|----------|------------------------------|------------|---------------|
| f2you | If your answer for question number one above is No. | , why ar | e you not able to obtain cre | edit? (s | skip |
| | if you didn't pay the down payment) | | | | |
| | | | | | _ |
| | | | | | _ |
| | | | | | |
| | | | No at all | | 1 |
| 3 | Did you get enough information about the Advantage | es of | | | |
| | bank loan for condominium house? | | Less sufficient | | |
| | | | | |] |
| | | | Sufficient | | |
| | | | | | |
| | | | More than Sufficient | | |
| | | | Not useful | | |
| 4 | What is your filling towards taking bank loan for | | Less useful | | |
| | Housing? | | Useful | \bot | |
| | | | More useful | + | |
| | Did you have any saving practice before for | | Yes No | + | |
| 5 | Housing? | | INO | | |
| E. I | Distribution of condominium houses to the c | ity's ir | nhabitants | | |
| | | Less e | asy | | $\overline{}$ |
| 1 | What do you think about the process of owing a | Easy | 1 D'CC 1 | ╬ | |
| 1 | Condominium house? | | rately Difficult | | |
| | 00.140.1111.1111.1111.1111.1111.1111.11 | Diffic | ult Difficult | $+ \vdash$ | |
| | | | | | |
| 2 | How long from paying the down payment for | More | than five months | | |
| | condominium house? .(skip if you didn't pay the | More | than four months | | 1 |
| | down payment) | More | than three months | | 7 |
| | | More | than two months | TH |] |
| | | More | than one months | | |

| Write the problem you face and /or the cost you inc | cur because of the condominium ho | uses are |
|---|---|--|
| not distributed on time after paying the down p | ayment? (skip if you didn't pay th | e down |
| payment)) | | |
| 1.0 | | |
| | | |
| | | |
| Do you think lottery method is the best way of | Yes | |
| • | | |
| | No | |
| • • | | |
| residences? | | |
| | | |
| If your answer for question number four above is No | , what other ways can you suggest? | |
| | | |
| | | |
| | | |
| Any other comment you would like to give. | | |
| | | |
| | | |
| | | |
| | not distributed on time after paying the down p payment)) Do you think lottery method is the best way of distributing the condominium house to solve the housing problem of low and middle income residences? If your answer for question number four above is No | Do you think lottery method is the best way of distributing the condominium house to solve the housing problem of low and middle income residences? If your answer for question number four above is No, what other ways can you suggest? |

Thank you

Interview Guide Lines to Collect Data from Mekelle City Administration and Regional and Mekelle City Housing Agencies,

- 1. Are the condominium houses built according to the time plan?
- 2. Do you think the condominium housing cease the housing problem of the city?
- 3. Is it possible to build affordable and quality house for low and middle income households?
- 4. Are the condominium houses distributed according to priority?
- 5. Do you think the condominium house is cost effective?
- 6. Does the building receive government financing or subsidy to reduce rents? (to make the down payment and monthly rents more affordable)
- 7. Is there any associated cost of finishing the condominium house after paying the down payment other than the monthly payment?
- 8. Do you think paying 20% of the price of the condominium house as down payment is affordable by low and middle income households?
- 9. What are the major problems raised by the beneficiaries?

Interview Guide Lines to Collect Data from Construction and Business Bank, Commercial Bank and Dedebit Microfinance.

- 1. What is the role of your organization to encourage saving for housing?
- 2. What are the conditions to get credit access for condominium housing?
- 3. Is there any privilege in providing housing loan?
- 4. What are the difficulties encounter so far?

5. Did you provide information about the requirements, costs, and advantages of bank loans

Focus Group discussion check list

- 1. Do you think detail study is made about housing problem, need of the residents and provision of condominium housing?
- 2. Are the condominium houses built and transferred according to the time plan? If not why and what is its impact on cost and satisfaction of the residents?
- 3. What are the problems for not providing the needed floor and size of a condominium house?
- 4. Do you think the provision of condominium housing is fair, transparent, timely, easy and achieve equity objective? For example, providing interest free loan only for government employee may affect equity adjectives.
- 5. Do you think the residents know every thing about the process of getting a condominium house? Individuals were purchasing residential condominium housing while they have their private house
- 6. What are the major complains raised by the beneficiaries about the process of transferring condominium housing?
- 7. would you think the government should continuo construction of condominium housing

Vision, Mission and Objectives of Mekelle City

Mekelle has formulated a development vision and design the following mission and objectives in consultation with the wider public at large during successive consolation processes.

Vision: - "Seeing our city being a center of industry and commerce, education and culture, wherein poverty would be reduced and effective good governance promoted and prevailed".

Mission: - "By enhancing the implementation capacity, provide well developed infrastructure services in equal and economical way to facilitate the city's development and create conducive administrative environment".

Objectives: - Provide efficient and effective services;

- Provide quality and rationally well distributed and physical infrastructures;
- Reduce urban poverty and urban unemployment;
- Exercise the supremacy of law;
- Address HIV and HIV related disease;
- Environmental improvement through different prevention and protection mechanisms;
- Enhance the city's revenue;
- Promote investment opportunities, build the capacity of micro and small scale enterprises; and

- Minimize social problems such as street children, beggary, prostitution, juvenile delinquency, etc.

Affordable Housing and Enhancements of Living Condition

As population increases so does the need for housing. However, to satisfy the demand is the challenging aspect that needs at framework level. Housing is a major land use in urban areas deserving special attention with respect to land delivery, subdivision planning, and density (houses and people) housing finance housing tenure, housing development methods and so on.

The current population projection indicates that about 38,000 housing units (including the backlog) are needed in the coming ten years. Within the framework of federal and regional governments' policies, a comprehensive housing development strategy mapped out in order to cope up with growing demand for housing and minimize the detrimental impact on the society and environment, MCDP (2006).

Housing Challenges and Proposed Solutions: -

The following housing challenges and solutions are identified:-

- Imbalance between housing demand and supply.
- Expansion oriented growth: Uncontrolled urban sprawl versus infrastructural cost,
- Poor urban design the plot design has brought ineffective land utilization.
- Lack of housing policy and implementation strategy.
- Uncontrolled development pattern and inefficient land supply
- High construction cost and failure to arrange housing finance
- Informal settlement and problems related land ownership and social segregation
- Problems related to lease regulation
- Lack of social services

Proposed solutions:-

- Improve land administration and management,

- Introduce development controlling mechanisms, development strategies, e.g. phasing
- Enhance land utilization efficiency by introducing compact city development, improve the urban design block arrangement and plot design on new development areas.
- Encourage mixed housing development
- Inner city revitalization, the in fill of poorly utilized areas.
- Introduce buoyant property tax item (building tax)which is elastic enough to link the delivery of municipal services more closely to their financing.

The project office has forwarded intervention options in two ways, namely, the infill of poorly utilized parts, and compact development of the new areas. The compact land-use development in urban areas is recognized as effective and efficient in achieving sustainable urban development by harmonizing the development of urban areas with the natural environment and the overall system of settlements. It is a tool to achieve a physically more balanced development through mixed land-used development and integrated spatial road networks, MCDP (2006).

Mixed Housing development

The mixed housing development includes residential with commercial activities, residential of different in come classes in which there are tow possibilities of implementation.

- a) the horizontal condominiums and
- b) the vertical condominiums.
- Share the cost of infrastructural facilities and public utilities.

| | | | | | | | year | | | | | | |
|-------------|---|--------------------------------|-------------------------|--------|--------------------|-------|----------------------|-----------|---------------------|------------|-----------------|------------|--|
| | types of | es of 1997 1998 1999 2000 2001 | | | | | | 2002 | | | | | |
| | | No of | area | No of | Area | No of | area | No of | | | area | No of | |
| .No | service | plot | k.m | plot | k.m | plot | k.m | plot | Area k.m | No of plot | k.m | plot | area k.m |
| 1 | Residency | 12 | 4388.6 | 1530 | 276453 | 30 | 11550 | 848 | 174659 | 1155 | 244674 | 52 | 24180 |
| 2 | commerce | 2 | 2,400 | 1 | 194 | 3 | 1,285 | 11 | 53,537 | 13 | 21,680 | 16 | 294,713 |
| 3 | Industry | | | 1 | 875 | 4 | 40,250 | 1 | 500 | 3 | 3,920 | 2 | 3,925 |
| | social | | | | | | | | | | 10.1 | | |
| 4 | service | | | | | | | | | 1 | 55,184 | 2 | 27,504 |
| 5 | Temporary | | | | | | | | | | 225.45 | | |
| | Total | 14 | 6,789 | 1,532 | 277,822 | 37 | 53,085 | 860 | 228,696 | 1,172 | 325,45 8 | 72 | 350,328 |
| | Total | 14 | 0,789 | 1,332 | 211,022 | 31 | 33,063 | 800 | 220,090 | 1,172 | 0 | 12 | 330,320 |
| | | | | | | | Year | | | | | | |
| | | 2003 | | 2 | 004 | 2 | 005 | 2 | 2006 | 2007 | 7 | Total | |
| | types of | No of | area | No of | | No of | area | No of | | | area | No | |
| .No | service | plot | k.m | plot | Area k.m | plot | k.m | plot | Area k.m | Residency | k.m | plots | size in k.m |
| 1 | Residency | 28 | 10907. 5 | 722 | 1017164 | 3135 | 618002 | 2111 | 420142.4 | 1026 | 2600.4 8 | 10204 | 1007300 |
| 1 | Residency | | | /22 | 191716.4 | 3133 | 618002 | 2111 | 428142.4 | 1836 | 8 | 10304 | 1987280 |
| | | 20 | 3 | | | | 15/127 | | | | | | |
| | | | | | 81 084 25 | 91 | 154,37 7 | 183 | 173 675 | 45 | 4 372 | 400 | 845 979 |
| 2 | commerce | 4 | 58,362 | 44 | 81,084.25 2 500 | 91 | 7 | 183 | 173,675 104 182 | 45 | 4,372 20,000 | 400 | |
| | | | | | 81,084.25 2,500 | 91 | 154,37 7 8,625 | 183 66 | 173,675 104,182 | 45 31 | 4,372 20,000 | 400 111 | |
| 2 | commerce Industry | | 58,362 | 44 | | | 7 | | | | | | 186,178 |
| 3 | commerce Industry social | 4 | 58,362 1400 | 44 | 2,500 | 4 | 8,625 | 66 | 104,182 | 31 | 20,000 | 111 | 186,178 |
| 2 3 4 | commerce Industry social service | 4 1 3 | 58,362 1400 20250 | 44 1 6 | 2,500 40,201 | 7 | 7 8,625 17,289 | 32 | 231,964 84,312.3 | 60 | 20,000 5,433 | 111 | 186,178 31513 |
| 2 3 | commerce Industry social | 4 | 58,362 1400 | 44 | 2,500 | 4 | 8,625 | 66 | 104,182 | 31 | 20,000 | 111 | 845,979 186,178 315137 156905.6 |

Mekelle Municipality 2008-2009/10 Distributed Lands for Different Purposes

| Year | Types of Service | Ways of | No of | | |
|------|------------------|------------------|------------|------------|-----------------|
| | | Distribution | plot s | Area k.m | Remarks |
| | | Residency | 715 | 100,000 | |
| 1998 | | Condominium | 14 hectare | | |
| 1776 | Residency | Diaspora | 385 | 96,250 | |
| | social and | social and | 185 | | |
| | economic service | economic service | | | |
| | | Cooperative | 1486 | 208,040 | |
| | | Lease | 313 | | |
| 2009 | | Bid | 129 | 200,000 | 74 Residency |
| 2009 | | | | | 55 firms |
| | | Industry | 20 hectare | 200,000 | |
| | Residency | Diaspora | 422 | 105,500 | |
| | social service | Lease | 77 | | |
| | | Cooperative | 3,179 | 445,060 | 139 cooperative |
| | | Dsiable | 100 | 13,020 | |
| | | Military | 126 | 26,040 | |
| | | Diaspora | 400 | 100,000 | |
| | Residency | Bid No.29 | | 11,176.48 | |
| 2010 | social service | Lease | | 204,798.23 | |
| | Micro and small | Metal Work | | 24933.66 | |
| | Firms | and others | | | |
| | Commerce | Bid No 29 | | 3,938 | |
| | Fattening | Bid | | 11,290 | |

Source: Mekelle City Municipality Report

Housing Agency Vision:-

To see housing problems ceased accordingly and creating livable neighborhood in the city.

Housing Agency Mission:-

Strive to build affordable and quality houses for low and middle income households of the city as well as bring high employment opportunities by participating MSE.

Housing Agency Goals:-

- 1. Increase access to decent affordable housing and increase home ownership.
- 2. Permit no net loss of committed affordable housing, and make every reasonable effort to maintain the supply of affordable market rate housing.
- 3. Expand economic and employment opportunities, through active and wide participation of M.S.E.
- 4. Improve saving habits of the society so as to enable them to own their own houses.
- 5. Enlarge and strengthen construction material supplies to make low cost housing construction possible.
- 6. Building the capacity of construction industry of the region by enhancing Participation of private contractors (companies).
- 7. Continuous and sustainable introduction of new and low cost technologies of housing construction.
- 8. To take part on beautification of our cities through introducing standard and quality buildings.
- 9. Distribute committed affordable housing within the regional cities on demand bases.
- 10. Providing different types of housing units so as to increase homeownership opportunities for low and moderate income households of the region.

Housing Agency Objectives:-

• The agency needs to secure 1.19 billion birr for low cost houses construction from bond sale.

Regional Yearly Financial Demand for Condominium Housing Construction

| Type of houses | yearly fin | | | | |
|----------------|------------|--------|--------|--------|---------|
| | 2007 | 2008 | 2009 | 2010 | |
| | | | | | Total |
| Residential | 134.87 | 198.28 | 288.51 | 468.53 | 1090.19 |
| Commercial | 12.95 | 19.04 | 28.57 | 44.99 | 105.55 |
| Total | 147.82 | 217.28 | 317.08 | 513.52 | 1195.74 |

Source: Tigray Housing Development Agency

Regional Yearly Construction Plan of Condominium Housing Units

| | | Yearly plan | | | | | | |
|----------------|------|-------------|------|-------|--------|--|--|--|
| | 2007 | 2008 | 2009 | 2010 | | | | |
| Type of Houses | | | | | | | | |
| Residential | 3,70 | 5,18 | 7,40 | 11,10 | 27,380 | | | |
| | 0 | 0 | 0 | 0 | | | | |
| Commercial | 370 | 518 | 740 | 1,110 | 2,738 | | | |
| | | | | | | | | |
| Total | 4070 | 5,69 | 8,14 | 12,21 | 30,118 | | | |
| | | 8 | 0 | 0 | | | | |

Source: Tigray Housing Development Agency

- Building 30,118 housing units from which 10% are used for commercial purpose in the coming four years.
- Provide at least four types of housing units i.e.
- Studio type ------21% (every year)
- With one bed room ------41% (every year)

- With two bed rooms------30% (every year)
- With three bed rooms------08% (every year)
- Creating employment opportunities for 2,005 MSE associations and more than 40,000 individuals.

Year Created Job Opportunities

| Year created job opportunities | 1999 | 2000 | 2001 | 2002 | Total |
|--------------------------------|------|------|-------|-------|--------|
| | | | | | |
| For MSE associations required | 271 | 379 | 542 | 813 | 2005 |
| For Individuals | 5,42 | 7,59 | 10,84 | 16,26 | 40,117 |
| | 1 | 0 | 2 | 4 | |

• Participating at least 340 construction companies during the coming four year.

Housing Agency Principles:-

- 1. Affordable housing should be the agency's priority
- 2. Market rate affordable housing should be the primary means of providing affordable housing
- 3. In providing affordable housing, priority should be targeted to the low and middle income households of our region.
- 4. Affordable housing should be used to help prevent homelessness and promote a diverse community.
- 5. Equal housing opportunity should be a reality.
- 6. A range of housing choices should be available to accommodate the needs of our targeted groups.
- 7. Offering a practical approach of on-the-job training for Technical, Vocational Education and Training (TVET) students on the construction sites.
- 8. The use of standardization and environment-friendly alternative building materials and prefabricated construction elements

Regional Yearly Created Job Opportunities

| Year created job opportunities | 2007 | 2008 | 2009 | 2010 | Total |
|--------------------------------|------|------|-------|-------|--------|
| For MSE associations required | 271 | 379 | 542 | 813 | 2005 |
| For Individuals | 5,42 | 7,59 | 10,84 | 16,26 | 40,117 |
| | 1 | 0 | 2 | 4 | |

Source: Tigray Housing Development Agency

Regional Condominium Houses Construction Plan and Demand

| | C. | | _ | |
|-----|----------|--------|------------|------------------------|
| S/n | City | Demand | Percentage | Construction plan 2008 |
| 1 | Mekelle | 14,647 | 51.4 | 2928 |
| 2 | Shire | 2,273 | 7.98 | 455 |
| 3 | Axum | 2,393 | 8.39 | 478 |
| 4 | Machew | 590 | 2.07 | 118 |
| 5 | Adigrat | 3613 | 12.68 | 723 |
| 6 | Humera | 795 | 2.79 | 159 |
| 7 | Adwa | 1561 | 5.48 | 312 |
| 8 | Korem | 293 | 0.77 | 99 |
| 9 | Alamata | 522 | 1.37 | 104 |
| 10 | Wkuro | 1000 | 2.63 | 119 |
| 11 | Abbyiadi | 684 | 1.8 | 92 |
| 12 | Sheraro | 1000 | 2.63 | 111 |
| | Total | 28,497 | 1000 | 5698 |

Source: Tigray Housing Development Agency

| Costs , Current P | rices and Payment | Arrangements of Dif | Terent Types of Condon | initum 110usc | | | | | | | | |
|--------------------------------|---|---|--|--|--|---|---|--|---|--|---|---|
| Tyeps of Bed Room | Area K.M | Constraction cost | Adminstration cost | Total cost | 10% Down payment | 90% Installment Puyment | Monthly Puyment for 25 Years | Monthly Puyment for 24 Years | 20% Down peyment | 80% Installment Puyment | Monthly Puyment for 25 Years | Monthly Puyment for 24 Years |
| | 24.85 | 29,136.63 | | 29,136.63 | 2,913.66 | 26,222.96 | 211.15 | 213.74 | 5827.325 | 23,309.30 | 187.69 | 189.99 |
| Studio | 26.06 | 30,555.35 | | 30,555.35 | 3,055.54 | 27,499.82 | 221.43 | 224.15 | 6111.07 | 24,444.28 | 196.83 | 199.25 |
| 0 BR | 26.4 | 30,954.00 | | 30,954.00 | 3,095.40 | 27,858.60 | 224.32 | 227.08 | 6190.8 | 24,763.20 | 199.39 | 201.84 |
| | 27.74 | 32,525.15 | | 32,525.15 | 3,252.52 | 29,272.64 | 235.70 | 238.60 | 6505.03 | 26,020.12 | 209.51 | 212.09 |
| Tyeps of Bed Room | Area K.M | Constraction cost | Adminstration cost | Total cost | 10% Down payment | 90% Installment Puyment | Monthly Puyment for 20 Years | Monthly Puyment for 19 Years | 20% Down peyment | 80% Installment Puyment | Monthly Puyment for 20 Years | Monthly Puyment for 19 Years |
| | 38.71 | 64,839.25 | | 64,839.25 | 6,483.93 | 58,355.33 | 506.41 | 516.68 | 12967.85 | 51871.4 | 450.14 | 459.27 |
| | 40.44 | 67,737.00 | | 67,737.00 | 6,773.70 | 60,963.30 | 529.04 | 539.77 | 13547.4 | 54189.6 | 470.26 | 479.79 |
| | 40.94 | 68,574.50 | | 68,574.50 | 6,857.45 | 61,717.05 | 535.58 | 546.44 | 13714.9 | 54859.6 | 476.07 | 485.73 |
| | 42.49 | 71,170.75 | | 71,170.75 | 7,117.08 | 64,053.68 | 555.86 | 567.13 | 14234.15 | 56936.6 | 494.10 | 504.12 |
| 1 Bed oomR | 44.49 | 74,520.75 | | 74,520.75 | 7,452.08 | 67,068.68 | 582.02 | 593.83 | 14904.15 | 59616.6 | 517.35 | 527.85 |
| | 45.56 | 76,313.00 | | 76,313.00 | 7,631.30 | 68,681.70 | 596.02 | 608.11 | 15262.6 | 61050.4 | 529.80 | 540.54 |
| | 47.87 | 80,182.25 | | 80,182.25 | 8,018.23 | 72,164.03 | 626.24 | 638.94 | 16036.45 | 64145.8 | 556.66 | 567.95 |
| | 50.55 | 84,671.25 | | 84,671.25 | 8,467.13 | 76,204.13 | 661.30 | 674.71 | 16934.25 | 67737 | 587.82 | 599.74 |
| | 50.94 | 85,324.50 | | 85,324.50 | 8,532.45 | 76,792.05 | 666.40 | 679.92 | 17064.9 | 68259.6 | 592.36 | 604.37 |
| Tyeps of Bed | | | | | | | | | | | | |
| Room | Area K.M | construction cost | Adminstration cost | Total cost | 15% Down peyment | 85% □□.□□ | Monthly Puyment for 20 Years | Monthly Puyment for 19 Years | 20% Down peyment | 80% Installment Puyment | Monthly Puyment for 20 Years | Monthly Puyment for 19 Years |
| | Area K.M 50.93 | constraction cost 85,307.75 | Adminstration cost 4,265.39 | Total cost 89,573.14 | | 85% □□.□□ | | | | | | |
| | | | | | peyment | | for 20 Years | for 19 Years | peyment | Puyment | for 20 Years | 19 Years |
| | 50.93 | 85,307.75 | 4,265.39 | 89,573.14 | peyment 13,435.97 | 76,137.17 | for 20 Years 660.72 | for 19 Years 674.12 | peyment 17914.6275 | Puyment 71658.51 | for 20 Years 621.85 | 19 Years 634.46 |
| | 50.93 51.5736 54.2184 56.68 | 85,307.75 86,385.78 90,815.82 94,939.00 | 4,265.39 4,319.29 4,540.79 4,746.95 | 89,573.14 90,705.07 95,356.61 99,685.95 | 13,435.97 13,605.76 14,303.49 14,952.89 | 76,137.17 77,099.31 81,053.12 84,733.06 | for 20 Years 660.72 669.07 703.38 735.31 | for 19 Years 674.12 682.64 717.64 750.23 | peyment 17914.6275 18141.0138 19071.3222 19937.19 | Puyment 71658.51 72564.0552 76285.2888 79748.76 | for 20 Years 621.85 629.71 662.00 692.06 | 19 Years 634.46 642.48 675.43 706.10 |
| | 50.93 51.5736 54.2184 56.68 57.17 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 | for 20 Years 660.72 669.07 703.38 | 674.12 682.64 717.64 750.23 756.71 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 | for 20 Years 621.85 629.71 662.00 692.06 698.04 | 19 Years 634.46 642.48 675.43 706.10 712.20 |
| | 50.93 51.5736 54.2184 56.68 57.17 56.68 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 | 674.12 682.64 717.64 750.23 756.71 750.23 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 | 621.85 629.71 662.00 692.06 698.04 692.06 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 |
| Room | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 | 674.12 682.64 717.64 750.23 756.71 750.23 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 | 621.85 629.71 662.00 692.06 698.04 692.06 729.54 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 |
| Room | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 | for 20 Years 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 |
| Room | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,512.12 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 | for 20 Years 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 957.99 |
| Room | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 76.9 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 128,807.50 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 6,440.38 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 135,247.88 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 23,416.00 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,512.12 114,960.70 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 1,151.49 | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 1,174.84 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 31221.33 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 124885.32 | 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 1,083.75 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 957.99 1,105.73 |
| Room | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 76.9 88.76 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 128,807.50 148,673.00 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 6,440.38 7,433.65 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 135,247.88 156,106.65 | peyment 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 23,416.00 23,671.90 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,521.20 114,960.70 132,690.65 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 1,151.49 1,164.07 | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 1,174.84 1,187.68 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 31221.33 31562.528 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 124885.32 126250.112 | 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 1.083.75 1.095.60 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 957.99 1,105.73 1,117.82 |
| Room | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 76.9 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 128,807.50 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 6,440.38 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 135,247.88 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 23,416.00 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,512.12 114,960.70 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 1,151.49 | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 1,174.84 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 31221.33 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 124885.32 | 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 1,083.75 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 957.99 1,105.73 |
| Room | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 76.9 88.76 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 128,807.50 148,673.00 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 6,440.38 7,433.65 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 135,247.88 156,106.65 | peyment 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 23,416.00 23,671.90 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,521.20 114,960.70 132,690.65 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 1,151.49 1,164.07 | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 1,174.84 1,187.68 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 31221.33 31562.528 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 124885.32 126250.112 | 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 1.083.75 1.095.60 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 957.99 1,105.73 1,117.82 |
| Room 2 Bed Room Tyeps of Bed | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 76.9 88.76 89.73 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 128,807.50 148,673.00 150,297.75 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 6,440.38 7,433.65 7,514.89 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 135,247.88 156,106.65 157,812.64 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 23,416.00 23,671.90 20% Down | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,512.12 114,960.70 132,690.65 134,140.74 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 1,151.49 1,164.07 1,164.07 Monthly Puyment | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 1,174.84 1,187.68 Monthly Puyment | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 31221.33 31562.528 31562.5275 20% Down | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 124885.32 126250.112 126250.111 80% Installment | 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 1,083.75 1,095.60 Monthly Puyment | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 957.99 1,105.73 1,117.82 Monthly Puyment for |
| Room 2 Bed Room Tyeps of Bed | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 76.9 88.76 89.73 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 128,807.50 148,673.00 150,297.75 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 6,440.38 7,433.65 7,514.89 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 135,247.88 156,106.65 157,812.64 | 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 23,416.00 23,671.90 20% Down peyment | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,512.12 114,960.70 132,690.65 134,140.74 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 1,151.49 1,164.07 1,164.07 Monthly Puyment for 15 Years | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 1,174.84 1,187.68 Monthly Puyment for 14 Years | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 31221.33 31562.528 31562.5275 20% Down peyment | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 124885.32 126250.112 126250.111 80% Installment Puyment | 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 1,083.75 1,095.60 Monthly Puyment for 15 Years | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 1,105.73 1,117.82 1,117.82 Monthly Puyment for 194Years |
| Room 2 Bed Room Tyeps of Bed | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 76.9 88.76 89.73 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 128,807.50 148,673.00 150,297.75 constraction cost 113,632.00 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 6,440.38 7,433.65 7,514.89 Adminstration cost 11,363.20 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 135,247.88 156,106.65 157,812.64 Total cost 119,436.71 | peyment 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 23,416.00 23,671.90 20% Down peyment 24,999.04 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,512.12 114,960.70 132,690.65 134,140.74 80% Installment Puyment 95,549.37 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 1,151.49 1,164.07 1,164.07 Monthly Puyment for 15 Years 99.996.16 | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 1,174.84 1,187.68 Monthly Puyment for 14 Years 984.66 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 31221.33 31562.528 31562.5275 20% Down peyment 1,019.86 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 124885.32 126250.112 126250.11 80% Installment Puyment 24999.04 | 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 1,083.75 1,095.60 Monthly Puyment for 15 Years 246.17 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 957.99 1,105.73 1,117.82 1,117.82 Monthly Puyment for 194Years 254.97 |
| 2 Bed Room Tyeps of Bed Room | 50.93 51.5736 54.2184 56.68 57.17 56.68 57.17 59.75 67.91 76.9 88.76 89.73 Area K.M 67.84 70.89 | 85,307.75 86,385.78 90,815.82 94,939.00 95,759.75 94,939.00 95,759.75 100,081.2500 113,749.25 128,807.50 148,673.00 150,297.75 constraction cost 113,632.00 118,740.75 | 4,265.39 4,319.29 4,540.79 4,746.95 4,787.99 4,746.95 4,787.99 5,004.06 5,687.46 6,440.38 7,433.65 7,514.89 Adminstration cost 11,363.20 11,874.08 | 89,573.14 90,705.07 95,356.61 99,685.95 100,547.74 99,685.95 100,547.74 105,085.31 119,436.71 135,247.88 156,106.65 157,812.64 Total cost 119,436.71 135,247.88 | peyment 13,435.97 13,605.76 14,303.49 14,952.89 15,082.16 14,952.89 15,082.16 17,915.51 20,287.18 23,416.00 23,671.90 20% Down peyment 24,999.04 26,122.97 | 76,137.17 77,099.31 81,053.12 84,733.06 85,465.58 84,733.06 85,465.58 101,521.20 101,512.12 114,960.70 132,690.65 134,140.74 80% Installment Puyment 95,549.37 108,198.30 | for 20 Years 660.72 669.07 703.38 735.31 741.67 735.31 741.67 881.00 997.63 1,151.49 1,164.07 1,164.07 Monthly Puyment for 15 Years 99,996.16 104,491.86 | for 19 Years 674.12 682.64 717.64 750.23 756.71 750.23 756.71 898.87 1,017.86 1,174.84 1,187.68 Monthly Puyment for 14 Years 984.66 1,028.93 | peyment 17914.6275 18141.0138 19071.3222 19937.19 20109.5475 19937.19 20109.5475 23887.342 27049.576 31221.33 31562.528 31562.5275 20% Down peyment 1,019.86 1,065.71 | Puyment 71658.51 72564.0552 76285.2888 79748.76 80438.19 79748.76 84068.248 95549.368 108198.304 124885.32 126250.112 126250.11 80% Installment Puyment 24999.04 26122.965 | for 20 Years 621.85 629.71 662.00 692.06 698.04 692.06 729.54 829.18 938.94 1,083.75 1,095.60 Monthly Puyment for 15 Years 246.17 257.23 | 19 Years 634.46 642.48 675.43 706.10 712.20 706.10 744.34 845.99 957.99 1,105.73 1,117.82 1,117.82 Monthly Puyment for 194Years 254.97 266.43 |

Source: Tigray Housing Development Agency