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SATISFACTION LEVEL ASSESSMENT OF THE INTEGRATED HOUSING DEVELOPMENT PROGRAM (IHDP) RESIDENTS:

The case of Key Bahir and Mickey lay land condominium sites

By

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MASTER'S THESIS

A thesis submitted to the Ethiopian Institute of Architecture, Building Construction, and City Development (EiABC) Postgraduate Program Office in partial fulfillment of all requirements for the Degree of Master of Science in Housing and Sustainable Development.

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Title of Thesis:

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Declaration

I declare that, this thesis prepared for the partial fulfillment of the requirements for the degree of Masters of Science in Housing and Sustainable Development entitled *"SATISFACTION LEVEL ASSESSMENT OF THE INTEGRATED HOUSING DEVELOPMENT PROGRAM (IHDP) RESIDENTS: The case of Key Bahir and Mickey lay land condominium sites.*" is my original research work. It is prepared independently by my own effort with the close advice and guidance of my advisor. I also declare that that this thesis has not been presented in any university and all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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Advisor's Confirmation

Here with, I state that NARDOS SELESHI KELKAY has carried out this research work titled "*SATISFACTION LEVEL ASSESSMENT OF THE INTEGRATED HOUSING DEVELOPMENT PROGRAM (IHDP) RESIDENTS*: The case of Key Bahir and Mickey lay land condominium sites." under my supervisor. I confirm with my signature that it can be submitted for examination.

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Signature: _____ Date: _____

ABSTRACT

Residential satisfaction is individual residents' subjective evaluation of their comprehensive satisfaction regarding their housing and neighborhood environment. Many researchers in different fields have examined the personal, physical, economic, social, institutional and managerial dimensions of housing satisfaction. The Integrated Housing Development Project (IHDP) is the flagship housing project in Ethiopia since 2005. It is implemented by the government targeting to provide affordable housing to low and middle income sections of the society. This research assessed the satisfaction level of the IHDP condominium residents in Addis Ababa. It took the case of two condominium sites that have been lived in for a number of years, one in the inner city and one in the outskirts of the city. I.e. Key Baher and Mickey lay land site. Out of the internationally used dimensions of housing satisfaction survey, this research chose the two most affecting dimensions (i.e. Physical and social dimension) to measure the satisfaction level by relating it to the objective and implementation of the IHDP. Case study method is used as a research method. Qualitative method is applied for collecting data and quantitative method to compute and analyze the collected data. The target populations are taken from condominium houses constructed by AAHCPO and distributed to beneficiaries through lottery system or any other means. Purposive selection method was used to select sample residential houses to conduct the interviews. In order to make the study fair and representative of the whole study site, the samples are taken from each block /building typologies, each floors and housing typologies (Studio, one bedroom, two bedroom and three bedroom). The main finding of the study is that the residents of both condominium sites are generally satisfied by having a dwelling for their family. There were variation in the level of satisfaction among residents depending on whether the condominium is located in inner city or urban periphery, weather their housing unit is top floor or ground floor, better housing structural quality, proximity to major public service and utilities, absences of children playground, absence of adult recreation center, neighborhood cleanness, day and night bar noise and lack of living experience in multi-story houses were the main contributing factors to the lower satisfaction level of residents.

Key terms: housing /residential satisfaction, Condominium Housing, Addis Ababa.

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Abbreviations

IHDP: Integrated Housing Development Program

MWUD: Ministry of Works and Urban Development (later called MoUDHC: Ministry of Urban Development Housing and Construction)

MWUD: Ministry of Works and Urban Development

PASDEP: Plan for Accelerated and Sustained Development to End Poverty

ACSI: Addis Credit and Savings Institution

GHP: Grand Housing Project

AAHCPO: Addis Ababa Housing Construction Project Office (previously AAHDP: Addis Ababa Housing Development Project)

AU: African Union

UNECA: United Nations Economic Commission for Africa

UN: United Nations

CBE: Commercial Bank of Ethiopia

CSA: Central Statistical Agency

EC: Ethiopian Calendar

GC: Gregorian calendar

EiABC: Ethiopian Institute of Architecture, Building Construction and City Development

Local terms

Birr: Ethiopian currency

Iddir: a traditional self-help organization which provides moral and financial support to members in times of death and funerals

Iqub: is a traditional voluntary revolving saving scheme by a group of people

Key Bahir: a local name of a condominium site

Tella: homemade local drink

LIST OF TABLES

LIST OF FIGURES

CONTENT

CHAPTER 0NE: INTRODUCTION

1.1 Background of the study

Housing is one of the three most essential human needs. According to the United Nations Universal Declaration of Human Rights 1948, "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care." The increased number of housing need in Ethiopia especially in the capital city Addis Ababa has become a challenge. As a solution for the larger housing demand, different housing approaches and policies have been introduced. The focus of this research, the integrated housing development program is one of the recent housing approaches.

The Integrated Housing Development Program (IHDP) is the prominent current approach of the Ethiopian Government to solve the housing challenge to low and middle-income sections of the society. It was initiated by the Ministry of Works and Urban Development (MWUD) in 2005. (UN Habitat, 2010). The Program was originally launched as the 'Addis Ababa Grand Housing Program' which supported the endeavors of the Ethiopian Government in their implementation of the 'Plan for Accelerated and Sustained Development to End Poverty' (PASDEP).Within the IHDP, specific projects were undertaken on either on farmlands of the outskirts or inner city areas that are cleared and residents re-located. The common attribute of each project is the type of housing developed which is condominium housing: multi-storied housing units for several households where communal areas are jointly owned and managed.

This research assessed and measured the satisfaction level of the integrated housing development program residents. It identified the gap and recommended a possible solution to improve the satisfaction level of the residents.

Residential satisfaction is individuals' subjective evaluation of their comprehensive satisfaction regarding housing and neighborhood environment. It is explained by the three components of the residential environment, namely neighborhood, house, and neighbors.

The determinants of residential satisfaction are very complex. Researchers approach this framework based on housing characteristics, neighborhood characteristics, home ownership, migration, individual and household characteristics, and so on. Many researchers in different fields have examined the personal, physical, economic, social, institutional and managerial dimensions of housing satisfaction.

In general the physical, social, economic, institutional and managerial dimensions of the program are the internationally accepted indicators to measure the satisfaction level of residents in IHDP. This research also tried to refer the above dimensions and tried to make them contextual to assess and measure the satisfaction level and come up with a solution to increase the satisfaction level.

Therefore, this research purposively selected Key Bahir condominium sites from inner city and mickey lay land condominium site from urban periphery to look at location effect on dwellers housing satisfaction.

1.2 Statement of the problem

The integrated housing development program is a large-scale approach to addressing the current housing shortage. But it is criticized it for its failure to meet the resident's need and expectation starting from design till the implementation or delivery stage. Addis Ababa housing project office managed to construct 276,502 housing units until 2018 and 182,388 housing units have been delivered. In the four plan years of 2014/15 to 2017/18, it was planned to construct 400 thousand housing units, out of which the construction of more than 150 thousand housing units was completed.

Many media programs have discussed residents' dissatisfaction on many aspects of the housing. One of the criticisms is in ignoring the social and cultural values of the community. Even though it is stated on the program manual that it considers all the values but there are complaints against it by the residents. They further pointed that malfunctioning of water pipe, sanitary system, door and window are exposed dwellers for extra maintenance and replacement costs. Because of poor housing management, lack of skill in utilizing shared facilities, its potential risk for young children, condominium negatively perceived by many residents.

The housing unit area and construction material are also considered as a drawback of the program. In order to minimize the construction cost the program is criticized by using poor quality material and providing minimum unit area. The location of the construction site is also one of the problems of the program. It is highly criticized by the location of most of the condominium sites: at periphery area, which is very far from the center, resident's work place, necessary services, etc…

Some express dissatisfaction due to their inability to afford the houses of the IHDP. Though the program's targets were low and middle income groups but the project is criticized by excluding the initial targets; because time to time the houses are becoming very expensive and unaffordable.

There is only one study made on the topic with a title "condominium dwellers' housing quality perception and satisfaction in Addis Ababa" in 2015 by Tigist Ayele. The study is made in four condominium sites, Lideta and Gotera from inner city, and Bole Ayati I and Jemmo II from urban periphery. She used 30 housing quality indicators, which were grouped into seven domains to assess satisfaction. However, the level of satisfaction of residents has not been studied in targeted manner. This clearly limits the efforts of decision makers and professionals alike to improve the IHDP program.

Therefore, it is important to systematically assess and identify areas of dissatisfaction by residents, in order to give a definitive source for decision makers and professionals for future improvements. And this study assesses the satisfaction level of the integrated housing development program residents by emphasizing the two basic dimensions. I.e. Physical and social.

1.3 Objectives

1.3.1 General Objective

The general objective of this research is to measure the satisfaction level of residents in the integrated housing development program, in a way that will help future improvements.

1.3.2 Specific Objectives

- To measure the satisfaction level of integrated housing development program residents
- To identify the key areas of dissatisfaction
- To propose possible options for solution in order to improve the satisfaction level

1.4 Research questions

1. What is the level of satisfaction of residents of the integrated housing development program at Key Bahir and Mickey lay land sites?
2. What are the key areas of dissatisfaction and why?
3. What can be done to improve the satisfaction level?

1.5 Scope of the study

The geographic scope of this study is restricted to two condominium sites which are located in Addis Ababa. i.e. 'key Bahir' condominium site which is located in Arada Sub city and 'Mickey lay land' condominium site which is located in kolfe Keraniyo Sub city.

The thematic scope of the study focuses on measuring the satisfaction level of the residents who are living in the above mentioned condominium sites based on two satisfaction measurement dimensions. The two dimensions are drawn from the internationally accepted dimensions because they are found to be the key areas of focus for the residents.

1.6 Significance of the study

Since the grand housing project is the largest housing project taking place in the country, it is important to know to what extent it satisfies the users/residents. It has been more than a decade since the project started to implement and thousands of people are currently residing in the houses.

This research is significant in measuring the satisfaction level of the residents, identifying the gap/problem and proposing possible solutions. Because the project is still ongoing and there are also other housing proposals and for any future housing development, this research will contribute to increase the satisfaction level of the users/residents because it will indicate the gaps clearly and show possible solutions which will be helpful to revise the past and improve the future implementation of the project.

1.7 Limitations of the study

The limitations of this research were the availability of secondary documents written on this topic, especially in local context and the availability and willingness of the grand housing project residents to give proper response for the interview/questionnaire during the data collection phase. But I have tried to overcome the limitations by trying to get as many as possible documents written on the topic by searching on internets and libraries and also by asking the people who are working on the area and also I have tried to get as many willing respondents as needed by increasing the number of residents I have approached for interview.

1.8 Organization of the study

This paper is organized into five chapters as follows.

- The first chapter is introduction. Which discusses about; the general background of the study, the statement of the problem, the general and specific objectives of the study, the research question, the scope, significance and the limitations of the study.
- The second chapter is literature review. This has two parts. The first part discusses about the international experiences and studies made on the study topic. The second part discusses the contextual related issues.
- The third chapter is research methodology. Which discusses about; the research methodology and design used to do the study, selection of sample frame, source and type of data and also data collection and analysis methods.
- The fourth chapter is data presentation and analysis. Which discusses about; the presentation and analysis of the collected data
- The fifth chapter is conclusion and recommendations. Which discusses; the conclusion of the whole study findings and also recommendations for the problems.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

As mentioned earlier this study assesses the satisfaction level of condominium housing residents. The literature review part is done to explore more about the issues. The researcher believes that the different issues which are written by different scholars are very important for the success of this study. So this part assess the basic definition of housing, the definition of housing satisfaction, about determinants of housing satisfaction, about internationally accepted dimensions which helps to measure residential satisfaction and about the contextual review of the study area. There is also a part which discussed about different case studies on different countries.

2.2 THEMATIC LITERATURE REVIEW

2.2.1 Housing

According to Turner Housing is defined in terms of as a noun and as a verb. Housing as a verb means what it does (the process of housing) and as a noun means what it is (the product or the dwelling unit or the object) (Turner, 1976).To provide adequate housing we must have standardize procedures and products in order to operate economically by dealing with the questions of values and standards, the economies and costs and the demands of the customer or the societies (Turner, 1976).

Housing is one of the basic needs/rights of human beings. When we say “housing” it is beyond the physical framework of the building (floor, roof and walls), and includes giving permanent and reliable security to residents, ensuring the resident’s land use and permanent property ownership rights and having sufficient moving and working space. In addition to these, there should be access to infrastructure, social and economic services, which are among basic needs and important for a healthy life, inside and nearby the house at affordable prices (Government of FDRE, 2013).

The above definitions are important for this research paper because they have indicated what an adequate housing should include. These things can be seen as a factor which leads residents to be satisfied or not on their housing and the environment.

2.2.2 Definition of housing satisfaction

Between the late 1970s and early 1990s residential satisfaction has been widely studied by sociologists. However, Galster and Hesser (1981) were the first to conceptualize residential satisfaction as the gap between the actual and the desired housing situation. Some researchers also consider residential satisfaction as a predictor of behavior (e.g., (Speare, 1974); (Newman, S. J.,Duncan, G. J., 1979). It can predict behavior such as moving house or home improvement. This approach assumes that any incongruence between the set of needs and aspirations and the current residential status can be alleviated either by moving or making adjustments to the current unit or location (Galster, 1987a). Accordingly, studies dealing with residential mobility and its consequences use residential satisfaction as a predictor of moving/coping behavior.

As distinguished by Canter and Rees (1982), Residential satisfaction is explained by the three components of the residential environment, namely neighborhood, house, and neighbors. Certain types of neighborhoods are considered more problematic than others due to their physical characteristics. Residential environments can be typified by objective criteria such as building period, architectural style, spatial structure, amount of green space, and geographic location. The allocation of neighborhood characteristics is not generally disputed. But there are differences in the way residents perceive and use their environments. Residential environmental satisfaction is expressed not only by satisfaction with the dwelling or by the internal neighborhood reputation. Rather, it is mainly revealed by people's evaluation of the social climate in their neighborhood.

There are also some researchers who relate housing satisfaction with housing expectations. Campbellet.al. (1976) and Wiesenfeld (1992), state that Housing satisfaction depends on the current conditions of inhabitants and their housing expectations. Bardo and Hughey (1984) also explain that expectations are shaped by Housing need and demand. When expectations are reduced, housing satisfaction increases. Residential satisfaction is individuals' subjective evaluation of their comprehensive satisfaction regarding housing and neighborhood environment.

2.2.3 Determinants of housing satisfaction

The determinants of residential satisfaction are very complex. Researchers approach this framework on the basis of house characteristics, neighborhood characteristics, home ownership, migration, individual and household characteristics, and so on.

House characteristics have a direct impact on residential satisfaction (Lu, 1999). In terms of housing characteristics, housing size has a positive and statistical significant impact on residential satisfaction. People who live in larger housing have a higher residential satisfaction. Building age positively impacts residential satisfaction. This is because that old housing generally is located in core urban area and has more public facilities, and thus has a higher residential satisfaction. House characters I believe extend to building quality, and the whole range of physical attributes of the house.

The neighborhood characteristic or environment is an important factor in residential satisfaction.in terms of neighborhood characteristics; neighborhood environment sanitation, transport facilities, and access to services all have significantly positive effects on residential satisfaction. These neighborhood characteristic variables represent residential environment and convenience, which are positively related to residential satisfaction. Housing and neighborhood characteristics are indicative of living quality and comfort, which are closely related to residential satisfaction (Diaz-Serrano, 2009).

Individuals' or households' characteristics including income, age, gender, and household type have an influence on residential satisfaction (Lu, 1999).

Migration (movement from house to another) behavior and residential satisfaction are closely related; as a low migration rate may reflect high residential satisfaction.

The effect of **home ownership** on residential satisfaction may be mediated by some ways of home ownership-related behaviors such as sense of belonging, participation in social affairs and attending a nearby school.

Barcus (2004) groups these satisfaction determinants in to three groups of factors.

i) Characteristics of the individual or household, i.e. personal and socioeconomic Characteristics;

ii) Characteristics of the environment, i.e. dwelling and neighborhood characteristics, and

iii) Individual's subjective perceptions, valuations and aspirations.

Galster and Hesser (1981), also mention some factors such as length of residence, tenure status, the physical characteristics of the house and neighborhood, social bonds, and the socio-demographic characteristics of residents, as determinants which affect satisfaction levels.

They also state that, ''given a set of felt needs and aspirations, an individual evaluates his or her current housing situation with regard to both the dwelling unit and neighborhood.'' Those needs and aspirations are comprised of individual characteristics (e.g., social class, life cycle stage) and cultural norms.

Residents with a similar household composition may evaluate their living environment differently. A focus on objective person -environment relations or objective neighborhood characteristics gives only a limited perspective on the determinants of residential environmental satisfaction. (Karsten, L., Reijndorp, A., & van der Zwaard, J., 2006).

Certainly, subjective attributes are influenced by 'personal characteristics', which include one's socio-demographic profile. But subjective attributes are also influenced by one's 'residential quality pattern'. This brings a normative element into the picture, since the individual is asked to compare his/her real and ideal residential environments. The result of this evaluation constitutes a measure of residential satisfaction. Psycho-social aspects such as relationships with neighbors and the degree of attachment to the residential environment are stronger predictors than physical features such as infrastructure and equipment of the house and neighborhood (Amerigo, M., & Aragone´s, J. I., 1990).

2.2.4 Dimensions of housing satisfaction

Many researchers in different fields have examined the personal, physical, economic, social, institutional and managerial dimensions of housing satisfaction. Each of the dimensions is going to be discussed in detail as follows:

A. Personal dimension

The **personal dimension** of housing satisfaction identifies the personal characteristics of households. Lu (1999), Explains individuals' satisfaction with dwellings through the combination of housing, neighborhood and household characteristics. According to Barrasi , C., Ferraro, K.F., Hobey, L.L., (1984) and (Mohit, M.A, Ibrahim, M. and Rashid, Y.R. (2010) the degree of housing satisfaction of different age groups may differ from each other. Additionally, Mohit et al. (2010) use family size and the existence of working wife in the family in their objective measurement model of housing satisfaction. According to them, these predictor variables have negatively correlated with housing satisfaction.

Yin (1985) finds out that lower density housing (area per person) is residentially more satisfied than those with higher density. Mustapha, f. H., al-ped, a., wild, s., (1995) and Mohit, M.A, Ibrahim, M. and Rashid, Y.R. , (2010) explore the positive correlation between satisfaction and sex, and occupation type. Adams, (1992) takes the factors of marriage, education and race into account in housing satisfaction studies. However, there is no consensus about the direction of these factors on satisfaction. For instance, low education is sometimes led to greater satisfaction but in some cases it is associated with greater dissatisfaction. (Lee, b. A., Guest, a. M., 1983)

B. Physical dimension

The **physical dimension** of housing satisfaction includes the house type, physical quality, size, functionality, aesthetic aspects and location of housing layout and housing environment. The house type naturally affects physical and social life quality of residents. The house type which provides privacy might be evaluated as a feature that results in satisfaction (Kaitilla, 1993).

Moreover, the common use of some areas and amenities outside the house might also be seen as a factor of satisfaction in some cases (Konadu, 2001). (Ukoha, o. M., beamish j. O., 1996)who investigate the effect of different housing types on housing satisfaction in Nigeria not only include modern housing provision types such as apartment, single-family house and single room, but also traditional and cultural ones such as townhouse and cottage.

(Satsangi, M., kearns, A., 1992), argue that the low quality of construction results in the need for frequent maintenance, this in turn leads to dissatisfaction with the home. Moreover, dissatisfaction with

home maintenance causes some dissatisfaction with home use. Physical or environmental quality is another factor that influences housing satisfaction. The researchers also identify some determinants which influences housing satisfaction negatively. Some of them are; Physical problems, noise, odor, safety problems, security problems, heavy traffic, uncontrolled growth and number of accidents (Mohit et al., 2010).

According to Rohe, W.M., Stegman, M.A., (1994), homeowners adapt the house in terms of their needs to improve the functionality of the house and consequently their housing satisfaction. Soen, (1979) and Mustapha et al. (2006) discuss the positive correlation between housing satisfaction with functions inside the house such as sanitary, washing and cooking facilities, and ventilation. The varieties in room types (living room, bedroom, kitchen, dining space etc.), number and size of rooms, location of rooms in the house, existence of space for children to play, and of the balcony, brightness and sunshine are also used as variables to measure housing quality and housing satisfaction.

Onibokun, Evaluating consumers' satisfaction with housing., (1974) Sums up all these variables related with the internal space, amenities and household services under the adequacy of the housing unit. The aesthetic aspects of the home such as design of the housing unit, sidings and landscaping also affect the housing well-being; uncover the strong association between the materials of walls, roof and floor and housing satisfaction.

C. Social dimension

The **social dimension** of housing satisfaction includes satisfaction with the community. Many researchers have studied different aspects of community satisfaction. Erdoğan et al. (2007) indicate that social and environmental living conditions positively influence housing satisfaction. They emphasize different drivers of social and environmental living conditions in traditional and modern neighborhoods. This finding uncovered that the perception of housing satisfaction in modern and traditional neighborhoods differ from each other (Galster, G. C., & Hesser, G. W., 1981).

Parkes, A., Kearns, A., Atkinson, R., (2002) advocate the relationship between housing satisfaction and feelings toward neighbors. Similarly, Mustapha et al. (1995) and Westaway M.S., (2006) use satisfaction with neighbors in their neighborhood satisfaction model. Baiden P., Arkug., Luginaah, Asiedu, A. B., (2011) Consider the peace in the social environment in their housing satisfaction research in Ghana. (Zanuzdana, A., Khan, M., Kraemer, A., 2012)Elicit the positive effects of establishing strong social rela-

tions through membership in a community or NGO and community leaders on housing satisfaction in urban slums in Bangladesh. Many researchers prove that social interaction within the neighborhood not only influences the satisfaction with neighborhood social life but also improves the overall housing satisfaction.

The findings of Hashim (2003)'s study about low cost housing in Malaysia imply that those who are satisfied with their residence are more likely to be more integrated into the community as compared to those who are not satisfied. In parallel with this argument, Adams (1992) reveals that social homogeneity increases user satisfaction. The stability of the neighborhood in terms of low turnover of residents and the existence of relatives in the neighborhood improve the satisfaction level. Parkes et al. (2002) supported the contribution of the presence of a good social network in housing satisfaction. Availability of such networks in the neighborhood which provide baby-sitting, social support and sharing food, materials and experience are exposed as fundamentals of housing satisfaction in shantytowns in Puerto Rico (Caldieron, 2011). (Hourihan, 1984)Supports that belonging to a social class and local social attachments shape housing satisfaction of residents.

D. Institutional and managerial dimension

The studies about managerial dimension of housing satisfaction are limited in number. (Onibokun, 1974)Stresses the relationship between management of the housing environment and housing satisfaction. Westaway (2002) uses activities and performance of local governments as a predictor of housing satisfaction. Their studies display the objective and subjective aspects of managerial dimension of housing satisfaction.

Some researchers have evaluated the role of accessibility to urban services and infrastructure, and management of the housing environment on housing satisfaction. This aspect of housing satisfaction is related to an **institutional and managerial dimension**. Marans and Rogers (1975) and Mustapha et al. (2006) present the positive relationship between accessibility and quality of urban services and housing satisfaction. These services include educational, medical, shopping, recreational and public transportation facilities. Additionally, Westaway (2006) explores police services and street lighting as predictors of housing and neighborhood satisfaction. Similarly, parking arrangements, fire protection, telephone service, maintenance and repair services, electricity and water supply, and drainage system in the neigh-

borhood are used as variables in housing satisfaction studies in underdeveloped or developing countries.

Mohit et al. (2010) support the contribution of the existence and sufficiency of pedestrian walkways in the housing environment to the satisfaction. They state that garbage collection of city administrations may affect the residential satisfaction of residents. Similarly, cleanliness of the housing environment, the air and water quality are stressed as a direct or indirect influence on user satisfaction. Moreover, social facilities and cultural activities have positive impact on physical quality and the housing satisfaction of inhabitants (Amerigo, M., & Aragone´s, J. I., 1990).

E. Economic dimension

The major factor defining the **economic dimension** of housing satisfaction is home ownership (Kaitille, 1993; Baiden et al., 2011). (Boyle, M. A., Kiel, K. A., 2001)Discuss that the increase in house price leads to dissatisfaction in housing. They explained the effect of physical upkeep of neighboring homes on the value of the house. Therefore, housing satisfaction depends on satisfaction with the neighborhood. Mustapha, et al. (1995) add payments to own a house in order to measure housing satisfaction in Yemen.

The income level of households also defines the housing satisfaction of inhabitants. Individuals with different income levels may display different housing satisfaction on similar housing environments. Marans, (1975) Use socio-demographic variables in perceptual assessment process of housing satisfaction. They support that these variables involve a smaller portion of housing satisfaction than does the neighborhood features.

2.2.5 Case study

A. Residents' satisfaction of housing environments: the case of Istanbul, Turkey

The city has experienced rapid population growth due to the rural-urban migration and, thus, is faced with housing shortages. The most common response to housing shortage has been squatter housing. In this study, both planned and squatter environments in Istanbul were evaluated from the residents' perception point of view.

Six factors were studied:

(i) Size and physical conditions of the dwelling,

(ii) Accessibility to the city center, work place, hospital, shopping and municipal services,

(iii) Availability and maintenance of social, recreational and educational services,

(iv) Social and physical environmental problems,

(v) Climatic control of the dwelling, and

(vi) Satisfaction with neighbors.

The results of the analysis show that there is a significant difference between different neighborhoods in terms of residents' satisfaction. Residents of legal dwellings are mainly more satisfied than those of squatters. The results of Multiple Regression Analysis determined that residents' satisfaction was largely predicted by subjective evaluation of dwelling and neighborhood characteristics.

Istanbul is Turkey's largest city and the dominant center of manufacturing, services, education and culture. It has attracted millions of migrants from the other regions of the country during the last 40 years. Its population has reached 6.8 million in 1990, while it was 1 million in 1950. By the year 2000, the population is projected to reach 12 million, making Istanbul the largest city in Europe. The density of population has been concentrated in the central areas of the city. Central district is heavily congested with commercial and residential development and vehicular traffic.

Residential development shows variations which can be described according to the legal status and distance to the city center. In search for better employment opportunities in industrial and service sectors, people come to Istanbul to settle in areas which are close to employment opportunities. Within the metropolitan area of Istanbul, about 60% of existing housing stock is in the form of squatter dwellings. Squatters are used to be single or two-story dwellings built with relatively cheap materials. In the last 20 years, squatter settlements have been transformed from one- or two-story buildings to apartment buildings. They do not conform to building codes and regulations and are built without license. They are built illegally on the government and even on private lands receiving little or no municipal services. Basic services such as water and electricity are not sufficiently provided. Other services such as schools, playgrounds and health facilities are inadequate or completely lacking. In fact, inadequacy of services is a common problem for both squatter and planned areas. Planned areas of the city have been shaped by legal structure plans. The general characteristic of the planned areas is multi-story apartment blocks

with medium or high population density. Planned neighborhoods are located along the seashore, while squatters are generally located at the northern part of the city.

In this study, residential areas of Istanbul are divided into four according to their legal status and distance to the city center: central planned, new planned, traditional squatter and new squatter. Central planned areas are located near the city center. The area characteristics are narrow streets, 3-6 stories attached apartments, relatively old buildings, and a neighborhood density of 250-500 persons/ ha. Most of the residents of the area belong to moderate-low or moderate income groups.

New planned areas on the other hand, are located relatively far from the city center and along the seashore. The area characteristics are 4-10 stories detached apartments or apartment blocks, relatively new buildings, and a neighborhood density of 250 persons/ha. Most of the residents of planned neighborhoods belong to moderate or moderate- high income groups. Also, most of these residents were born in Istanbul or another large city and they have spent relatively long time as a resident in Istanbul as residents.

Traditional squatter areas are located mostly near the city center. The district characteristics are l-2 stories single family buildings, loo-250 persons/ha neighborhood density. Most of the residents of the neighborhoods belong to low or moderate-low income groups. New squatter areas are located on the outskirts of Istanbul. The district characteristics are 3-5 stories attached or detached apartments, relatively new buildings, 250-500 persons/ha neighborhood density. Most of the residents of squatter neighborhoods belong to low or moderate low income groups. In squatter areas, most of the residents were born in cities other than Istanbul or a village. Squatter residents spent relatively short time as residents in Istanbul compared to those in planned neighborhoods. Inadequate services and infrastructure are common characteristics of squatter areas.

In this study, both planned and squatter environments in Istanbul were evaluated from the residents' satisfaction point of view. Two objectives of the study were to determine whether there was: (i) an objective difference between planned and squatter housing environment; (ii) a subjective difference between the perceptions of planned and squatter housing residents regarding the quality of housing environment.

Comparing the planned and squatter housing environments, it seems as if the planned housing environments are objectively better. Thus, one would expect residents' perception to reflect this difference.

Results

Most of the houses were multi-family houses (82.7%). Only 17.3% of the sample was single-family houses. Physical conditions of buildings were mostly fair (47.5%) or good (51.5%). Total square meter of house unit was between 60-100 square meters (67.1%) and total household size was grouped as four (32.5%) to five people (27.3%). Most of the buildings (47.7%) were in the 11- to 25-year age bracket, whereas, 39.6% were in the 1- to 10-year old age bracket. The 26-50 and 50 or more years old buildings comprised 11.7% and 1.0% of the total, respectively. Average density in the neighborhood was mostly within 101-500 persons/ha group (70.0%). Most respondents were female (58.1%).

Residents with one child were 27.1%, whereas, 19.0% did not have any children, 33.1% had two children, 14.6% three, and 6.3% four or more children. The respondents who did not have any education comprised 6.5%, primary school graduates 35.4%, high school graduates 45.4%, and university graduates 12.7%.

29.8% of the respondents were born in Istanbul, 61.7% in other cities in Turkey, and the rest were born in a village in Turkey. Age of the respondents showed variations. Housewives were 44.3%, self-employed 21.7%, workers 16.9%, retired people 10.8%, and students 6.5% as the distribution of respondents' occupation. Most of the respondents were home owners (69.2%). Time the resident spent in Istanbul was mostly 16-30 years (38.5%).

The results of the factor analysis are identified by the following labels.

Factor I, referred mainly to the evaluation of the size and physical condition of the dwelling (room size, bathroom size, kitchen size, total usable area of the dwelling, dwelling plan, overall comfort, quality of construction).

Factor 2, addressed the issue of accessibility to the city center, work place, health service and availability of shopping facilities and municipal services (trash collection and street lighting).

Factor 3, contained items concerning evaluation of existence and maintenance of the social, recreational and educational facilities of the neighborhood (sports, recreational and spare-time facilities; parks, play grounds, green areas, and elementary schools).

Factor 4, was directed towards the evaluation of physical and social environmental problems in the neighborhood, such as noise, crowding, air pollution and safety in the neighborhood.

Factor 5, concerned about climatic control of the dwelling such as availability of day light, ventilation, insulation from the cold.

Factor 6, addressed the neighbors and neighborly relations in general.

One-way analysis of variance was done to determine if there were significant differences between planned and squatter neighborhoods in terms of residents' satisfaction. The comparison is made between the two groups with various evaluative factors of house and housing environments. The results of the one-way analysis of variance show that there are significant differences between planned and unplanned areas in terms of perception of dwelling, and neighborhood characteristics. Residents who live in planned areas are more satisfied than the residents of squatter neighborhoods.

There were significant differences between planned and squatter neighborhoods in terms of satisfaction with size and physical condition of dwelling (Factor l), satisfaction with accessibility to the city center, work place, health services, shopping and municipal services (Factor 2), and satisfaction with environmental availability and maintenance of social, recreational and educational services (Factor 3). There were also significant differences between the central and new planned areas for satisfaction with availability and maintenance of social, recreational and educational services (Factor 3). For social and physical environ mental problems, (Factor 4) the residents' evaluation of new squatter areas showed significant differences from the residents living in other neighborhoods. Environmental problems were reported by the residents of central planned neighborhoods. Both new squatter and old planned neighborhoods have relatively dense populations. There was also significant difference between new planned and squatter neighborhoods for climatic control of the dwelling (Factor 5). No significant difference between any groups was reported about satisfaction with neighbors. The results of regression analysis revealed that residents' satisfaction was largely predicated by satisfaction with dwelling and neighborhood characteristics.

The variable which predicts most of the satisfaction was Factor 1 (satisfaction of size and physical characteristics of the dwelling) followed by Factor 2 (satisfaction of accessibility to downtown, work place, hospital and availability of shopping and municipal services). Immediately after, Factor 3 appears (satisfaction of existence and maintenance of social recreational and educational services). The next most

significant component in the regression analysis was Factor 5 (climatic control of the dwelling). Factor 4 appeared (environmental problems) next.

Discussion and conclusion

Considering the surveyed population, the findings of the research showed that positive physical characteristics such as perceived physical comfort, perceived quality of building condition, dwelling plan and larger size of house were found to be important in accounting for higher satisfaction. Satisfaction with social and educational services and quality of neighborhood maintenance affected resident satisfaction. Social and physical environmental problems such as perceived noise, air pollution, safety and crowding affected satisfaction negatively. Satisfaction with climatic control of dwelling was also one of basic factors. Among the objective characteristics, index of building utilities effected satisfaction.

Considering the differences more carefully, it is seen that the residents who live in both planned sections are more satisfied with physical comfort, building quality, dwelling plan, spatial adequacy, access to city center, access to his/her work place, availability of shopping activities, and availability of some municipal services. The residents who live in central planned areas reported a less satisfactory situation in terms of satisfaction with the availability and maintenance of social and educational services, and social and environmental problems than the residents who live in new planned neighborhoods. Since the results showed that the residents who live in central planned areas less satisfied with the house and house environment than the residents who live in new planned areas, city government policies should take these conditions into consideration and the need for the revitalization of central districts should be taken seriously.

The residents who live in both traditional and new squatter neighborhoods reported lesser satisfactory situation in terms of satisfaction physical comfort, building quality, dwelling plan, spatial adequacy, access to city center, access to work place, availability of shopping activities, availability of some municipal services, availability and maintenance of social and educational services, social and environmental problems. Considering the surveyed squatter residents, the residents who live in new squatter areas reported a less satisfactory situation about the availability and maintenance of social and educational services and social and environmental problems. This result showed that inadequate supply of social and technical infrastructure in squatter areas effected residents'

Therefore, while developing policies, city government should consider the need for the revitalization of squatter neighborhoods in terms of improving social, recreational, educational and infrastructural services. More detailed analysis of residents with respect to their socio-demographic differences is suggested for further research.

B. Assessment of residential satisfaction in newly designed public low-cost Housing in Kuala Lumpur, Malaysia

Kuala Lumpur City, capital of Malaysia, is a federal territory of the country. The city has a land area of 243.65 km2. It is the hub and nerve center of the nation with its various political, religious, cultural, economic, banking, financial, and commercial, sports and educational activities. As the center of a developing nation, Kuala Lumpur plays a major role in the urbanization and development of the country. The city population grew from about 0.32 million in 1957 to almost 1.62 million in 2006, representing a five-fold increase over a 49-year period. This spectacular increase of population has created pressure on the existing housing stocks particularly for the low-income group. In order to tackle this problem, since 1970s, a total of 65,000 units of public low-cost housing were constructed in Kuala Lumpur to accommodate the population (KLCH, 2000). 8.1% of the city's residents are considered as low-income earners, having monthly household income less than RM1500 (US$429).

In Malaysia, the low-cost housing development programs are undertaken both by the public and the private sectors. The public low-cost housing programs which started from the First Malaysia Plan (1970–1975) are concentrated in the major urban areas like Kuala Lumpur, Georgetown. The main objective of the Public Low- Cost Housing Program (PLCH) is to improve the quality of life, eradicate poverty among the low-income group and to resettle the urban squatters.

In the Kuala Lumpur Structure Plan-2020, there are about twenty three policies outlined for the housing sector and seven of those policies are related to public low-cost housing (KLCH, 2004: p.12-9– 12-13). Therefore, one of the major focuses of the housing sector in Kuala Lumpur is on improving the quality of housing and the housing environment.

The study housing project, Sungai Bonus, is one of the 24 newly designed public low-cost housing projects completed by the Ministry of Housing and Local Government in Kuala Lumpur during the 8th Malaysia Plan. The project is located at a distance of 20 km far from Kuala Lumpur City center and it is with-

in the Wangsa Maju-Maluri strategic zone which is one of the six strategic zones of the city. The nearest city center from the housing estate is the Wangsa Maju satellite center developed with commercial, business and public rail transit facilities. The housing estate has 1896 units within an area of 12.3 ha with a density of 154 house units per hectare and it is considered as high-density housing. The project is a new generation low-cost high-rise housing built by following the CIS:1998 (CIDB, 1998) according to which each dwelling unit must have a minimum area of 63 m2 with 3 bedrooms, living room, dining room, kitchen, a separate bathroom and toilet and a drying area. The housing project is now managed and maintained by the KLCH (Kuala Lumpur City Hall).

Socio-economic characteristics of the respondents

Public low-cost housing residents of Sungai Bonus were dominantly male (93%) compared to female (7%). The ethnic composition was 62% Malays followed by 20% Chinese and 17% Indians, respectively. Majority of the respondents (55%) were between age 41 and 60, followed by the age group of 31–40 (24.5%) and the old age people (60þ) constituted 15% in the sample. Although families with 2–5 members were dominant (71%), 28% of the respondents had 6–9 persons in their families and 29.4% families have 2.5 inhabitants in each bedroom. The highest education level of the respondents was upper secondary. Mean monthly income of majority (75.5%) of respondents was between RM750 (US$214) and 1500 (US$429), followed by 14% whose earnings were more than RM1500 and 11% earned less than RM750. Majority (46%) of the respondents' jobs were in the private sector followed by 34% who had their own businesses and 13% worked in the Government. A large percentage of respondents (63%) have stayed in the housing area for 3 years followed by 27% who stayed for 4 years and only 10% stayed for 2 years. While 6% of the respondents did not own any transport, a large percentage (45%) own car followed by 32% who own motorcycle and 17% own both car and motorcycle. 30.4% of the respondents had working wives.

Discussion and conclusion

Respondents' levels of satisfaction with residential environment consisting of 45 variables reveal that the residents of low-cost housing perceived moderate level of satisfaction (65.9) with their overall housing situation. Satisfaction index with dwelling unit support services is the highest (69.3), followed by public facilities (68.2), dwelling unit features (67.1), neighborhood facilities (64.5), and social environment (60.4), respectively. The percentage of respondents with moderate level of satisfaction is large (99.0%) in neighborhood facilities, followed by 96.1% in dwelling support services, 92.2% in public facilities, 76.5% in dwelling unit features and 62.7% in social environment. This finding tends to support Lu's (1999) proposition that public housing estates are better supplied with common/public facilities to satisfy their residents. Respondents with low level of satisfaction are high (37.3%) in social environment component followed by dwelling unit features component (22.5%) and public facilities component (8.7). while percentage of respondents with low satisfaction are relatively high in social environment followed by dwelling unit features and public facilities; for other components, the percentage of respondents with low satisfaction are negligible. This finding supports Husna and Nurijan's (1987) study about public low-cost housing in Kuala Lumpur, Nurizan's (1993) study of low-cost housing in Johor, Malaysia, and Ukoha and Beamish's (1997) study of public housing in Abuja, Nigeria. But the finding is somehow tends to be contrary to other studies (Lu, 1999; Ogu, 2002; Salleh, 2008; Savasdisara et al., 1989).

2.2.6 Summary of the thematic literature review

According to the different literatures reviewed, Residential satisfaction is individuals' subjective evaluation of their comprehensive satisfaction regarding housing and neighborhood environment. It is an important topic for long time due to two major reasons. First, residential satisfaction is an essential factor of life quality. Second, individuals' residential satisfaction reflects the individuals' preferences for housing and neighborhood environment and facilities. It is explained by the three components of the residential environment, namely neighborhood, house, and neighbors.

The determinants of residential satisfaction are very complex. Researchers approach this framework on the basis of housing characteristics, neighborhood characteristics, home ownership, migration, individual and household characteristics, and so on. Many researchers in different fields have examined the per-

sonal, physical, economic, social, institutional and managerial dimensions of housing satisfaction. These five dimensions are the most accepted dimensions which used to measure a satisfaction level.

The physical dimension of housing satisfaction includes the house type, physical quality, size, functionality, aesthetic aspects and location of housing layout and housing environment. The personal dimension of housing satisfaction identifies the personal characteristics of households; it examines individuals' satisfaction with dwellings through the combination of housing, neighborhood and household characteristics. The social dimension of housing satisfaction includes satisfaction with the community. Many researchers have studied different aspects of community satisfaction. They indicate that social and environmental living conditions positively influence housing satisfaction. An institutional and managerial dimension is related to the role of accessibility to urban services and infrastructure, and management of the housing environment on housing satisfaction. The major factor defining the economic dimension of housing satisfaction is home ownership. The income level of households also defines the housing satisfaction of inhabitants. Individuals with different income levels may display different housing satisfaction on similar housing environments. Homeownership is the key factor in determining housing satisfaction, but also homeowners and renters behave differently in unsatisfactory housing situations. According to different researches on housing satisfaction; Income and homeownership exert a clear positive effect on residential satisfaction, while family size and being a renter are found to contribute negatively on housing satisfaction.

2.3 CONTEXTUAL REVIEW

2.3.1 Introduction

Since the objective of this research is measuring and identifying the key dissatisfaction areas of integrated housing project residents, it is important to understand the IHDP as a whole. How it is designed and implemented. As discussed in the previous part there are internationally accepted indicators which helps to measure the satisfaction level of residents. This part will try to identify those indicators contextually in the IHDP by answering the questions: *how did the program consider them?*

The following points will be an input to answer the above questions and to measure the satisfaction level. They are divided in six parts: introduction to the country, the general background of the IHDP, the physical, economic, social, and institutional and ownership/delivery dimensions of the program. This discussion will give a brief explanation on how the program considers those dimensions while designing and implementing.

This section also explains about the case study area.

2.3.2 ABOUT ETHIOPIA

Ethiopia is located in North -East of Africa bordering Sudan, South Sudan, Kenya, Somalia, Djibouti and Eritrea. Ethiopia is one of the oldest independent nations in the world. Ethiopia has a land size of 1,140,330 km^2 (435,186 sq miles). Ethiopia is the largest land-locked country situated in the horn of Africa. The topographic features range from a high plateau with Central Mountains divided by Great Rift Valley. The highest peak at Ras 'Dashen' is 4,533 meters above sea level, down to the 'Dankil' Depression in Afar at 110 meters below sea level. The climatic condition varies between temperature of 47 ^{0} C in the Afar depression to 10 ^{0} C in the highlands.

It is the second most populated nation in Africa with population of 94 million (2015 est.), and 13th in the world. The young and productive age accounts for 60% of the population. Ethiopia is considered as a gate way to Africa as it is a seat for AU, ECA and many international organizations: the political capital for Africa.

Ethiopian is a federal democratic republic composed of 9 National Regional states which are based on ethnic territories: These are Afar region, Amhara region, Benishangul-Gumuz region, Gambela region,

Harari region, Oromia region, Tigray region, Somali region and Southern Nations, nationalities, and Peoples' region, and two Administrative states (Addis Ababa city administration and Dire Dawa city council). The regional states are subdivided into 85 Zones which further subdivided into 800' Weredas' and around 15,000 Kebeles (5,000 urban & 10,000 Rural).

Figure 2-1 : locations of Ethiopia and Addis Ababa

2.3.3 Description of the Case Study Area

Addis Ababa, the capital city of Ethiopia is located 90 1' 48'' N latitude and 380 44' 24'' E longitudes. The city is located at the heart of the country at an altitude ranging from 2100 meters at Akaki in the south to 3,000 meters at Entoto Hill in the north. The average altitude of the city is 2400 meter above sea level. This makes Addis Ababa the third from the from the high elevation city of the world following La Paz and Quito in Latin America. Its time zone is categorized in east Africa time (UTC+3). The city occupies a total area of 540 Km^2. It is the largest as well as the dominant political, economic, cultural and historical city of the country established in 1887 by Emperor Menilik II. It is the head quarter of AU, the UNECA and other continental and international organizations. It is also a primate city in Ethiopia. (BoFED, 2015)

Furthermore Addis Ababa is the capital city of the Federal Democratic Republic of Ethiopia and it is a self-governing, chartered city with its own council, elected every five years and accountable both to the city electoral and the federal government. It has the status of a special autonomous region within the federal system of government. The city has three layers of government- the city itself, 10 sub cities and 116 weredas-the lowest level of city administration. (BoFED, 2015)

According to Central Statistical Agency (CSA) in 2011 the population of Addis Ababa was 3.2 million. There is rapid population increase of the city that has been caused by natural urban population increase and internal migration. However, 80% of the city covered by slum i.e. the existing housing condition of the city has been substandard and dilapidated, (UN Habita, 2007). This rapid population growth has been putting great pressure on the city. Then the city administration has been launched the condominium housing program in the city to improve the housing condition and to solve the housing shortage

This case study is made in two condominium sites in order to see a location effect on the level of satisfaction of the residents. The sites are from inner city and periphery. The inner city site which found in Arada Sub city is called 'key bahir' condominium site. It is constructed in 2005GC and has 4 blocks with 120 housing units. The periphery site which is found in Kolfe Keraniyo sub city is called 'mickey lay land' condominium site. It is also constructed in 2005 GC and has 145 blocks with 2900 housing units. Both sites accommodate different housing schemes and housing typologies.

Figure 2-2: location of study areas

2.3.4 Integrated Housing Development Program (IHDP)

As it is stated in the UN-HABITAT 2017 document, the Integrated Housing Development Program (IHDP) is a government-led and financed housing provision program for low-and middle-income households in Ethiopia. The program was initiated by the Ministry of Works and Urban Development (MWUD) in 2005. The Program is a continuation of the 'Addis Ababa Grand Housing Program 'which supported the endeavors of the Ethiopian Government in their implementation of the 'Plan for Accelerated and Sustained Development to End Poverty' (PASDEP). Within the IHDP, specific projects are undertaken on either brown-field sites or slum areas that are cleared and residents re-housed. The common attribute of each

project is the type of housing developed, condominium housing: multi-storied housing units for several households where communal areas are jointly owned and managed.

According to (Alebel Weldesilassie, 2016), the IHDP is a large-scale program designed by the Ethiopian government to addressing the current housing deficit, the poor quality of existing housing stock, and the future housing needs due to continued rapid urbanization.

The initial goal of the program was to construct 400,000 condominium units, create 200,000 jobs, promote the development of 10,000 micro and small enterprises, enhance the capacity of the construction sector, regenerate inner city slum areas, and promote homeownership for low income households. The Condominium Project Office database shows 276,502 housing units have been constructed until 2017 and 182,388 housing units have been delivered for new homeowners in twelve rounds.

The Ethiopian Integrated Housing Development Program is an ambitious program that directly addresses the pressing low-income housing challenge. The program is significant because it is a large-scale approach to addressing the current housing deficit, the poor quality of the existing housing stock, and the future housing needs due to continued urbanization. It allows low- and middle-income households, who typically live in precarious housing situations to access improved housing.

i. Purpose of IHDP

Housing has been universally accepted as one of the three essential human needs besides food and clothing. However, According to UN Habitat80% of the Ethiopian population lives in sub-standard slum housing that needs either complete replacement or significant upgrading. This indicates presence of massive demand for serviced, healthy and affordable housing (UN-HABITAT, 2010). The Integrated housing development program aims to:-

- Increase housing supply for the low-income population
- Recognize existing urban slum areas and mitigate their expansion in the future
- Increase job opportunities for micro and small enterprises and unskilled laborers', which will in turn provide income for their families to afford their own housing
- Improve wealth creation and wealth distribution for the nation. (UN-HABITAT, 2011)

IHDP envisioned improving the living conditions of the low income residents of Addis Ababa through the provision of affordable housing and employment opportunities. it enables low-income urban dwellers to acquire homes of their own, alleviation of urban poverty through the participation of Micro and Small Enterprises and creation of employment opportunities in the construction sector which can absorb more labor force, changing the image of the city so as to meet international standards, transfer of knowledge and skill to the construction industry, promoting cost efficient housing construction technology, empowering citizens of the city through ownership of houses and tenure security (MUDHC, 2005; World Bank, 2009).

ii. IHDP Housing Scheme

The Addis Ababa condominium housing is a multi-story building that mixes private and collective ownership, and mixes purposes (residential and commercial). The owners' share some building structure (such as staircases and corridors) and common facilities (like parking lot and communal buildings).

Initially when the program was started, it has only one type of housing scheme which is the 20/80, where the beneficiaries should pay 20% of the transfer price and the rest 80% will be paid through time. But later in 2013, based on the minimum requirement for down payment, it increases the types of housing schemes in to three: 10/90, 20/80 and 40/60 schemes. The beneficiaries for the 10/90 housing schemes are required to pay 10% of the transfer price upon owning the house, and the rest 90% will be paid through time. Those eligible for 20/80 and 40/60 are expected to pay 20% and 40% as down payment. On this time, there was also a new system started which requires a prior saving of beneficiaries. The amounts of savings per month are different based on the type of the scheme and the number of rooms.

The design of 20/80 condominium block constitutes four residential typologies units: studio, one bedroom, two bedroom and three bedrooms units with mixed function commercial units at ground floor and communal buildings.

a. **Residential unit**: it incorporated four unit typologies in each condominium block: a studio, 1-bedroom, 2-bedroom, and 3-bedroom unit types. Each unit includes a bathroom, which includes a shower, flush-toilet and basin, and a separate kitchen. When the project was started, the per-

centages in each block are 20% studio, 40% 1-bedroom, 20% 2-bedroom and 20% 3-bedroom units.

b. **Commercial unit:** Each condominium site accommodates 10% to commercial purposes, primarily small shops located at ground level and. It benefits the beneficiaries to get the house with low purchase price by the cross subsidization between commercial units and housing units. Not because it's directly related with the reduction of house price but the infrastructure and other costs are paid by the government.
c. **Communal building: -** A communal is a one-story building block serve as condominium committee office, multipurpose hall, traditional kitchen and slaughtered house. It provides to respond to the cultural needs of residents. The cost of communal buildings is included in the unit purchase price (UN-HABITAT, 2011).

iii. Economic dimension of IHDP

The program has facilitated access to credit for the low-income sector of the population, through the Commercial Bank of Ethiopia, where previously there was very limited opportunity for low-income households to secure credit for improved housing.

The program recognizes the opportunity for housing to stimulate the economy, create employment, and improve the capacity of the construction and financial sectors. The adoption of cost-effective construction techniques and systems, notably pre-cast concrete elements, have reduced construction costs (by up to 30 per cent) compared with conventional systems, improved the speed of construction, and facilitated the development of small and medium enterprises to produce construction elements. Furthermore, effective quantity surveying and construction management systems have helped reduce construction costs and material wastage, resulting in a program that is extremely cost-efficient.

Condominium unit beneficiaries are required to make a down-payment out of their own savings to secure their unit. The down-payment percentage varies according to unit type. Beneficiaries enter into a contractual loan agreement with the CBE on the basis of monthly interest and principal repayments.

The project finance structure aims to cross-subsidize the studio and one-bedroom units as a pricing strategy to increase affordability for low-income households. Studio and 1-bed units are sold lower than

their individual construction costs and 2- and 3-bedroom units are sold higher than their individual construction costs. The subsidy percentages are: studio -30 per cent, 1-bed -10 per cent, 2-bed +5 per cent, and 3-bed +10 per cent of unit construction cost. Likewise, there is intended to employ families for six months on the construction sites where they could earn ETB 2 a day (USD 15 cents) and save half of this to go towards the down-payment for a unit. Unfortunately, there is no document which shows weather this program feature was successful or not.

The Addis Credit Savings Institution (ACSI), established in 2000 and capitalized with ETB 517,000 (USD 39,000) in city funds, provides savings accounts and lending services to individuals, cooperatives, small businesses, and others. It has experienced an increase in housing lending as it offers down-payment loans to low income beneficiaries of the IHDP.

iv. Physical Dimensions of IHDP

Densification is the driving concept behind condominium housing. The IHDP believes that is generally more expensive to create lateral development than vertical development so high-rise housing should be encouraged, especially in valuable inner-city locations. IHDP projects range in density from 175 to 300 households per hectare. At the beginning as a pilot project condominium blocks were 'ground floor plus 2 and 3stories (G+2 and G+3) in height, in some cases four and five stories, therefore avoiding the need for a mechanical lift, which minimizes associated construction and maintenance costs. However, in the most recent condominium project, located in Addis Ababa, condominium blocks with ground floor plus seven to nineteen stories (G+7 to G+19 in 40/60). Although this model requires an internal lift which increases construction and maintenance costs, the value of the centrally located land necessitates the higher density to maximize the use of the inner-city land on which it is located.

There are four unit typologies incorporated into each condominium block: a studio, 1-bedroom, 2-bedroom, and 3-bedroom unit types. Each unit includes a bathroom, which includes a shower, flush-toilet, and basin, and a separate kitchen. Each unit has water, sewerage, and electricity connections.

The same overall design strategy is used across the projects, although minor modifications are made to make each project site specific. The site layout of the condominium blocks, commercial units, and communal buildings depends on the specific site, responding to available land area, land typography, and required densities. The HDPO hires new architects through a competition system to avoid monotony

between sites. New block typologies are also designed every few years and currently there are more than 15 typologies which are being used.

v. Social Dimensions of IHDP

The design proposals for the project were based on the logic that the houses themselves could not be of such fine quality because of the low-cost nature of the project, ample outdoor green space had to be accommodated onsite to make residents feel proud of their surroundings and 'remove the stigma of housing for the poor'. (UN-HABITAT, 2011)

The designers attempted to address the inevitable difficult cultural transition of some occupants in moving from low-rise buildings to high-rise buildings through providing a well-designed neighborhood, provision of communal buildings, and a strong connection to land.

Typically 40 per cent of units are 1-bedroom as statistics have shown that the balance between floor-area and purchasing price of a 1-bedroom unit is the most popular amongst condominium applicants. The unit types are distributed evenly across each story, rather than each story having only one type to encourage a mix of income groups. (UN-HABITAT, 2011).

The arrangement of the space on a condominium site should accommodate not only green areas but also schools, playgrounds, and commercial hubs spaces which can provide enough revenue to subsidize the housing. This would create a mixed-use neighborhood which serves its community and, most importantly, avoids displacing people socially.

The provision of communal buildings to condominium sites was an attempt to respond to the cultural needs of residents. The function of the communal buildings is to provide a protected space for residents to perform traditional tasks such as slaughtering goats, hand washing laundry, and cooking extensive meals: activities the housing units themselves cannot accommodate.

Initially, the price of the communal buildings was not included in the unit purchase price, which has created accessibility and use problems. At present, however, the cost of communal buildings is included in the unit purchase price, as evidenced in Gotera and Gofa sites. Unfortunately, on some project sites communal building provision has ceased in an effort to reduce construction costs.

Resident demand for communal buildings is high. On sites containing too few communal buildings, the residents themselves have started to construct them, even though this practice is forbidden by the government and it is likely these buildings will eventually be demolished. A number of residents' associations have since bought their communal buildings from the Government. (UN-HABITAT, 2011).

vi. Institutional and Managerial Dimensions of IHDP

The city administration coordinates and finances the construction of infrastructure and services. Infrastructure elements include the roads, car parks, footpaths, grass areas and services are done early project sites. For instance Bole Gerji, roads were the final element to be built so as to reduce damage to them by heavy machinery during condominium block construction.

One major infrastructure challenge facing the program is the inadequate and small-scope of the Addis Ababa sewerage system. The horizontal expansion of Addis Ababa, particularly along the south-west and north-east regions of the city, has increased the cost of infrastructure provision and services on sites located in these locations. Once the units are occupied residents pay for their water and electricity services. They enter into a contract with the service providers and should they fail to keep on top of payments water and electricity can be cut off.

The post-occupancy maintenance of private and communal areas is the responsibility of the residents, who are responsible for maintaining service fittings (toilets, showers, basins) within their units. The government takes no responsibility for the maintenance of the units once they are occupied. In some projects, residents contribute a set amount of money each month to cover the payment of a caretaker but in other projects no-one maintains the communal areas.

Solid waste collection is organized as door to door collection. Pre-collectors are usually youth cooperatives or MSE which are paid by the Kebele administration. They carry the rubbish to collection point in the neighborhood, usually big open containers. The containers are collected by trucks and transported to the landfill site. The costs are paid by the unit owners together with the water bill. On some sites, however, rubbish collection has not been organized, which creates problems for the ongoing hygiene and appearance of condominium sites.

Once residents move in, the project is deemed complete. As many post-occupancy issues have arisen, however, two written guides have been prepared by the HDPO to help residents adjust to life in condo-

minium housing. The first guide is the code of conduct; the second outlines how to carry out basic maintenance on the units. Apart from this, there is no government monitoring and evaluation of the projects.

There is a homeowners association which is formed by the residents in the compound. The responsibility of the association is controlling the security of the compound, management of common facilities like utilities, parking areas, communal buildings. As it is mentioned by one of the association leader in the case study area, even though renting is illegal but the association facilitates the process informally.

vii. Housing Delivery Strategy and Ownership structure of IHDP

The program marks a radical departure from previous government-owned rental housing approaches to that of private homeownership. The program highlights government and local authority commitment to addressing housing affordability for the low-income sector of the population and improving the living conditions of the low-income urban dwellers. The different unit sizes were envisaged to suit households of differing income levels. Although the small unit sizes envisaged for the relatively lower income level groups may not fit with the family size of the low income households.

The first registration was made on 2005, when the project was about to start and all the available houses were 20/80. The second round registration was made on 2013 G.C with different housing options. I.e. 10/90, 20/80 and 40/60. The requirements for the registration were a kebele ID which shows they are currently living in the town they are registering, an individual who do not own a house or a plot of land. From a family one can only register (husband or wife).

To make the delivery system fail, the housing units are allocated through a computer-based lottery System. On the lottery system, 30 per cent of units are allocated to women because of the affirmative action where government is taking. At the beginning of the program, there were no special provisions for the elderly and disables, but if their name is drawn in the lottery they have first choice in choosing a ground floor condominium. But recently, 5% of the lottery is given for disables and 20% for government workers.

Presently, there is no income verification system in place, but lottery entrants must be able to prove that they have lived in Addis for at least 6 months (decreased from the 2 year period initially set). They also need to prove that there is no property in their name or their spouse's name. The lottery takes

place in a public meeting space and attendance is open to anyone who is interested. Admittance is open and free. First, the 30 per cent quota is drawn for women, then the remanding 70 per cent for men and women together. Extra numbers are drawn to compose a waiting list, as inevitably previously allocated units become available because beneficiaries who cannot afford the down-payment drop out.

The program restricts the resale of condominium units, with beneficiaries not allowed to re-sell their condominium for five years from the date of taking over the property. The program makes provision for those who have had to leave their former home for condominium development and there is a dedicated office in the City Administration who deals specifically with relocation. People living in sites that are to be re-developed are given the option to acquire a condominium house in the same location. They are not put through the lottery process but get allocated a condominium automatically provided if they can afford the down payment. Furthermore, it is written in law that those currently living in an inner-city area will be given a condominium still within the inner-city. But there are also people who are relocated forcibly to outskirts. (UN-HABITAT, 2011).

As mentioned earlier an anticipated beneficial outcome of condominium housing is that it creates homeowners. A parallel unanticipated outcome is that many unit owners have become landlords since they move out of their unit and rent it to another household. Unit owners that are unable to service the required monthly mortgage repayments have chosen to privately rent out their unit, rather than risk losing it through foreclosure by the bank. As households cannot legally sell their unit for five years from the date of purchase, renting is an attractive option. However, illegal sells also do occur through full delegation of the house to the buyer and informal sells agreements.

The government appears to support condominium homeownership becoming a tool by which beneficiaries can generate substantial income through renting out their condominium, moving into a cheaper rental place and using the access rental income for income-generating or other productive activities. While exact figures are not available, a study made on condominium housing suggest that in total up to 70percent of homeowners rent out their condominium (either the whole unit or a part of their unit in which they continue to occupy) to increase their income to ease the struggle of paying back their bank loan, and/or receive a regular income.

2.3.5 Summary of contextual review

On the contextual review part it is discussed about the back ground of the study area and also the detail about the IHDP. The contextual review is helpful to understand the study area and also the program. It also helped to contextualize the internationally accepted dimensions.

The two dimensions are selected by the researcher based on the survey made in four different condominium sites. I.e. jemmo and Mickey lay land site from the periphery and key Bahir and lideta site from the inner city. The survey is made base on a check list which is adopted from the internationally accepted dimensions. The two dimensions are selected based on the responses of 40 residents from the four sites. The two dimensions are selected because they are considered as the most important factors of satisfaction for the respondents.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter briefly describes the research methodology which is used in the research. It describes the sample design, target population, the data sources, methods of data collection, sample technique and methods of data analysis.

3.2 Research design and approach

In this research, the researcher used a case study as a research method. Case study method is the strong research method particularly when a holistic, in-depth investigation is required (Zainal, 2007). By including both quantitative and qualitative data, case study helps explain both the process and outcome of a phenomenon through complete observation, reconstruction and analysis of the cases under investigation (Tellis, 1997). Qualitative method is applied for collecting data and quantitative method is used to compute and analyze data collected from the residents of IHDP and responsible bodies concerning the issue.

The research framework is shown as follows:

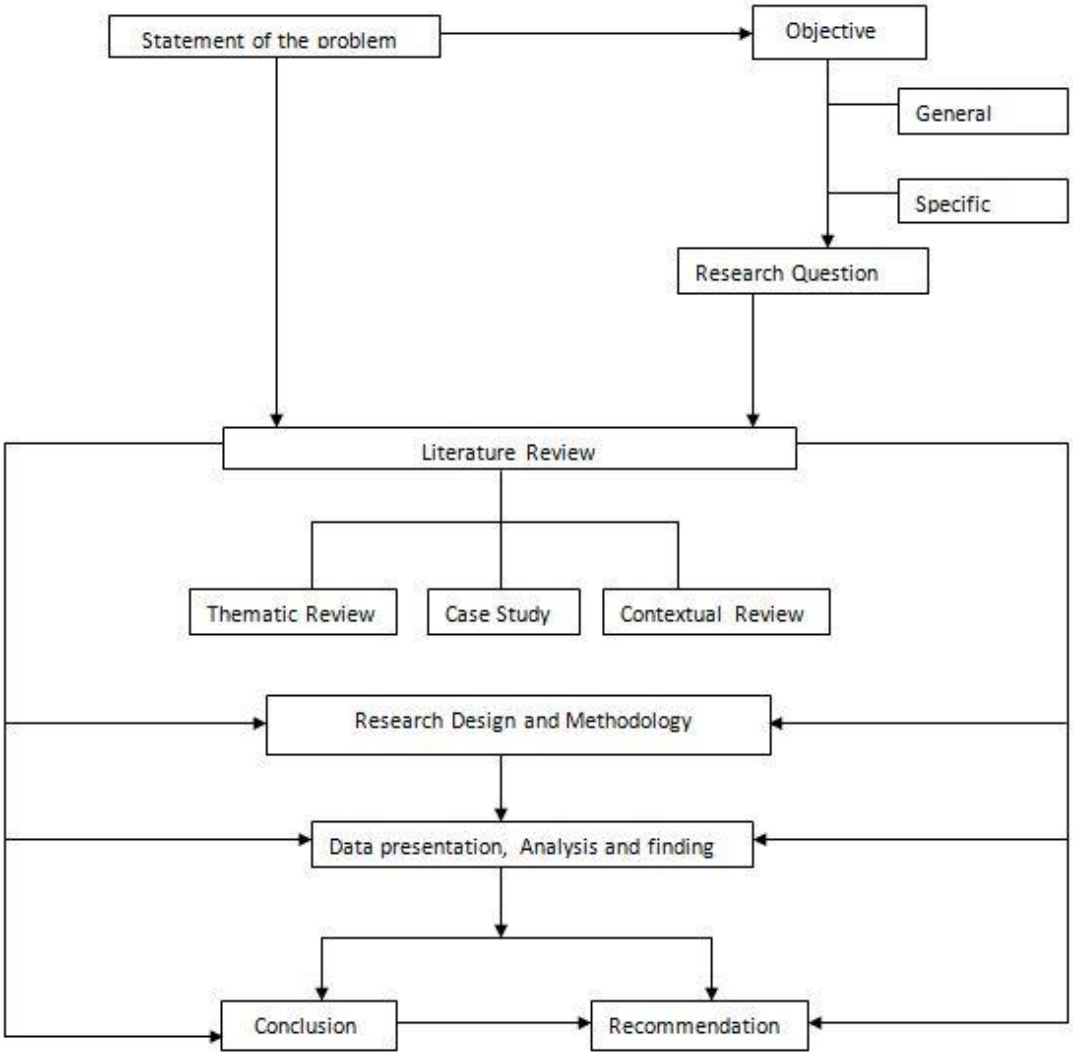

Figure 3-1: Research study framework diagram

3.3 Selection of sample frame

The target populations are taken from condominium houses constructed by AAHCPO and distributed to beneficiaries through lottery system or any other means. To see the location effect on the satisfaction level of the residents', a purposive sampling technique is used to select condominium sites from categories of condominium houses constructed and distributed to beneficiaries at various times. I.e. from inner city and urban periphery.

From the total condominium sites which are delivered to beneficiaries, the two study areas are selected based on their construction (delivery) period and their location proximity to the researcher. Purposive

selection method was used to select sample residential houses to conduct the interviews. In order to make the study fair and representative of the whole study site, the samples are taken from each block /building typologies, each floors and housing typologies (Studio, one bedroom, two bedroom and three bedroom).

Figure 3-2: location of studied units in mickey lay land site

Figure 3-3: location of studied units in Key Baher site

The researcher used the following criteria in order to select the residents to be interviewed:

- Period Lived in the site (minimum one year)
- Ownership (both owners and renters)
- Means of ownership (lottery, relocation, privileged government workers, buying from original owners.)
- House Location (from each floor)
- typology (all number of bed rooms)
- Block location (street side and inner part)
- House hold type (different family sizes)

3.4 SOURCE OF DATA

In this research both primary and secondary data sources are used. The primary data is collected through an interview questionnaire filed by the residents of condominium housing units and interviews/discussions with key informants and staffs of organization that work on the issues. The secondary data sources are published or unpublished documents from the MUDHC, IHDP, AAHCPO, Addis Ababa profile by UN-Habitat and research paper. Journals, Magazines, Newsletters and Publications on related issues are also used.

3.5 DATA COLLECTION METHODS

Both observation and qualitative survey methods of data collection in selected condominium sites is used in this research. Interviews are made with the residents which are selected based on the criteria that are mentioned on section 2.3. Questionnaires were prepared and completed by key informants who are related with the issue. In addition, published and unpublished documents of IHDP were used to validate the information with facts and figures.

3.6 METHODS OF DATA ANALYSIS

Mainly qualitative data analysis methods are used in the research. Specifically, comparative method is applied to analyze and explain the results of the interviews and discussions. In addition, statistical method of data analysis (frequency distribution system) is used to analyze some basic quantitative data collected through questionnaires.

3.7 Summary of Methodology

Research Objectives	Research Question	Data Type	Source of Data	Method of Data Collection
- To identify the key areas of dissatisfaction	What are the key areas of dissatisfaction and why?	Primary	Residents	sample survey interview and In depth interview
To measure the satisfaction level of integrated housing development program residents	What is the level of satisfaction of residents of the integrated housing development program at Key Bahir and Mickey lay land sites?	Primary	Residents	In depth interview
To propose possible options for solution in order to improve the satisfaction level	What can be done to improve the satisfaction level?	Primary and secondary	The collected data, officials, rules and regulations	Reading and interview.

Table 3-1: summary of methodology

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND FINDINGS

4.1 Introduction

This chapter contains the introduction of study area, summary of data which is collected from the study area and government offices through, questionnaire, interviews, residents' life story and observation by the researcher. The collected data are summarized in different forms. I.e. texts, bars, charts and tables. The summary is categorized based on the responses from the residents. The summary is made in two ways, qualitative and quantitative. From the total number of respondents, the researchers tried to identify how many are satisfied and how many are not satisfied on each dimensions. Then the reasons for satisfaction and dissatisfaction are also summarized.

As it is explained on the literature review part, there are internationally accepted dimensions to measure residential satisfaction. But for this specific research the dimensions where the researcher used to measure the satisfaction level of the residents are the physical and social dimensions. There are domains under each of the dimensions. The physical dimension has 14 domains and the social dimension has 10 domains. The researcher tried to study the satisfaction level based on the total 24 domains which are found under the two measurement dimensions.

The satisfied Respondents' reflections with each of the domains do not necessarily mean that they were in perfect condition and no need of improvement. Instead, it indicates how much those domains were valued for them. The residents also described that condominium was much better than their previous residential house while less than their expectation. The findings of Dennis and Rent (1987) support this finding because they reported that dwellers satisfaction related with improvement over previous residential. Besides, respondents who live on the inner city compared the site with those of urban periphery site condominiums and they considered themselves as lucky by comparing site accessibility. This could suggest that it is important to consider residents' expectation and their previous experience.

4.2 Socioeconomic situation of the respondents

The socio economic data collected from both study areas in summarized in the following table:

Socio economic		Key Bahir	percentage	Mickey lay land	percentage	total	percentage
Sex	Male	6	60%	15	33%	21	38%
	female	4	40%	30	67%	34	62%
Age Group	20 – 35	1	10%	8	18%	9	16%
	36- 50	3	30%	26	58%	29	53%
	51 - 65	4	40%	7	16%	11	20%
	>65	2	20%	5	8%	7	11%
Family size	4-6	6	60%	30	67%	36	65%
	2-3	4	40%	12	27%	16	30%
	>7	0	0%	3	6%	3	5%

Table 4-1: socioeconomic data of respondents

As shown in the above table the number of women is higher than the men, which is the result of the affirmative action taken by the government on the lottery system of getting the condominium house. Although families with 4-6 members are dominant. The effect of the large number of family size will be discussed on the coming sections. According to Mohit et al. (2010), if the family size increases the housing satisfaction become decrease.

		Key Bahir	Percentage	Mickey lay land	Percentage	total	percentage
Number of rooms	Studio	0	0%	5	11%	5	9%
	1_bed room	2	20%	5	11%	7	13%
	2_bed room	4	40%	26	58%	30	55%
	3_bed room	4	40%	9	20%	13	23%
Floor location	Ground	2	20%	12	26%	14	26%
	1st Floor	2	20%	8	18%	10	18%
	2nd Floor	2	20%	8	18%	10	18%
	3rd Floor	2	20%	9	20%	11	20%
	4th Floor	2	20%	8	18%	10	18%

Table 4-2: floor location and typology

All housing typologies are also included in the interview, because the difference in typology might result a difference on satisfaction level. And In order to see the floor location effect the researcher tried to interview from all floors. The following table shows the distribution of the survey based on the housing typology and floor location

		Key Bahir	Percentage	Mickey lay land	Percentage	total	percentage
ownership	tenant	3	30%	17	38%	20	36%
	owner	7	70%	28	62%	35	64%
owners	Lottery	6	86%	18	64%	24	69%
	relocation	0	0%	3	11%	3	9%
	Bought it	1	14%	7	25%	8	22%
Year of stay	>6 years	6	60%	25	56%	31	57%
	3-4 years	3	30%	17	38%	20	36%
	1-2 years	1	10%	3	6%	4	7%

Table 4-3: ownership status and length of stay of respondents

In order to see the satisfaction level based on the ownership status the researcher interviewed both tenants and owners. The number of tenants at mikililand site is higher than the piassa site. This is the result of location of the sites, i.e. the rental cost at the inner city is higher than the periphery.

The study also shows that, those who stayed less than two years are all tenants. This implies that the length of stay usually depends on the ownership status. The increase in rental cost forces the tenants to move from house to house with in short period of time.

4.3 Satisfaction on the physical dimension

The overall satisfaction percentage result on the physical dimension revealed that respondents' level of satisfaction with Utilities and infrastructures availability is the highest, followed by the wall floor and roof structure, space for activity inside and outside of the house, room sufficiency, access for the communal service building, availability of parking space, availability of transport, finishing quality of the buildings, sanitation system installation, size of rooms, corridor space, finishing quality of toilet and kitchen, green area and children's' playground, respectively. This finding tends to support Lu's (1999) proposition that public housing estates are better supplied with common/public facilities to satisfy their residents.

Besides studying the satisfaction level of residents, one of the objectives of this study is exploring the reasons which lead to dissatisfaction and coming up with a recommendation in order to improve the satisfaction level of the residents. The following sections will clearly shows the reasons behind the dissatisfaction of residents on each of the domains. It also shows the effect of location on satisfaction level by comparing the two study areas. I.e. piassa and Mickililand condominiums.

4.3.1 Satisfaction with structure

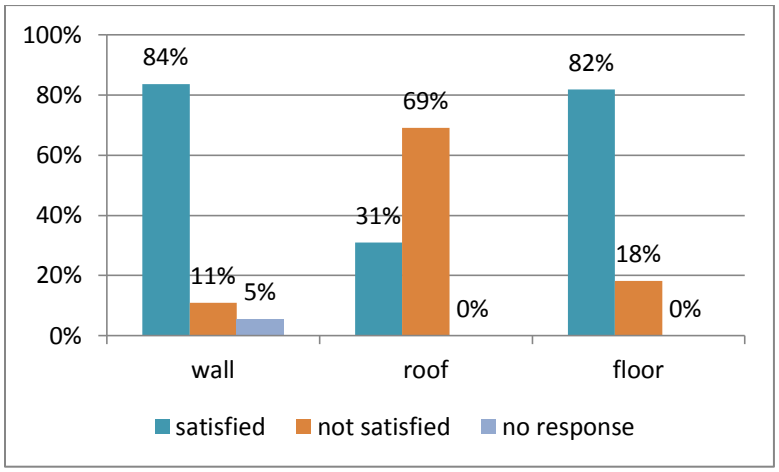

Figure 4-1: satisfaction with structure

Structure on this research context refers to the wall, roof and floor. Onibokun (1974), states that the aesthetic aspects of the home such as design of the housing unit, sidings and landscaping also affect the housing well-being; uncover the strong association between the materials of walls, roof and floor and housing satisfaction. As shown on the above graph the residents' satisfaction level for the roof is lower than the wall and the floor.

Floor location	Total number of respondents	Satisfied on the roof	percentage	Dissatisfied on the roof	percentage
Ground	14	0	0	14	100%
1st Floor	10	2	20%	8	80%
2nd Floor	10	2	20%	8	80%
3rd Floor	11	5	46%	6	54%
4th Floor	10	8	80%	2	20%

Table 4-4: the effect of floor location on the satisfaction level of roof

Residents in both condominium sites have similar reaction towards this domain. The main reason mentioned by the residents who are not satisfied with the roof are, the leakage of liquids from upper floor.

This mostly happens when the residents from upper floor tries to pave and fix their floor. The diffusion of sound (i.e. when children are playing and when there is movement of furniture and other materials) from the upper floor also raised as a reason of dissatisfaction. Since most of the residents have no experience of living in a multistory building, they are having a hard time to adopt with some limitations of the living style. Campbell et al., (1976) and Wiesenfeld, (1992), state that Housing satisfaction depends on the current conditions of inhabitants, their previous experience and their housing expectations. This could suggest that it is important to consider residents' expectation and their previous experience.

4.3.2 Satisfaction with size of rooms

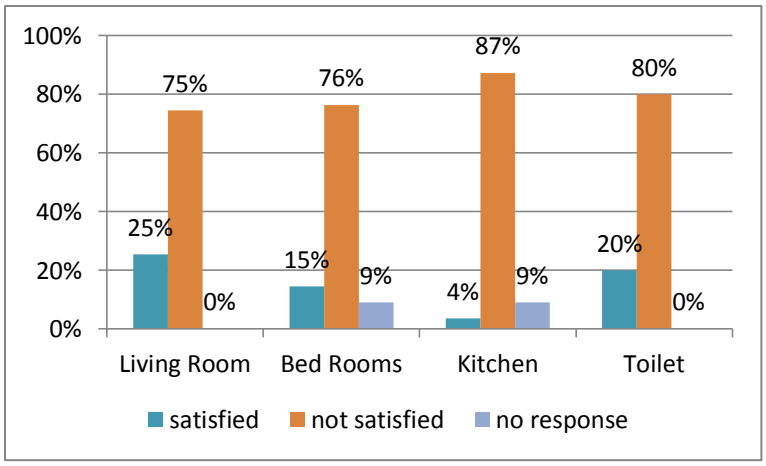

Figure 4-2: satisfaction with size of rooms

Different respondents have different perception due to the different housing typology they are living in. As it's explained by Lu, (1999), size of room is directly proportional to satisfaction level. The higher the size of the rooms, the higher the satisfaction level will be. As shown on the above graph from 75% to 87% of the respondents are not satisfied with the size of the rooms they have. This result is also related with life style and previous living experience of residents'.

As shown in the above graph, satisfaction with the size of kitchen is the lowest of all. This is related with the traditional way of living of residents on their previous residence. As it is mentioned by the residents, it is a place where most of the domestic activities are taking place. The intended service of the space and the size are not compatible to each other. The other reasons mentioned by residents are the size of the rooms isn't compatible to the furniture they had in their previous house and it also leads them to unplanned cost to change their furniture which fits to their new home and also forced to dispose lots of materials because there is no enough space. They also raised that the size of the living and the bed rooms are not enough to host visitors.

4.3.3 Satisfaction with room sufficiency

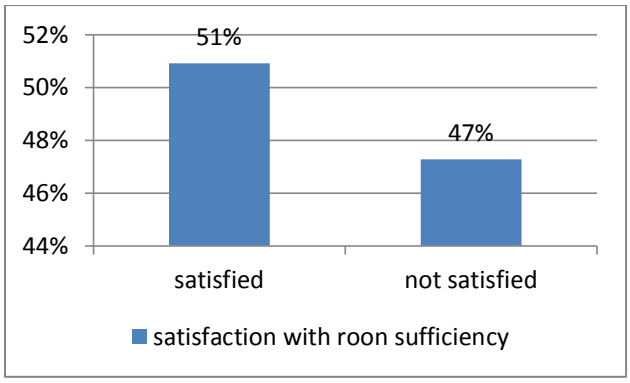

Figure 4-3: Satisfaction with room sufficiency

As it is shown in the above graph more than half of respondents are satisfied with the sufficiency of the number of rooms. But those who are not satisfied mentioned that they are not satisfied with their room sufficiency because it is not enough to host a guest, especially when there is a holiday and different ceremonies. And also their family size and the number of the rooms are not compatible. This is the issue of those who got the house by the lottery system. As shown on the above paragraph those who bought the houses had the chance to choose what they want or the largest possible typology. But of those who got the house by lottery system have said that the time it took from the registering till delivering was a lot and there is a lot happened in between. They are not on the status as they were when they registered for the housing. So they suggest that the delivery should consider the effect of the time gap on the living status of the residents.

As it is described on the socioeconomic status of the respondents, 35 are owners and 20 are tenants. Eight of the 35 owners bought the house and seven from the eight owns a three bed room house.

Family size	%age of respondents
2-3	30%
4-6	65%
>7	5%

# of rooms	%age of respondents
Studio	9%
1 bed room	13%
2 bed room	55%
3 bed room	23%

Table 4-5: relationship between family size and number of rooms

As described on the above tables families with 4-6 members are dominant (65%) and also large number of respondents (55%) are living in two bed room. This figure implies that the number of family members and the rooms are not compatible. One of the reasons raised by those who have large family member is

the cost of the house. Though they know that it is not enough for their family size but it is the one they can afford. So here the issue is housing affordability. Marans, (1975) States individuals with different income levels may display different housing satisfaction on similar housing environments.

4.3.4 Satisfaction with corridor space and space for activity

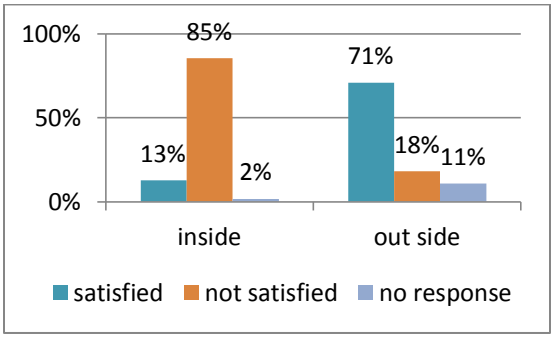

Figure 4-4: satisfaction with space for activity

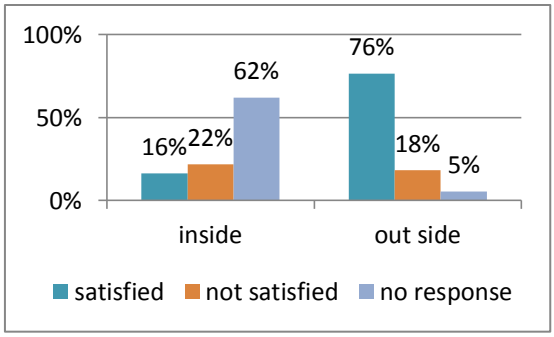

Figure 4-5: satisfaction with corridor space

The above graphs shows that the satisfaction of residents on spaces inside and outside of the house. As it is shown, the residents are more satisfied with the outside space than the inside. They said that they used the outside space for their domestic activities because they don't have enough space inside the house.

Floor location	Satisfaction with outdoor space (71%)
Ground	40%
1st Floor	11%
2nd Floor	9%
3rd Floor	8%
4th Floor	3%

Table 4-6: relationship between floor location and outdoor space

The satisfaction level of the residents who are living on the ground is higher than those who are living on the upper stories. Since the only available outdoor space on the upper floors is the corridor, which is mainly serving as a path.

The communal open space on the ground is more available for those who are living on the ground and they use the open spaces easily whenever they want. Those who are living on the upper floors said that they don't even feel that the open space on the ground is intended for them too. The residents on the ground claimed the open spaces on the ground as if it is their own. It leads the residents to unwanted conflict and dissatisfaction with their living compound.

The same is with the corridor space. The satisfaction level of residents on the outside corridor space is higher than the inside corridor space. 62% of the houses don't have a corridor inside the house and the rest has a corridor but the residents complain that they are very narrow and not comfortable to move through.

Other important issues raised by some respondents were condominium structural and neighborhood convenience related to laundering. Respondents who do not afford to buy washing and drying machine mentioned that condominiums are not suitable for such activities. This was because of small housing unit and small corridor size not comfortable to hand wash clothes as they did it on their previous residential location.

4.3.5 Satisfaction with children play ground

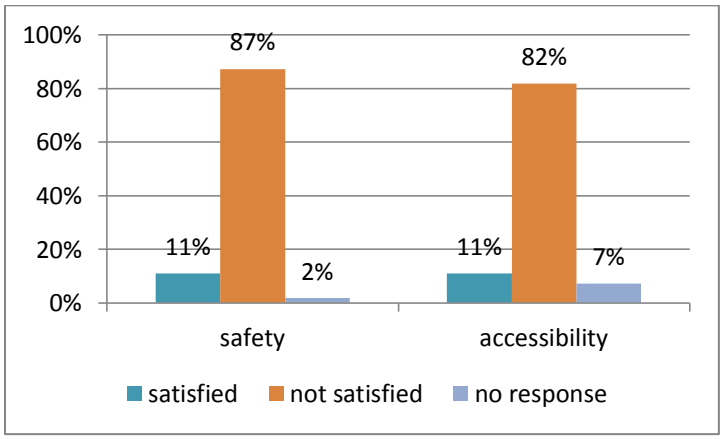

Figure 4-6: satisfaction with children plays ground

Residents from both sites are not satisfied with both the accessibility and safety of the children play ground. The residents from key Bahir have said that there is no planned spaces for children play ground at all.

Figure 4-7: open space in Mickey lay land

Figure 4-8: open space in Key Bahir

The open space on the ground is totally covered by cars because the parking area is not enough. So the children on that specific area are forced to stay in home because the outside space isn't safe for them not only for playing but even for walking alone.

On the other hand, the residents from Mickey lay land site have said that there are also no planned spaces for children play ground. But unlike key bahir site, there are lots of open spaces. But since it isn't well planned and reserved for children's playground, it is not safe for the kids to play there.

There are some families who fenced an open space which is found at the middle of their blocks and tried to make it accessible and safe for the children to play on it. But this move brings another conflict with other families who don't use the playground. Their issue is, since the government didn't enclose that space for playground they want to use it for our domestic activities like washing cloth, drying of spices and foods.

4.3.6 Satisfaction with infrastructure and utility

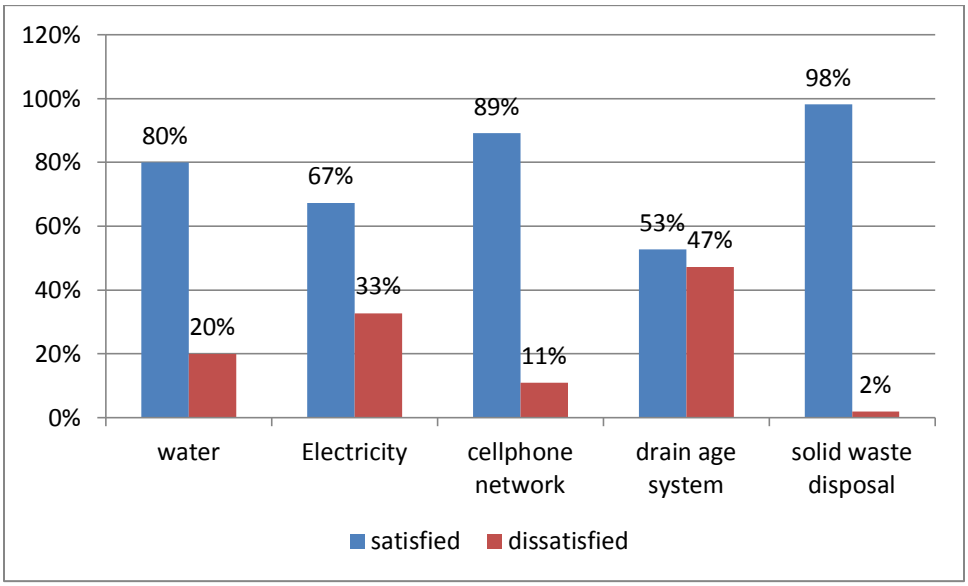

Figure 4-9: satisfaction with infrastructure and utilities

The highest percentages of the residents' from both sides are satisfied with the infrastructure and utilities distribution of the sites.

Satisfaction level with solid waste disposal system is higher followed by cell phone network, water and electricity availability and also the drainage system of the site.

In both sites, there are door to door solid waste collectors. They come twice a week and collect the waste, so the residents satisfaction level in this domain is higher than others. But there are also some complains about the residents who don't manage their domestic waste wisely. These residents put/throw their solid waste on the open spaces till the collectors come and collect.

Water is available in both sites, but there is a problem with its quality. Residents' from both sides have complained that the water is not clean that it cannot be for drink. Rather they use it for washing and other services or if they should drink it they use different water Purifying methods.

Electricity is also available in both sites. But residents from the piassa site have complained a lot about the transformer quality. As they mentioned, it always burns and they need to change it. Regarding electricity supply, the problem was multi faced; power interruption from main hydropower source, from overload on transformer and from poor electricity installation and low quality electricity appliance.

The main reason for the lower satisfaction level of the resident on Drain age system in both sites is the life style of the residents. The way the residents use the installed systems is very inappropriate. Since there is one system for one block, the inappropriate use of even one household leads to the distraction of the whole system which results a huge problem to the whole building and the households. The other problem is maintenance. Once the government delivered the houses to the beneficiaries there is no follow up. All the distractions and broken systems are expected to be maintained by the residents cost. These things lead the residents to lower their satisfaction level.

4.3.7 Satisfaction with sanitation system installation, green area, parking space and mode of transport

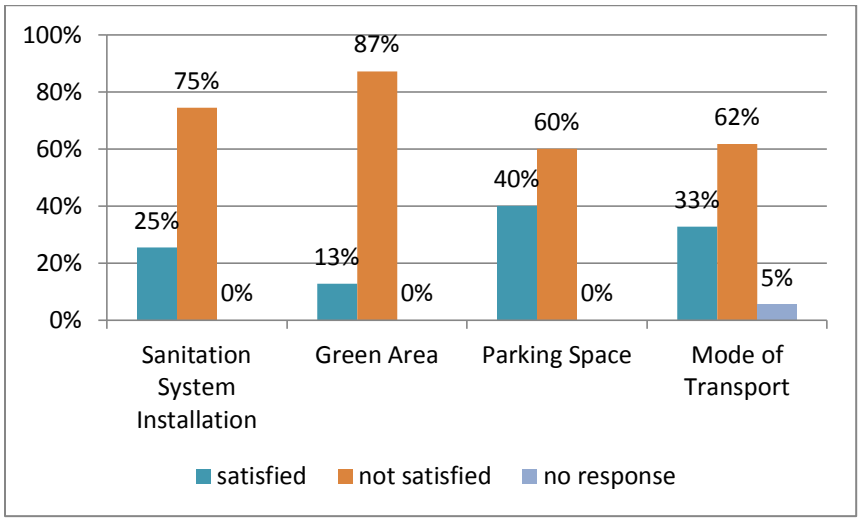

Figure 4-10: satisfaction with sanitation system installation, green area, parking space and mode of transport

As shown on the above graph, the satisfaction level on the listed four domains of physical dimensions lower for the residents' from both sites. The satisfaction level with the availability of green area is the lowest of all followed by the sanitation system installation, availability of mode of transportation systems and parking space availability.

Respondents from both study areas are not satisfied with the green area availability in their compound. But the reason behind their low satisfaction level is different. Those who are from the key bahir site said that there is a shortage of open space. They said most of the spaces are occupies by parking. There is no a well-defined space for green area.

On the other hand at the Mickey lay land site there is no shortage of space but the open spaces are not well designed and planned for green area. So some people claimed the spaces at the gate of their house

(corridors) and plant their own plants and tried to create a personal green area. And this also sometimes leads to conflicts to each other because corridors are a pass by for some residents.

The respondents who live on the ground floor are the one who are suffering a lot because of the sanitation system installation. Because all the system is connected starting from the fourth floor. The entire kitchen and the toilet lines are connected and sometimes water from the kitchen and the toilets leaks to the lower floors. Beside the poor installation system design, the materials they used and the improper usage of the residents are also a reason to lower the satisfaction level of the residents. And the other problem here is there is no a proper maintenance provided by the government. All the maintenance costs are covered by the residents. This is the issue with both study areas.

The availability of mode of transportation is one of the domains where the effect of location can be seen. All the respondents from the Key Bahir site are satisfied with the availability of mode of transportation.

But those who are from the mickey lay land site are not. The reasons are the road is not paved and designed well so most of the taxis don't want to come to the compound. Since the site is located on periphery the taxis should go extra road from the main street. There are Bajaj but they are not as many as needed, and they also don't want to go till the last block because the more they go inside the more the roads are getting bad. There is a huge problem on transportation especially on the morning and night times. There was a bus provided by government but they stop coming because most people don't choose them. And their reason is the busses took long ways than the taxis. So if someone wants to get transport he/she should be out very early in the morning and should come very late night which is not safe to move.

Again on the availability of parking area those who are in Key Bahir have a lower satisfaction level than those from mickey lay land. The reason which makes their satisfaction level to be low is that, the provided parking areas are not well designed and not safe, the space and the number of residents who have a car isn't compatible, it serves on the first come first served bases, especially at night when all the residents come to home the compound will be full of cars and still some will park somewhere out of the compound.

There is a space which is given to those who are registered by the committee that they have cars, but there are also many people who aren't registered but have a car. So those people use the space of the registered ones and there will be a conflict and also results parking everywhere they got. The other problem it creates is safety issue. Since there is no a well-designed green area and playground some children play on the open space they got on the ground which is not safe for them and also for the cars. Most of the time the windows of the cars got broke and the parents of the kids are required to replace it. This also leads to conflict.

4.3.8 Satisfaction with communal building

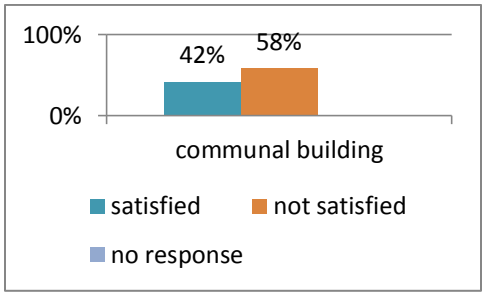

Figure 4-11: satisfaction with communal building

When we disaggregate respondents' responses per site, there are variations between the sites. All the respondents from Key Bahir site are not satisfied with the communal building which is found in their compound. There is a communal building in the compound but it isn't giving its intended service. It was originally built for multipurpose hall, common traditional kitchen, hand washing laundry or slaughter-house services. These were important for dwellers to attempt cultural demand and for those dwellers previously had traditional kitchen continue their activities in new location. But the one in Key Bahir site is rented out for other purposes.

The committee said that the money from the rent goes to the development of the compound but the residents don't agree with this. They said the committee always asked money for any development in the compound. Because of the absence or lack of its service, residents were facing problems to host special occasions like funeral, weeding, celebrating holiday together and for other social gathering. These concerns were very much related to cultural customs of Ethiopians. So instead of renting they want to use the communal building for these activities. As mentioned by Konadu, (2001) the common use of some areas and amenities outside the house might also be seen as a factor of satisfaction in some case.

Figure 4-12: communal building in Key Bahir site

There are also residents from mickey lay land who are not satisfied with the communal buildings. Their reason for their dissatisfaction is some of the communal buildings are not reserved well, so they are not comfortable to use. They have said that the location of the communal buildings is far from their block. Since there are lots of blocks in the mickey lay land site, the distribution is one communal building to five blocks. The communal buildings in these sites are broken down because there is no responsible body for maintenance.

Figure 4-13: communal building in mickey lay land site

4.3.9 Satisfaction with finishing quality

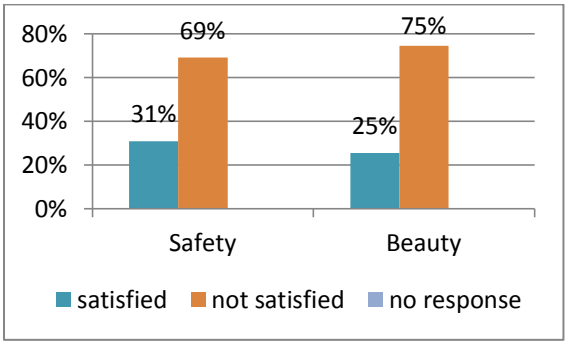

Figure 4-14: satisfaction with finishing quality of the building Figure 4-15: satisfaction with finishing quality of toilet and kitchen

Here the researcher tried to measure the satisfaction level of residents on the finishing quality of the buildings under the physical dimension. Finishing quality here is seen in two dimensions safety and beauty. Because most of the residents were relating the finishing quality as a threat and as an aesthetic value. As it is shown in the above graph the level of satisfaction of residents' is low.

Respondents mentioned housing units finishing stage as a cause of dissatisfaction. According to government officials' explanation, these housing units have been completed at 80% finishing stage. But the residents don't agree with this. They have complaints on the finishing stage because it is either nor finished or is poor quality which exposed them for high cost. Satsangi, M., kearns, A.,(1992), argue that the low quality of construction results in the need for frequent maintenance, this in turn leads to dissatisfaction with the home.

Mostly, small dwelling unit, poor design and badly proportionate room space particularly for kitchen and bathroom. Materials used for wall partition and ceiling are not sound and water proof. Most of the doors, windows, electric sockets were not well functioning and bedrooms and kitchens do not have doors. Interior housing unit does not paint in both sites.

4.4 Satisfaction on the Social dimension

This section shows the satisfaction level of respondents on the social dimension. There are also different domains under the social dimension. The overall satisfaction percentage result on this dimension revealed that the satisfaction level of residents on privacy is higher followed by proximity to social services, availability of social activities, the neighborhood social network, safety and security, cleanness of the compound and the availability of recreational area.

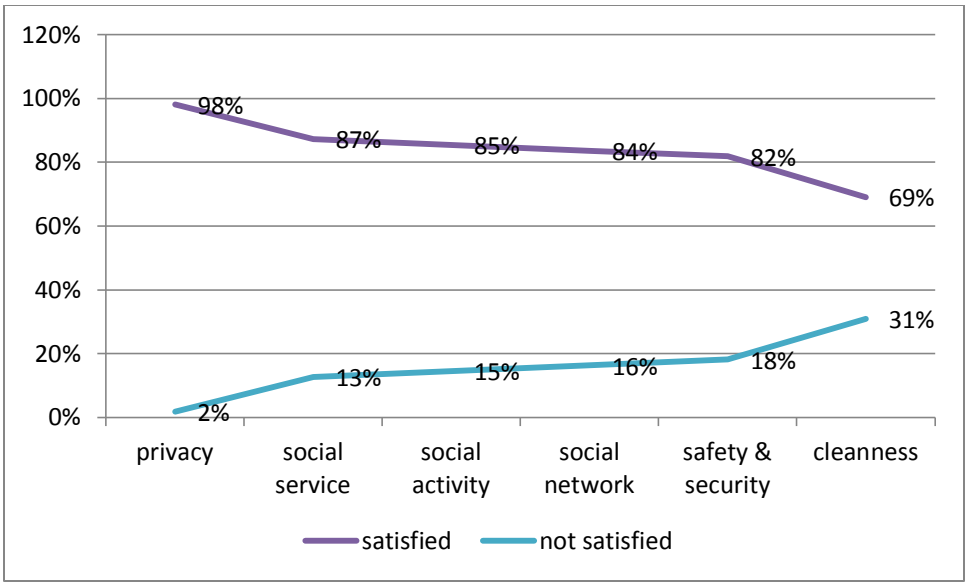

Figure 4-16: satisfaction on social dimensions

There are social institutions in both sites. The following chart shows the membership of respondents in the social institutions.

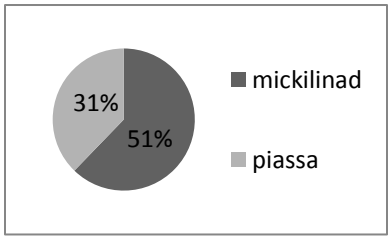

Figure 4-17: membership in social institutions

There are different reasons raised by the respondents who are not a member of social institutions.

percentage	**reason**
11%	because they don't want and are busy with their works
2%	they aren't a member because their age isn't as their neighbors
7%	they are still members at their former village
16%	They don't want because they are tenants.

Table 4-7: reasons for not to be a member of social institutions

Owners are more involved in social affairs because home ownership gives them a better social identity and more incentives to create social capital. All these are expected to lead the homeowners to have more satisfaction than the renters.

4.4.1 Satisfaction with proximity with social services

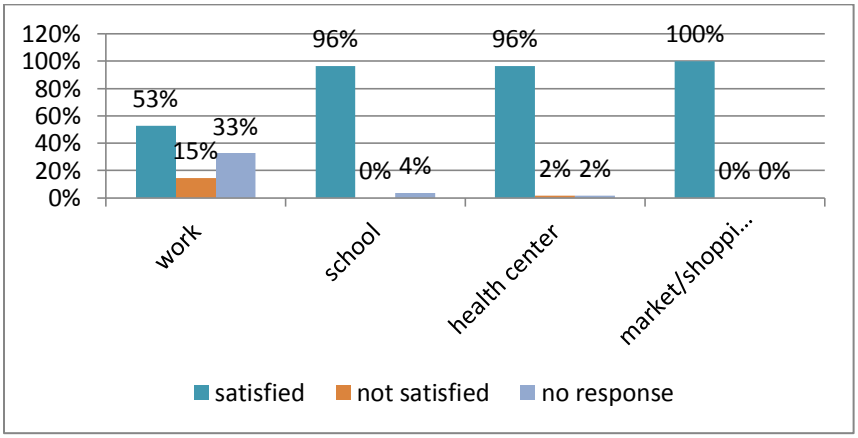

Figure 4-18: satisfaction with proximity with social services

Marans and Rogers (1975) and Mustapha et al. (2006) present the positive relationship between accessibility and quality of urban services and housing satisfaction. These services include educational, medical, shopping, recreational and public transportation facilities. As it is shown on the above graph all the residents are satisfied with proximity of their house to school, health center and market place. All the mentioned social services are located in or nearby to the compound. But there are some residents who aren't satisfied with the proximity of their house to their work place. From these residents most are those who live in at mickey lay land site. Since most of the residents got the house by lottery system they are displaced from their former village which was closer to their work place. Beside the distance to their work place the problem with the transportation system is also a problem for them. These results their satisfaction level to decrease.

4.4.2 Satisfaction with availability of social activities

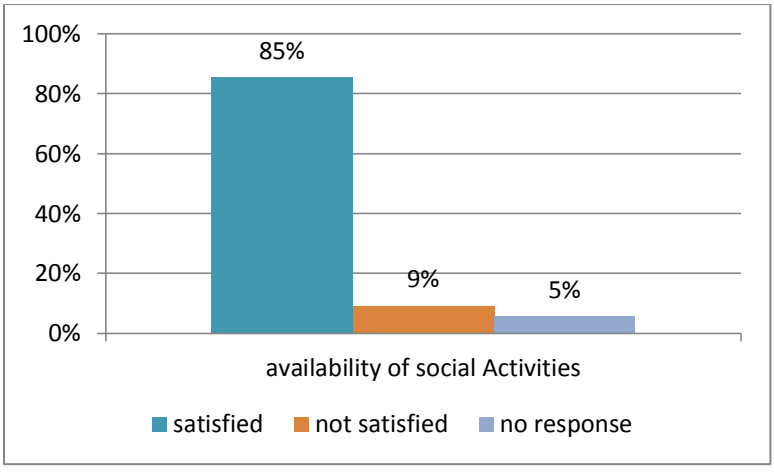

Figure 4-19: satisfaction with availability of social activities

The availability of social activities is one of the domains under the social dimension. A study made in shantytowns in Puerto Rico revealed that the availability of social activity in a neighborhood has a positive impact on the satisfaction level of the residents. As it is studied by Caldieron, (2011), availability of such networks in the neighborhood which provide baby-sitting, social support and sharing food, materials and experience are exposed as fundamentals of housing satisfaction. The more there are lots of social activities the higher the satisfaction level will be. (Amerigo, M., & Aragone´s, J. I., 1990) Also explained that social facilities and cultural activities have positive impact on physical quality and the housing satisfaction of inhabitants.

According to this study 90% of residents from both study areas are satisfied with the availability of social activities. But this figure doesn't show the strength of the bond they have. There are different types of activities where the residents do it together but their participation is as mentioned on previous and on the next sections.

4.4.3 Satisfaction with privacy and recreational service

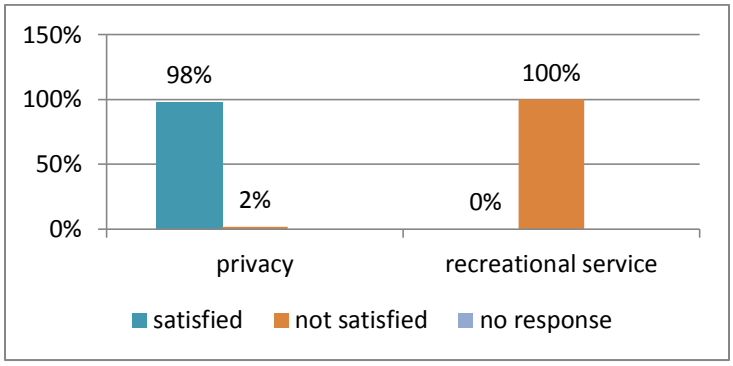

Figure 4-20: satisfaction with privacy and recreational service

As shown on the above graph 99% of respondents from both study areas are satisfied with the privacy of their home and their compound. As stated by Kaitilla, (1993) the house type which provides privacy might be evaluated as features that result in satisfaction.

And 100% of respondents are not satisfied with the availability of recreational service in the compound. There is no any intended open space for recreation in both study areas. These lead residents of both sides to have a lower satisfaction level.

4.4.4 Satisfaction with neighborhood social network

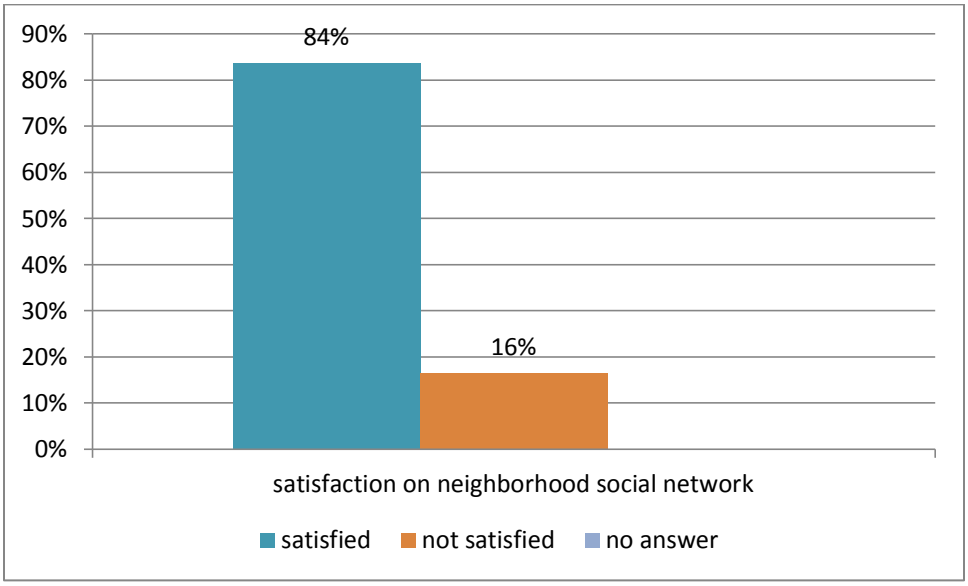

Figure 4-21: satisfaction with neighborhood social network

It is important to measure the satisfaction level of residents on their social networking to each other because the strong the network they have to each other the higher the satisfaction will be. Many researchers prove that social interaction within the neighborhood not only influences the satisfaction with neighborhood social life but also improves the overall housing satisfaction. Parkes et al. (2002) also supported the contribution of the presence of a good social network in housing satisfaction.

As shown on the above graph 82% of residents from both study areas are satisfied with the social network they have in their neighborhood. All the residents who live in Key Bahir site are satisfied with the social network in their neighborhood. So it means that the rest 18% are from mickey lay land site. The main reason for their low satisfaction is the existence of the tenants. The tenants don't want to have a strong relation with their neighbors because they consider their house as permanent resident. So mostly the networking is between the owners only. Since the tenants don't stay for long the owners don't even know who is living in the next room. Parkes, A., Kearns, A., Atkinson, R., (2002) Advocate the relationship between housing satisfaction and feelings toward neighbors.

4.4.5 Satisfaction with safety and security

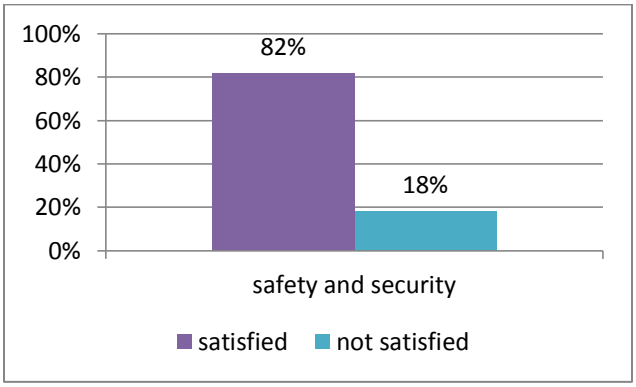

Figure 4-22: satisfaction with safety and security

The safety and security of a neighborhood also affects the satisfaction level of the residents. A housing satisfaction research made in Ghana considers the peace in the social environment (Baiden P., Arkug., Luginaah, Asiedu, A. B., 2011).

Here as shown on the above graph 91% of the respondents are satisfied with the safety and security of their compound. All the residents who are living Key Bahir site are satisfied with the safety and security of their neighborhood. Since there are only four blocks in the compound it is easier to follow up for the security to look all the houses. The compound is also a well fenced and there is always a security at the gate and around the blocks.

All the 9% dissatisfied respondents are from the mickey lay land. The reason for their satisfaction is the location of their blocks. Since there are lots of groceries on ground floors of the blocks which are found near to the street, those whose houses are near to the street are exposed for thieves.

Residents who are living in the mickey lay land site also have another complaint on the vacant houses in the neighborhood. This is because of some houses were reserved for urban redevelopment relocated person and some were already transferred to lottery winners not yet homeowners entered. They were not being comfortable because of both ugly physical conditions and risk of security i.e. they fear it will attract some illegal owners who pose danger to the building security. They also suggest that project office should transfer vacant house or make proper protection and control. This implies that housing perception affected by individual perception and neighborhood social and physical conditions. Gifford (2007) on his review explained that how a fear of stranger leads to fear of crime and affect dwellers satisfaction.

4.4.6 Satisfaction with neighborhood cleanness

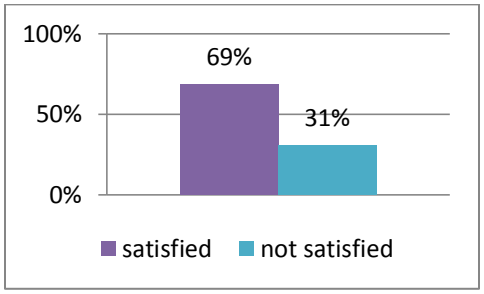

Figure 4-23: satisfaction with neighborhood cleanness

A shown in the figure 69% of the respondents are satisfied and 31% are not satisfied with the cleanness of their compound. All the residents who are living in the Key Bahir site are satisfied with the cleanness of their neighborhood. The size of the compound has a positive impact on this. It makes the management easier. There are janitors and the people themselves also clean their compound in terns.

Whereas, on the mickey lay land, there are residents who are not satisfied. The existence of the tenants also has a negative impact here. Since they don't have a sense of belongingness to the compound they don't care to keep the area clean.

According to Mohit et al. (2010) cleanliness of the housing environment, the air and water quality are stressed as a direct or indirect influence on user satisfaction. Some of the Residents from mickey lay land stresses that the area is polluted because of the glass factory near to the site. They mentioned it as a treat for their children and for themselves too. This shows that the effect of location. They argued that the government didn't do any study before choosing the area for a development. On the other hand the government officials said that the effect of the factory was studied and tried to build the blocks as far as possible based on the assessment made on the area.

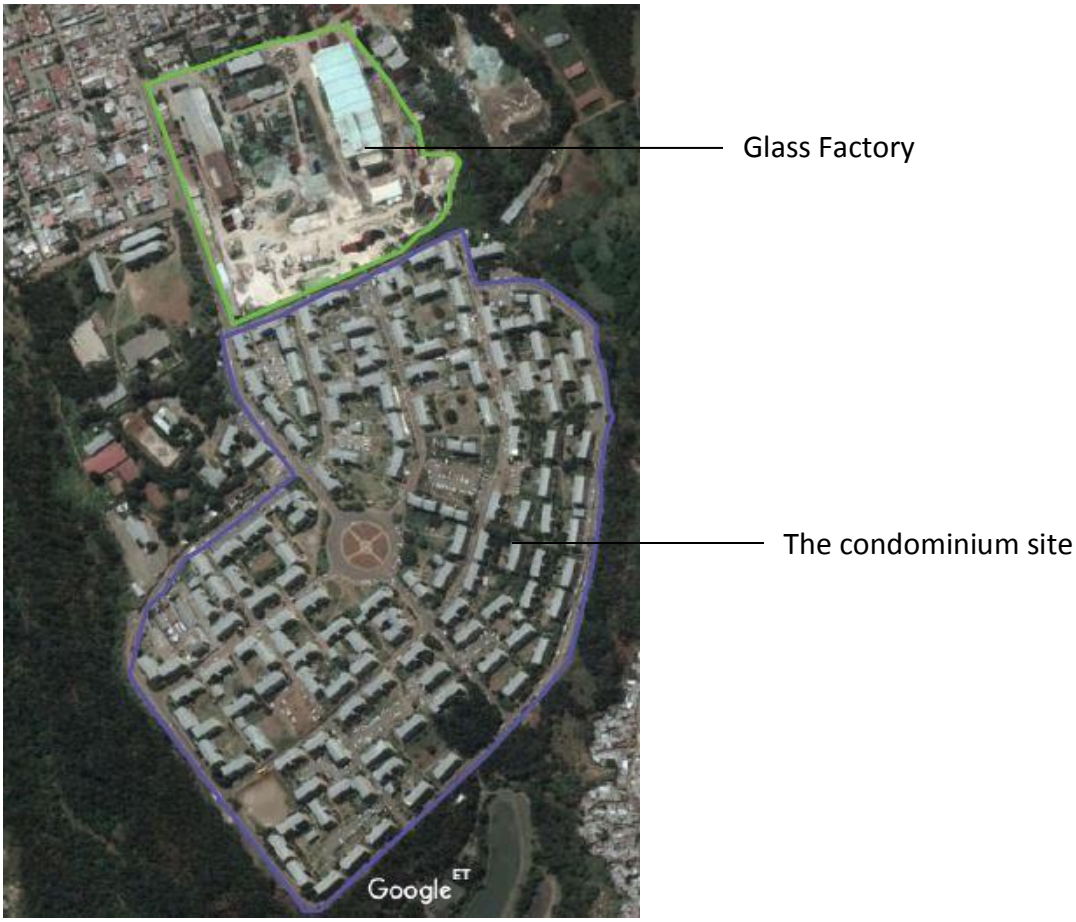

Figure 4-24: location of the Glass Factory

4.5 General perception and aspiration of residents

The general perception part of the questionnaire is aimed to understand the overall challenges the residents are facing because of living in condominium housing, to understand the need and aspiration of the residents and to hear from the resident if they have any suggestion on how to improve the problem and increase the satisfaction level. The responses for the specific questions are summarized as follows:

The first question raised was about the challenges of living in condominium. The response of residents differs based on their location.

The challenges mentioned by those who are living in mickey lay land site are:

- The effect of the factory. It results sound and air pollution to the site.
- Safety and security is also another challenge. As mentioned by the residents this is the result of the existence of groceries and bars in the site. It also results a sound pollution.
- Shortage of transport system is also another challenge.
- Absence of a properly designed the pedestrian walkway also raised as challenge because it leads to car accidents.

- The location of some blocks in mickey lay land is also raised as a threat. Because it is far from the main road and closer to the forest, it results a security and safety problem.

The common challenges in both sites are:

- the size of toilet and kitchen,
- absence of corridors in the house,
- sound pollution from upper floors,
- absence of playground and recreational areas,
- the drainage and sanitation system and
- The peoples' understanding on how to live in condominium and how to respect to each other. These are also raised as an issue which leads to a dissatisfaction.

The most satisfactory things about the sites are:

- The first reason for a higher satisfaction mentioned by the residents is ownership. Compared to renters, homeowners have higher self-esteem or enjoy higher social status and thus higher satisfaction. Homeowners might feel greater security than renters and hence have a higher satisfaction (Elsinga, M., & Hockstra, J., 2005); (Hu, 2013)).
- The availability of social services in a nearby distance is also one of the most satisfactory things in both sites.
- The other reason mention by renters for a higher satisfaction level is freedom and privacy. As they explained, since the owners are not there the renters have the right to do whatever they want.
- The satisfactory reasons mentioned by respondents from Key Bahir site are living in the inner city, which leads them to have a transportation access to any part of the city and also closer to the main streets, markets and different entertainment areas, i.e. cinemas, cafes, restaurants.

The respondents' aspiration and recommendations for a higher satisfaction level are summarized as follows:

- playground for children should be planned well
- size of kitchen and toilet should be increased
- parking area, green area, playground and open space should be separated and planned well
- the stair quality should be improved
- the committee should take responsibility and serve the community properly
- the road pavement should be improved
- residential and groceries should be segregated,
- corridors should be included in every housing unit,
- awareness creation to the residents on how to live in condominium should be increased
- there should be full maintenance system for the broken infrastructures and utilities
- quality materials should be used

- the responsible body needs to take consideration of elderly peoples because as they can't walk in all the floors stairs they need to be provided at the ground floor or there should be lift for the peoples who live at the top of the floor, especially for elders and disables
- the responsible body to act accordingly on those who creates sound pollution
- the government should give more focus for transportation
- the buildings are getting old the government should maintain that

The following life stories are examples of the residents' aspiration and general perception about the site:

Life story 1:

Her name is w/ro Tiruwork. She is 70 years old. She lives in mickey lay land site in the 2nd floor in one bed room unit. She has only one daughter and one grandson. Her daughter is living out of the city because of her work. She is currently living with her grandson. Before they moved to this condominium site they used to live around 4killo.she have a strong bond with her neighbors at her former place. They were very close and we spent most of their time together. She has friends at her age. They went to church together, they have coffee every day and they celebrate holidays together. They do most of their activities together. It was her daughter who registered for the house. The moment she heard her daughter won a lottery she didn't feel happy. She didn't celebrate as her daughter did or as expected. It isn't because they can't afford, but it is because she doesn't want to lose the place where she lived for more than 50 years. She said if she had the chance not to move to the new neighborhood, she would rather prefer to live in her old house than the new house somewhere far from her former village. What she was thinking was having a new house with all her neighbors together. She didn't think having a new house would keep her this far from her neighbors this way. It's been 6years since she moved to this neighborhood. But she said that she cannot say that "I have neighbors". She doesn't know who is living next door. There is no one around to talk with, there is no one to go to church with and there is no one around to have coffee with. Whenever she is out to see the surrounding she always sees new faces. So frequently she went to her old neighborhoods and spent the day with her former neighbors. She even spends holidays with them. The other thing she hates about living in a condominium is the sound which is coming from upper floor. Especially on weekends and at night, when the kids are playing in their home the sound is very disturbing. She said that it is something she couldn't get used to it.

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Life story 3:

Her name is Rahel. She is 29 years old. She lives in piassa "key bahir condomium site" with her father, mother and two sisters. Their house is in the ground and it is three bed rooms. She said their rooms are enough for them but they don't feel comfortable when they have guests. They bought the house four years ago. They used to live in hawassa before they came to Addis. They love their house but they don't like the neighborhood. There is no space to entertain ourselves. The open space in the compound is very small for all the residents. There is a parking space given for each resident who registered their car for the committee but no one follows the rule. They always got their space occupied by other resident's car, and they forced to take the other one which leads to a conflict then. They are also tired of repetitive costs they are asked by the committee (for security, for janitors, for maintenance, etc). They were told that the communal building in the compound is rented to cover such costs but that is what really happening. They don't know for whom they should report.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

The objective of this study is to measure the satisfaction level of IHDP residents in two sites and also identifying the key dissatisfaction areas and the reason behind the lower satisfaction level. On the previous chapters, the satisfaction level of the residents is discussed in detail so in this chapter the summary of findings and key dissatisfaction areas will be discussed. The possible recommendations for the improvement of the lower satisfaction level are also going to be listed.

5.1 Conclusion

The main finding of the study is that the residents of both condominium sites are generally satisfied by having a dwelling for their family. There were variations in the level of satisfaction among residents depending on whether the condominium is located in inner city or urban periphery, weather their housing unit is top floor or ground floor and also based on the measurement dimensions. As it is discussed on the previous sections, from the internationally accepted dimensions physical and social dimensions are selected as a measurement of the satisfaction of residents. The summary of findings in the two sites is summarized as follows:

5.1.1 Satisfaction on physical dimension

The main finding of the study on this dimension shows that the satisfaction level of residents on this dimension is not affected by the location of the sites. According to the study, the satisfaction level of residents from both study areas is relatively close to each other. This is the result of the time they have been built and also the similarity of the housing scheme.

Although, the location of the housing unit affects the satisfaction level in some of the domains. From both sites: the satisfaction levels of those who are living in the ground are lower on the satisfaction for structure (specifically for roof) but their satisfaction level for an outdoor space is very high. And also the family size affects the satisfaction level as well. The satisfaction level of those who have large number of family is lower for the sufficiency of the rooms.

On this specific dimension there are key dissatisfaction areas which are raised by the respondents. These are:

- Absence of children play ground
- Absence of well-designed green area
- Absence of well-designed parking area
- Size of kitchen
- Finishing quality of toilet and kitchen

5.1.2 Satisfaction on social dimension

On this dimension the location of the sites has an effect on the satisfaction level. As it is described on the previous sections the rental cost at the periphery is lower than the inner city, which results the number of tenants to be high on the periphery than in the inner city. As the respondents highly complained, the increased number of tenants also results insecurity to the owners.

The satisfaction level of residents who are living in mickey lay land is lower than the residents from Key Bahir site on the safety and security domain. It is mainly related with the location. Unlike the Key Bahir site; the existence of forests near to the blocks, the existence of bars and groceries in the compound and the existence of large number of tenants is raised as a threat for safety and security in mickey lay land site.

The other effect of location is seen on the neighborhood cleanness domain. The satisfaction level of mickey lay land residents on this domain is much lower that the Key Bahir residents. It is because of the following reasons:

- The location of the glass fabric (has an environment pollution including sound pollution)
- The existence of tenants (they don't have sense of belongingness to the compound)

Satisfaction level on Proximity to major social services in both sites is higher. It is due to the availability of the services inside the compound or nearby.

On this specific dimension there are key dissatisfaction areas which are raised by the respondents. These are:

- Neighborhood cleanness
- Safety and security

5.2 Recommendations

Based on the analysis and finding of the study the following recommendations are put forwarded as an input to future mass housing provisions:-

Recommendation on pre-construction phase:

- The land use compatibility of construction sites should be studied well before constructing the housing units.
- Space for parking, children play ground and also recreational areas for adults should be designed and reserved well. There should be a separated space for each activity. Because the happening of the activities on same place at the same time is considered as a threat.
- The housing unit designs should consider the need of the residents. So that it will increase the satisfaction level of the residents.
- Integrated services should be there at the design level. i.e. transport stations

Recommendation on post-construction phase:

- After delivering the site, there should be a follow up system by the government weather the provided spaces are giving the intended service or not.
- On the lottery system, if there is a system which allows exchanging the lottery between the winners it will improve the satisfaction level. Since it has been from 6 to 14years from the registration till the delivery stage, there are changes in the socio economic status of the beneficiaries. So if the exchanging is allowed it will help the winners (beneficiaries) to own the house they need or afford, which will contribute to the improvement of the satisfaction level of residents.
- Since most of the condominium housing residents have no experience of living in communal multistory apartments, it is considered as one of the reasons for the low satisfaction level. So, awareness creating on how to live in condominiums can be a good solution for the residents to make themselves fit to the living area.
- The residents association in each of the sites should be followed by the government weather it is performing well or not. Because it has an enormous responsibility as it is stated on the condominium proclamation NO.370/2003 (part four): the objective of the association is ensuring the peace and security of residents in the compound and also maintaining common elements.

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Annex I: Questionnaire for Household

The purpose of this study is to assess satisfaction level of Condominium Dwellers' in Addis Ababa. The reason behind assessment of the level of satisfaction of the dwellers' is to identify the effect of dwellers perception and satisfaction level on their life quality and to indicate potential quality problems for future policy intervention. All answers you give are kept confidential. Therefore, I kindly request you to give real and honest answers to the following questions. I would like to thank you for your invaluable time devoted to respond the questions.

Questionnaire number: _____
Name of Interviewer: _____
Interview Date: _____
Name: _____
Block number: _____
House number: _____
House hold profile

Name of Household Head _____

How long has it been since they moved in to this condominium _____

Tenure Type: 1) Owner 2) Tenant

House type

A) Studio B) 1-bed room C) 2-bed room D) 3- bedroom

House hold profile

No.	Nam	Relationship in the HH	Gender	Year of birth	Marital status	Disability	Income / month in birr	Kind of Employment (full or par time)	Special Skills	Job location	Transportation to work	Remark
1												
2												
3												
4												
5												
	S - Single											

Family monthly expenditure:_____

Food _____House rent _____Utilities_____School fee_____ Transport _____ others _____

Background:

Where did you come from before you started residing in this neighborhood? What was your reason to move to this neighborhood?

_____
_____
_____
_____
_____

- ***For this questionnaire part, the questions are indicators level of satisfaction of the residents.***

PHYSICAL DIMENSIONS

1. How do you see the house structure quality? i.e. wall, roof, floor

_____
_____
_____
_____
_____

2. Is the number of rooms sufficient for you?

_____
_____
_____

3. How do you see the size of the rooms? Are you satisfied? (living room, bed room, kitchen, toilet,)

_____
_____

_____
_____

4. Do you have enough space for your activities? In and outside of your house?

_____
_____
_____
_____
_____

5. Is the corridor space in your house sufficient for your activities?

_____
_____
_____

6. How do you see the finishing quality of your toilet and kitchen?

_____
_____
_____

7. Is there any space for children play ground? Is it safe and accessible? Are you satisfied with it?

_____
_____
_____
_____
_____

8. Are you satisfied with the sanitation system installation of your house/building?

_____
_____
_____
_____
_____

9. Are you satisfied with the green area in your neighborhood?

_____
_____
_____
_____
_____

10. Are you satisfied with the sufficiency of parking space in you site?

_____
_____
_____
_____
_____

11. Are you satisfied with the availability of mode of transport?

_____
_____
_____
_____
_____

12. How do you see the availability of utilities and infrastructures in your site? What is your satisfaction level on the following items?

    a) Water supply?

    _____
    _____
    _____

    b) Electricity supply?

    _____
    _____
    _____

    c) Cell phone network connection?

_____
_____
_____

d) Drainage system connection?

_____
_____
_____

e) Solid waste disposal service?

_____
_____
_____

13. Is there a communal service building in your site? If yes, how are you using it? Is it accessible? Are you satisfied with it?

_____
_____
_____
_____
_____

14. How do you describe the finishing quality of the building? in referring to;

a. safety

_____
_____
_____
_____

b. beauty

_____
_____
_____
_____

ECONOMIC DIMENSIONS

15. How much did you pay for the dawn payment? Are you satisfied with the cost?(Owner)

_____
_____
_____

16. Are you satisfied with the moving cost? How much did it cost you to move here? And why? Please list all the costs. (Owner)

_____
_____
_____
_____
_____

17. How much are you paying for the monthly mortgage repayment? Are you happy/satisfied with the cost and payment system? (Owner)

_____
_____
_____
_____
_____

18. How much is the rent cost of the house in total? Are you satisfied with it?(Tenant)

_____
_____
_____
_____
_____

19. How do you describe the living cost in your site? How satisfied are you with the following items:
    Food
    items_____
    _____
    Laundry
    items_____
    _____
    Transport_____
    _____

Oth-
ers;_____
_____

SOCIAL DIMENSIONS

Is there any social institution in your neighborhood?

_____
_____

Are you a member of social institutions? Such as; Ekub, Edir etc.

1, yes 2, No

If No, why? _____

20. How do you see the neighborhood social network? How satisfied are you with it?

_____
_____
_____

21. Do you feel safe and secure in your neighborhood? How satisfied are you in this regard?

_____
_____
_____

22. How do you see the neighborhood cleanness and the recreational service of your site? How satisfied are you with it?

_____
_____
_____
_____

23. Are you satisfied with your house proximity to your work place? And how far is your work place from your site?

_____
_____
_____
_____

24. How far is your house from school? Are you satisfied with the proximity?

_____

_____

25. How far is your house from public health center? Are you satisfied with the proximity?

_____

_____

26. How far is your house from shopping center or market? Are you satisfied with the proximity?

_____

_____

27. Are there any social activities in your neighborhood? If yes; _____

    A) What are the social activities in your neighborhood?

    _____

    _____

    B) Did you share any of this activities and why?

    _____

    _____

28. Do you feel that your site keeps your privacy? How satisfied are you with the privacy?

_____

_____

_____

INSTITUTIONAL AND MANAGERIAL DIMENSIONS

29. Are you happy with the management of the housing association of your condominium? Are you satisfied with their service?

_____

_____

_____

_____

_____

30. How do you see the service of the bank where you pay your monthly mortgage? How satisfied are you with it?

_____

_____

_____

_____
_____

31. How do you see the maintenance service of infrastructures? Do you get on time maintenance if you need any? Specify the institution where you get the maintenance. How satisfied are you with it?

_____
_____
_____
_____

32. From which institution do you get a satisfactory service? Explain how?

_____
_____
_____

33. Which institution dissatisfied you? How?

General Perception

34. Could you tell me any challenge experienced because of living in condominium? That affected your satisfaction?

_____
_____
_____
_____
_____

35. To what extent condominium affects your housing satisfaction level?

_____
_____
_____
_____
_____

36. Could you tell me any suggestion about further housing satisfaction level improvement?

_____
_____
_____
_____
_____

37. What is the most dissatisfactory thing about your residence?

_____
_____
_____
_____
_____

38. What is the most satisfactory thing about your residence?

_____
_____
_____
_____
_____

Appendices II: Questionnaire for professionals and officials

Please answer the following questions by marking "**X**" or writing down your answer in the space provided**.**

I. Background

1. Profession:_____

2. Position in the organization: _____

3. Length of work experience in the position:_____

4. Role on the project: _____

II. Condominium housing related questions

1) Do you think that all of the condominium houses so far constructed have been distributed to intended beneficiaries as per the distribution criteria? Yes / No If "No" what was the reason?

_____

2) Do you believe all the designs are implemented on the ground?

_____

3) Do you think the spaces in the condominium compounds are giving the intended service?

_____

4) Is there any follow up made by after the delivery of the units?

_____

5) Did you receive any complain from the beneficiaries? _____

6) How do you explain the satisfaction level of the residents? High/ medium/ low?
How?_____
_____
_____

7) If your answer for the previous question is low, what do you suggest to improve it?
_____
_____

Appendices III: Research Questionnaire for residents' association committee members

I. Background

1. Gender: Male/Female

2. Education background:_____

3. Position in the association:_____

4. For how long have you been in the association?_____

5. Do you own a house in this compound: yes/No 6. Year of stay in the house:_____

II. Condominium housing related questions

1. Who appointed you in the association:_____

2. What is your role in the association? _____

3. What is the role and responsibilities of the association in the compound?

_____

_____

4. How many members are in the association? _____

5. Have you ever receive a complaint from the residents? Yes/No if yes, what are they?

_____

_____

6. Is a there any government body who follow-up the work of the association?

_____

_____

7. Are you aware of the proclamation about the role and responsibility of the association? Yes/No if yes, are you working according to the law?

_____

_____

8. Are you informed about the existence of tenants in the compound? Yes/No if yes, how do you control them? How do you check weather its legal or illegal?

_____

_____

_____

9. Is the communal building in your compound available for the residents? Yes/No If No, why?

_____
_____

10. Are the communal spaces in your compound giving the intended space? Yes/ No Is No, why?

_____
_____

11. How do you explain the satisfaction level of the residents? High/ medium/ low? How?

_____
_____
_____

12. If your answer for the previous question is low, what do you suggest to improve it?

_____
_____