ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
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The Assessment of 20/80 Condominium Housing Projects performance in Addis Ababa: The case of Akaki -Kaliti Sub city

By

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Addis Ababa, Ethiopia

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Approval

This is to certify that the thesis prepared by Tilahun Lemma Armide entitled "The Assessment of 20/80 Condominium Housing Projects in Addis Ababa: The case of Akaki -Kaliti Sub city", which is submitted in partial fulfillment of the requirements for the Degree of Masters in Public Management and Policy (MPMP), complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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Statement of Declaration

I, Tilahun Lemma Armide the undersigned, declare that this thesis is my original work and has not been presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

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Abstract

The Aim of this study to assess 20/80 condominium housing projects in Addis Ababa: Researcher used quantitative and qualitative approach as a methodology to address the research questions. Data were collected through a semi-structured questionnaire distributed to 106 selected respondents, with 8 key informant interviews conducted and secondary data was collected from AAHPO employees and Akaki-kalitykoye-feche project sites one and two. The data collected were analyzed using both quantitative and qualitative approaches. The technique used to analyze data was frequency and percentage.

The findings indicated that,regarding to the client or public agent such as problem in selection of competent consultants and reliable contractors, absence of good methods and systems in purchasing and finance, slow speed in decision making, poor planning and controlling, lack of leadership skills of project manager, poor coordination and communication with stakeholders, and lack of sense of ownership.

Regarding to the consultant, there is lack of knowledge and experience, poor management, and difficulty in controlling contractors, poor coordination and communication with the project stakeholders, a slow response regarding testing and inspection, lack of commitment to confirm construction work according to specification and design. Depending on the contractors' lack of experience and technical profession, poor planning and scheduling, Insufficient coordination and communication, lack of leadership quality, less commitment, wastage of resources around the project sites, construction mistakes and defective works.

It suggested thatthe government should pay special attention in facilitating a comprehensive national housing policy by providing land, funds, discounted interest rate, and infrastructures to allow the private sector and the individual citizens to solve the housing deficit.

Key words: performance. Construction, owner, consultant, contractors, time.Cost, quality.

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List of Acronyms

AAHPO =Addis Ababa Housing Project Office

AAIHDP = Addis Ababa Integrated Housing Development Program

AHUR = Australian Housing and Urban Research Institute

ACIF = Australian Construction Industry Forum.

CSA = Central Statistics Agency

EHDA = Ethiopian Housing Development Agency

IHDP =Integrated Housing Development Program

IHA = Integrated Holistic Approach

MDG =Millennium Development Goals

MOFED = Ministry of Finance and Economic Development

MWUD = Ministry of Work and Urban Development

MPMP = Masters of public Management and policy

MSE = Micro and Small Enterprise

PLC = private Limited Company

PPP = Public Private Partnership.

SWOT = Strength, Weakness, Opportunity, and Threats

UDP = Urban Development project

UN-HABITAT= United Nation Human Settlements Program

UNMDG = United Nation Millennium Development Program

WHO = World Health Organization

GTZ = the German Technical Corporation

NGO = Non-Governmental Organization

SPSS=statically package for social science

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CHAPTER ONE

INTRODUCTION

1.1. Backgrounds of the Study

Historical trace witnesses that the importance of housing in economic development was disregarded issue. However, since the late 1960s the role of housing beyond basic necessity has been recognized. Since then housing sector has become influential over ranges of socio-economic, political and cultural aspects. Now a-days, it is considered as one of the sectors that serves as a tool to address poverty and bring sustainable development (UN Habitat, 2003). Ethiopia is one of the developing countries that formulated Integrated Housing Development Program to alleviate poverty and bring sustainable development. It is undisputable fact that one of the factors that affect housing ownership of lower income groups is the success of a program implementation. The housing program was conceived with the intention of bringing multiple effects that contribute to the betterment of urban residents. It is one of the urban based government-led and financed development programs with multi-goals, primarily aiming at housing provision for low-and middle-income households through creating job opportunities. As to the program spirit, all slums would be cleared within ten years' time and Ethiopia is supposed to be a middle-income country by 2025 (UN-Habitat, 2011).

Despite the program has been undergoing during the last nine years, there are implementation problems that hindered achievement of the desired objectives. The problem under investigation is about the effect of and their root causes that adversely affected the effective and efficient implementation in most Addis Ababa city administration to promote housing ownership of lower income residents. Urban Development Policy of Ethiopia (2005) reveals that urban centers in the country have been constrained with development and good governance related problems. The two problems were fundamental constraints that have challenged the development of urban centers. One of the development related constraints is lack of residential houses and dilapidation of urban villages (ibid). Housing situation in Ethiopia is mainly characterized by unplanned and informal, high density, homelessness, plastic made housing, street peoples and the like (UN Habitat, 2007). Research studied in the study area found that Addis Ababa is relatively in high urbanization process (UN Habitat, 2008). Contrarily to such high-speed urbanization, housing stock development has been very low.

Integrated Development Plan (2016) indicates that there were 24,000 informal houses inhabited with low income households that expected to be increased annually by 2,900 in the subsequent five years. The existing housing stock is characterized by deficiency of basic services and over-crowdedness. In 2008, the total housing stock was 44,126 of which 70 percent were single room and 53 percent were homed by a family of two or more persons (UN Habitat, 2008).

Added to the aforementioned, the study area has not yet attracted as such private housing developers. Due to various reasons, the role of condominium project in the housing sector development process has been terminated. These clearly imply that there is a mismatch between sluggish housing stock development in one hand and huge demand on the other hand. And one may infer that housing and housing related problems are one of the critical challenges the city has faced. Since 2005, Ethiopia adopted IHDP with the objective that creates massive job opportunities through which low and middle income citizens employed, earn income, promote saving and ultimately become owners of houses (Mahumbi, et, al,2013).

Specially, Akakikality sub city is one of the Addis Ababa sub city urban centers that adopted the program with the hope that it addresses the aforementioned problems. During the first a Four Years Plan (2006/07-2009/10) alone, the city administration planned to construct 12,210 houses (Ministry of Work and Urban Development, 2010). However, from 2005/06- 2014/15 only 2803 houses had been constructed and transferred to the beneficiaries, including commercial units. The figure reveals that there is extremely low supply of condominium houses in the city. Besides to the inadequacy of supply, problems related to quality, delay, costs, infrastructural provisions and lack of consideration for vulnerable groups have been complained. One may state that housing problem is more severe in the city as private sector in housing stock development have not been worth mentioning while the existing stock becoming old and need maintenance and replacement.

According to Addis Ababa Housing Project Office (AAHPO- 2016), Addis Ababa City Administration has delivered 105,000 houses to tenants in the last 10 years. Annually, the administration allocates over 6.3 billion birr for the construction of 10/90 and 20/80 condominiums. More than 860,000 of Addis Ababa's dwellers have registered in the 10/90 and 20/80 housing schemes.

The office had initially planned to construct 335,000 houses in the five years of GTP II. However, no new construction has been undertaken due to waiting the approval of city council to start anew 20/80 housing project, considered ideal for construction due to high cost overrun. Currently, there are over 130,000 houses already in progress across several coroners of the city. Yet several houses are lagging behind schedule, often blamed on power interruption, poor capacity of some contractors and mismanagement in supervision and procurement procedures.

In this thesis, towards the performance on governmental 20/80 housing project undertaking by Addis Ababa city Administration. Cost is among the major considerations throughout the project management life cycle and can be regarded as one of the most important challenge of a project and the driving force of project success. Despite its proven importance, it is not uncommon to see a construction project failing to achieve its objectives within the specified cost (Integrated Development Plan, 2016).

Al- Najjar (2008) defines cost overruns as the change in contract amount divided by the original contract award amount. This variation occurred during construction stage by means of practitioners. Identifying the contributory factors that appear this variation is a crucial aspect to secure the project success. The issue of performance in construction projects is very dominant in both developed and developing countries likes Ethiopia, but this trend is very severe in developing countries like Ethiopia, where these overruns sometimes exceed 100% of the anticipated delay performance and change in transferring the condo users to third person or rich peoples due to enabling to pay the rest of percentage payment expected.

1.2. Statements of the problem

In Ethiopia, the current government formulated different housing strategies to minimize the residential shortage; it can be constructed by saving of tenants and subsidiary of government. This shows there is scarce resource in terms of finance and land. Allocated budget which is initially estimated is not met due to different unforeseeable factors that rose from involved parties, from the initial stag up to execution of the projects, which means, all need to be eliminated or mitigated to ensure accomplished the projects within allocated time and budget. Therefore, a crucial aspect of practitioners of governmental public housing projects that needs to be focused on identifying the root causes of cost overrun in current phenomena.

Different previous studied literatures such as: (Fetene Nega,2008; United nation human settlement program, 2011; World Bank, 2013; Zinabu and Getachew, 2015; Alebel, et,al.,

2016, Addis Ababa city saving House Development, 2016,) proven that, Housing projects are entrapped by various types of causes, some are- inadequate or inefficient equipment, tools and plants, unreliable sources of materials on the local market, inadequate manpower, (e.g., in terms of numbers, poor training, lack of training, etc), delayed payment to contractors, subcontractors and/or suppliers, rework required due to poor work or the wrong materials used by contractors, change of work scope and/or changes in material specifications, poor communication among stakeholders (e.g., slow responses to site queries, late receipt of drawings, etc), disputes among the parties involved in the project (clients, contractors, consultants) , high inflation, insurance and interest rates , contractor's work load, bureaucracy, site accidents Ethiopia. The previous study identified is that, Addis Ababa City Administration housing Project program delivers their progressed the houses to tenants behind the schedules due to most houses required additional budget to finalized the project, that is initial estimated cost is less than the actual cost at completion due to unidentified root causes.

Hence, it is important to establish to investigate prevailing outcome in the selected 20/80 housing scheme regrading to assessing the overall cost increment outcomes, neither of previous researcher have had evaluated on the Effects of condo- Houses' Coast Increment in the Addis Ababa in any of Housing Development Projects. This shows to the empirical knowledge gap insisting to overcome current study. Though United Nations HABITAT (2017), data has been obtained from the government bureau many thousands of condos were sold in the past 12 years in legal and illegal ways. People in a diverse array of circumstances are participating in this including people who have land in other parts of the country and Diaspora who live overseas. Just renting the condo can bring in 20 – 80 thousand birr a year. According to current researcher during pilot interviewed government worker around Semen Hotel the price of condo houses now makes them inaccessible to the people they were designed to help.

> *"Look if someone wants a 20/ 80 condo they must pay around 80,000 birr for the down payment which is 20 percent of the house's total value and after that they need to save at least 2,500 birr per month in the Commercial Bank of Ethiopia until they cover the payment. This is difficult for people so their only option is to rent out the condo to other people." (piolet interviewed government worker, April, 2018)*

In spit to this the people also intended to sell their house to other person in the area of housing construction industry in the case of Ethiopia. the general practical problems in other urban centers of Akakikality Sub city, 20/ 80 condo, it is also important to investigate the o assess the level of /80 condo-housing performance in respect to plan performance, price affordability, timely fulfillments of some basic facilities and affirmative action wherein certain contextual differences exist and finally outreaches to the users.

1.3. Research Questions

Study is forwarding the following research questions below:

1. What is the level 20/80 condo housing programs performance look like in Akakikality sub city?
2. How does the house hold conceptualize housing affordability of unreasonable burden on household incomes?
3. How do government fast responses and solutions for problems that are raised by customers in the Integrated Addis Ababa House Construction projects?
4. What is the challenges of 20/80 condo housing project in Akakaikality sub city?

1.4. Objective of the Study

1.4.1. GeneralObjective

The overall objective of the study is to evaluate the 20/80 Condo-hosing performance in Addis Ababa governmental integrated housing project: the case of Akakikality Sub city.

1.4.2. Specific objective

1. To evaluate the level of housing performance in 20/80 governmental housing programs of akakikality Sub city.
2. To evaluate the extent of household, conceptualize housing affordability of unreasonable burden on household incomes.
3. To evaluate the extent of government tentative responses and solutions for problems that are raised by customers in the Integrated Addis Ababa House Construction projects.
4. To evaluate the challenges of 20/80 condo housing project performance in Akaki kality sub city

1.5. Significance of the Study

The study is expected to provide information to the Addis Ababa city Administration by identifying the status and associated problems currently the Addis Ababa housing development program currently has. It will have a high value to the city administration to make proper decisions regarding the provision of residential housing. In addition, the study will forward possible solutions to improve the problem of residential housing in the city and it contributes to filling the knowledge gap essential for academic purpose as well. The study will be creating interests in researchers to undertake a farther investigation on the issues finally, the finding and recommendation of this research will be useful for those concerned bodies to find out the more effective solution on the problems of condominium housing projects.

1.6. Scope of the Study

The construction of the 20/80 condominium housing program was being implemented in the entire10 sub-cities of Addis Ababa in more than 18 projects sites. Out of which 6 projects were found underAkakiykalityWereda9 project sites. Such as, project11, project12, project16, project17, project 18 were under constructed on Koye-Fechesite. Due to constraints of time, finance and the researcher's ability to collect data, the study would bind by Addis Ababa housing project head office staff employees,Akakiy-KalitykoyeFeche project sites one and koye-feche project site two. This sub city is purposively selected because it has currently on-going projects and the large number of 20/80 condominium housing programs was under constructed than any other inner sub-cities of Addis Ababa. Furthermore, the researcher expected to get better data on this area due to more than large project sites were being implemented on koye-Fecheproject sites.

The study was delimited to the status or implementation factors and prospects of Addis Ababa condominium housing projects. The research tried to assess issues of condominium housing projects since 2005 Ethiopia has been implementing an ambitious government-led low- and middle-income housing program. Addis Ababa housing project office has been legally established in 2004 the proclamation No.370/2003 of the Federal Democratic Republic of Ethiopia. Therefore, the study was focused on the implementation of Addis Ababa condominium housing project from its starting time to up to date. As sample, two of the condominium sites at Akaki-kality; koye-Feche project site one and koye-Feche project site two; were selected. The project sites were commenced on 2014. In respect to the

methodology of the study researcher applied descriptive research method; using both qualitative and quantitative data analysis approach was used. The finding may apply to on other condominiums of the same situation with entire part of the city of Addis Ababa. Based on the result to provide the possible solution or remedial to the stated problem.

1.7. Limitation of Study

Researcher got limitations while doing this research, especially during the data collection period. Among the major limitations, due to the location of Akakiy-Kality-koye project sites found out of the inner city of Addis Ababa, the researcher faced inaccessibility of transportation problem. Another challenge was the key informant project managers and officials of the Addis Ababa housing project office and Akaki-Kality sites chief executives, a consultant's head, and main contractors to get on the site is another challenge to contact in their office for the purpose of interview information, due to the reason of issues of organizational meeting. The well-known problem was lack of enough time and finance to do the research exhaustively and comprehensively.

1.8. Organization of the Thesis

The logical arrangement of the design of any work is very essential and hence the paper is organized in order that it suits for the purpose of paper presentation and logical arrangement of the content. This thesis is organized as follows.

The first chapter is the introduction which deals with the general aspects of the thesis; followed by the problem of statement and objectives, significant of the study, scope of the study, an organization of the paper, and definition of operational terms. The second chapter focused on discussing the related works regarding theoretical or conceptual and Empirical shreds of evidence to show research gap. It fulfilled depends on the challenges of condominium housing project issues which deals with the secondary data that provides different detail information about the topic. The third chapter deals with the design and methodological issues of the research and explanation of the study area. The fourth chapter deals with the data presentation, analysis and interpretation of the study and finally, the last chapter of this thesis provided conclusion and recommendation of the study.

1.9. Definition of Operational terms

Condominium: it is a Single, individually owned housing unit in a multi-unit building. The condominium owner holds sole title to the unit, but owns the land and common property (elevators, halls, roof, stairs, etc.) jointly with other unit owners, and shares the upkeep expenses on the common property with them. Unit owner pays property taxes only on his or her unit, and may mortgage, rent, or sell it just like any other personal property. And also the word condominium divides into the prefix "con" means sharing and "dominium" which means, ownership. It simply means sharing with others. A condominium is no particular kind of building rather; it is a legal arrangement. It refers to a form of ownership (Condominium Proclamation No. 370/2003).

Condominium housing: is a name given to the form of housing tenure where each resident household owns their individual unit, but equally shares ownership and responsibility for the communal areas and facilities of the building, such as hallways, heating systems, and elevators. There is no individual ownership over plots of land. All of the land on a condominium site is owned by all homeowners (UN-Habitat, 2011).

Project: it is a temporary Endeavour undertaken to create a unique product, service, or result. The temporary nature of projects indicates that a project has a definite beginning and end. The end is reached when the project's objectives have been achieved or when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists. A project may also be terminated if the client (customer, sponsor or champion) wishes to terminate the project (Harold and Kerzner, 2004).

Household: a group of persons who often live in the same housing unit or in connected Premises and have a common arrangement for cooking and eating food. A household consists of a husband, his wife, their children, relatives and some other persons residing together in the household (MOFED, 2008).

Housing unit: is a separate and independent place of residence, either intended for habitation or not but occupied as a living quarter by a household at a time of the census (CSA, 2010).

Housing affordability: Are the willingness and ability of households to pay to consume Housing services, which depends on the housing price, household income, and the terms and availability of mortgage finance (AHURI, 2006).

Housing supply: is the flow of houses into the market either that offered for sale or rent at any one time with changing prices. It is mainly depending on the number of new housing units constructed by the concerned bodies (Ibid).

Time: It is the length of time that extends the project duration (Atkinson, 1999).

Cost escalation: changes in the cost or price of specific goods or services in a given economy over a period (Ibid).

Quality: fitness for purpose (Newton, 2007),

CHAPTER TWO

REVIEW OF RELATEDLITERATURE

2.1.Introduction

2.1.1.Theoretical Literature Review

Housing is one of the basic necessities for human beings. However, there are very complex linkages between adequate housing supply and affordability practices. Throughout the less developed countries cities, uncontrolled rapid population growth, from the high rate of natural increase, and rapid rural to urban migration together with a low level of their income has resulted in high demand of urban housing which results in a critical problem of housing supply and affordability. Like most urban centers of developing countries, Ethiopia's urban centers are characterized by a poorly developed economic base. Most cities and towns in Ethiopia face a plethora of problems, including an acute and ever-worsening housing shortage. But; housing problems may not be the same in each city because of variations in physical conditions, economic development and cultural preferences of the given society (UN-Habitat, 2016). Therefore, the function of housing is the most important economic resource to Addis Ababa residents than any other urban cities of our country. This chapter presents the review of related literature which is relevant to the study.

The core point is to investigate the government policy in providing adequate and affordable housing in line with the low and middle-income people of Addis Ababa which is promised in its objective at the Integrated Housing Development Program (IHDP), actually before five years ago (2010) the IHDP said that the city's current housing project has a goal of constructing 400,000 condominium units between 2010 and 2015. However, the program has not met its original targets it has built 171,000 housing units to date. Now, the question is why the projects of condominium housing failed by more than 50 per cent.

2.1.2. Integrated Housing Development Program (IHDP).

2.1.3. History of Condominium Housing

The concept of condominium is quite old. There is at least one record of the sale of part of a building, in ancient [Modern Iraq], during the First Dynasty, nearly two centuries before the birth of Christ, and there is evidence of the use of the system among the Greeks, Egyptians, and others. It was during the Middle Ages when walls we reconstructed to enclose cities in order to provide security, that building space became scarce in many European cities. This

lack of space led to individual ownership of parts of a building, sometimes even individual ownership of single rooms, in cities such as Orleans and Paris (Bennett S. 2011: p250). As stated in the annotated bibliography of Bennett S., that there existed an informal ownership of Floors or parts of buildings in countries such as Austria, Switzerland, and Germany as early as the twelfth century, especially among the poorer citizens (Bennett, 2012).

As cited in Bonnet's bibliography (2012), In the United States, the severe housing shortage and the urban sprawl that occurred following the end of World War II created a need for the more efficient use of land through high rise multi-family dwellings located in those areas where facilities for employment, education, recreation, and public services already exist. In addition, there was national interest in providing more affordable housing for a larger number of people. Americans, in common with most people, preferred town their own homes, rather than rent, and to own a home in an area that might be financially out of their reach if they attempted to purchase a single-family Dwelling (Bennett S., 2012: p254). The Grey stone Manor, built in the United States of America, Salt Lake City, Utah in 1960, was the First ever constructed condominium housing (Condominiums and Cooperatives. n.d.). It was adopted from the Caribbean housing cooperative: a form of property ownership under the Napoleonic Code.

Since 1960's, condominiums continue to be an affordable form of housing tenure for Americans looking to manage their own property without the burdens of land ownership and high property taxes (Condominiums and Cooperatives. n.d.). In Central and Eastern Europe (CEE) in the early 1990s, privatization of government-owned houses was the first step taken as transition measures from socialism to market economy. Large apartment buildings, built and maintained by the central government and rented to citizens we retransferred to the condominium form of ownership (Rabenhorst, 2012). Hence, condominium housing is a form of housing tenure that is affordable and provides an opportunity to own property in desirable areas, without the financial strain of land ownership in most part of the world including the United States of America, Europe, Africa, and etc. In Ethiopia, the concept of Condominium housing as a separate form of ownership was not familiar until 2003 (MUDHC, 2005 E.C.: p11).

In 2005, the government of Ethiopia considering provision of houses as one of the major developmental tasks to reducing poverty and improving the livelihoods of slum dwellers; and thereby bringing sustainable socio-economic development, established a National Integrated

Housing Development Program under the then Ministry of Works and Urban Development (MWUD) later renamed as the Ministry of Urban Development, and Construction (UNHABITAT, 2010). As reported by UNHABITAT (2010), the Integrated Housing Development Program (IHDP) is a Government-led and financed housing provision program for low-and-middle-income urban households in Ethiopia.

The program was launched in 2004 by the then State Minister ArkebeEqubay, and later Mayor of Addis Ababa who was the driving force behind this program (UNHABITAT, 2010). His main goal was to construct massive low-cost housing units in Addis Ababa. As a starting menu, the City Administration of Addis Ababa, in collaboration with the German Technical Corporation (GTZ) office, commenced the design and construction of a pilot Condominium housing project in the neighborhood of Bole Gerji (UNHABITA, 2010). As stated on MUDHC (2005 E.C.), analysis of the program indicated that the Integrated Housing Development Program is an ambitious program which was directly started to address the pressing low-income housing challenges throughout Ethiopian Cities without considering social setup, economic, physical, and environmental as well as the resource (financial, material and human) management differences that exist in each city. As a result, constructions of all condominium houses which were started in various cities, except Addis Ababa, were suspended.

2.1.4 Meaning of Condominium Housing in Different Countries

The term condominium identifies a form of ownership of real property. Property becomes a condominium simply by recording a Declaration which submits the real property to the Condominium Property Act. Condominiums are not a new concept. The form of ownership which is utilized for condominiums was used by the Romans as early as the 6th century B.C. In Europe, the concept has been available for many centuries. The concept has existed in South American countries for at least two centuries.

After World War II, essentially the only type of commonly owned housing that was available to the general population was the cooperative (UN-Habitat 2011). Technically, a condominium is a collection of individual home units and common areas along with the land upon which they sit. Individual home ownership within a condominium is construed as ownership of only the airspace confining the boundaries of the home. The boundaries of that space are specified by a legal document known as a Declaration, filed on record with the local governing authority. Typically, these boundaries will include the wall surrounding a

condo, allowing the homeowner to make some interior modifications without impacting the common area. Anything outside this boundary is held in an undivided ownership interest by a corporation established at the time of the condominium's creation.

The corporation holds this property in trust on behalf of the homeowners as a group; it may not have ownership itself. Condominiums have conditions, covenants, and restrictions, and often additional rules that govern how the individual unit owners are to share the space (Ibid). Condominium housing is a name given to the form of housing tenure where each resident household owns their individual unit, but equally shares ownership and responsibility for the communal areas and facilities of the building, such as hallways, heating systems, and elevators. There is no individual ownership over plots of land. All of the land on a condominium site is owned by all homeowners. Usually, the external maintenance of the roof and walls are undertaken by a Condominium association that jointly represents ownership of the whole complex, employing strict management to ensure funding from each homeowner. This association consists of representatives of all condominium residents who manage the site through a Board of directors, elected by association members (UN-Habitat 2008).

A register of condominium units and common areas on site and any restrictions on their use is commonly established in a master deed which authorizes the Board of directors to administer condominium affairs and assess owners on their performance of adequate maintenance. Rules of governance are usually covered in a separate set of bylaws which generally govern the internal affairs of the condominium blocks. Bylaws usually establish the responsibilities of the condominium association; the voting procedure to be used at association meetings; the qualifications, powers, and duties of the Board of directors; the powers and duties of the officers; and the obligations of the owners with regards to assessments, maintenance, and use of their unit and common areas (Ibid). A set of rules and regulations, providing specific details of restrictions and conduct, are established by the Board and are more readily amendable than the declaration or bylaws. Typical rules include mandatory maintenance fees (often a monthly collection), pet and livestock restrictions, and colour/design choices visible from the common areas of the buildings.

The upkeep of walls and features inside a condominium unit is the sole responsibility of homeowners themselves. This area is defined as the area bounded by the walls of the building, allowing the homeowner to make some interior modifications without creating an impact on the common areas. These boundaries are specified by a legal declaration, filed with

the local governing authority. Anything outside this boundary is held in an undivided ownership interest by a corporation established at the time of the condominium's creation (UN-Habitat 2009).

Condominium unit owners can be permitted to rent out their home to tenants, although leasing rights may be subject to conditions set forth in the original declaration, such as a rental cap on the total number of units a community can lease at any one time, or otherwise as permitted by local law. The program recognizes the opportunity for housing to stimulate the economy, create employment, and improve the capacity of the construction and financial sectors (Ibid).

2.1.5. Key Players in Housing Sector

In order to achieve the urban development strategy through providing low -cost and affordable houses to all members of the society, the government is facilitating and supporting private house constructors, real estate developers and house construction cooperatives, (UNHHBITAT 2010). In addition, the government is currently a key player in the housing development and supply (MUDHC, 2005 E.C). It controls the majority of the rental accommodation and influences the supply of new housing through active involvement in material production and importation, land supply, and housing finance particularly for condominium houses. This justifies that the main actor in the condominium housing construction is the government aimed at achieving the main goal of addressing a low and middle-income group of the society through the construction of subsidized affordable houses.

Addis Ababa City Administration, Housing Registration Directive No. 2 (2005E.C.) Amharic version defines low-income group a person's monthly income and/or the total household monthly income of less than or equal to Birr 1, 200. Affordability is supposed to be realized by constructing the low-cost condominium houses. The other players are real estate developers. According to Tameru (2009), above 300 real estate Developers were established in Addis Ababa over the last fifteen years. The level of development is varied according to tithe capacity of the developers. This kind of development is recent in Ethiopia and purchasers are required to make 30 per cent of the price of the house as down payment. Real estate developers currently operate only with high-income groups as there is little incentive to construct low-income housing.

The housing cooperatives also build houses collectively. Housing cooperatives have received varying levels of government support over the last 40 years, (MUDHC, 2005 E.C). The government was providing significant subsidy up to 60 per cent on construction materials, land being allocated with no charge, and low mortgage interest rates. However, mainly due to their own internal problems and gradual reduction of the government ‟s attention and subsidies their contribution towards housing development has become minimum (MUDHC, 2005 E.C). Informal unplanned housing provision, as reported by un-habituated (2010), constitutes a considerable proportion of the total housing supply. Informal housing is especially prevalent in Addis Ababa city expansion areas about sixty thousand informal settlers and the number is expected to reach around hundred thousand and it is the fastest growing supply method (MUDHC, 2005 E.C).

Individuals (formal) also construct houses with market prices constitute 25.3 per cent of the total Housing supply (UNHABITAT, 2010). Most of the houses constructed by individuals were financed by the individuals themselves that are without mortgage loans; hence their contribution to housing problem is minimal. Similarly, NGOs and governmental organizations are involved in the construction of housing for their employees as well. Involvement in the housing market by Non-Governmental Organizations (NGOs), both national and international, has been of small scale. While many NGOs operate in Ethiopia, few deals with housing and land issues (UNHABITAT, 2010).

2.1.6. Overview of housing in different governments of Ethiopia

In the first half of the twentieth-century land and housing in Ethiopia were possessed by a few individuals and groups who owned and controlled land and housing development. Housing supply was led by the landowning elite with less than one per cent of the population owning more than 70 per cent of the arable land, on which 80 per cent of the peasants were tenants. Low-income households had little option but to rent housing and this was done outside of any formal control or planning system. In 1962, for example, 58 per cent of the land in Addis Ababa was owned by only 1,768 individuals, equating to ownership of over 10,000m2 each, and leading to 55 per cent of housing units being rental housing.

While government urban housing and land strategies were debated and documented at length they did not materialize into built projects to address the severe housing demand. The government exhibited little national commitment to land and housing development for the low-income sector and there was no coherent approach or action toward land and housing

provision. Therefore, ad-hoc policies and approaches prevailed and informal, unauthorized housing proliferated (UN-Habitat, 2011, p.2). During 1974, the land and housing situation significantly changed as a result of the political revolution that saw the overthrow of Emperor Haile Selassie by the Derg. In July 1975, Proclamation No. 47: 'Government Ownership of Urban Lands and Extra Houses' nationalized all urban land in an effort to force a fair distribution of wealth across the country. Two new typologies in the housing sector were established: Government owned rental units, administered by the Agency for the Administration of Rental Houses, and Kebele Housing managed by Kebele Administration units, the smallest government administration unit, operating at the neighborhood level. During this time approximately 60 per cent of housing in Addis Ababa was rental accommodation and Kebeles accounted for 93% of this rental accommodation.

A consequence of the nationalization was a significant reduction in the rental price for the low-cost rental housing of between 15 and 50 per cent for occupants paying below ETB 300 (USD 23). In Addis Ababa, the rent of 80 per cent of the city's population was reduced by30 per cent. Housing supply was controlled by the centralized government yet it was drastically insufficient to meet the large demand. For instance, in Addis Ababa between 1975 and 1995, only one-tenth of the projected dwellings were built because of very low effective demand, rock bottom national housing investment rates, and from regulatory constraints in the supply of land, credit, and building materials (UN-Habitat, 2011c).

The Derg government was controlled by ownership of urban lands, and rental dwellings or extra houses (a person is not allowed to have more than one house). Consequently, ownership of all urban land and extra houses were transferred to the government in an effort to enforce a fair distribution of wealth across the country. During the Derg regime, housing supply was controlled by the central government and urban residents were allowed to keep one residential house and another business house, if necessary. Housing supply was insufficient to meet the large demand and all cities in Ethiopia experienced acute housing shortages and ever deteriorating housing conditions (Teshome, 2008). In the late 1980s, the 'Derg' loosened its control of housing supply by allowing private house owners and tenants of public premises to sell and exchange their houses although in reality the government devolved very little control and maintained its position as the key driver of housing supply. Proclamation No. 292 of 1986 specified that "residential buildings could be produced only by state enterprises, municipal governments, housing cooperatives and individuals who build dwellings for their

personal consumption effectively excluding large-scale private sector housing developers to address the large demand.

The housing stock continued to be characterized by high rates of rental housing. By the mid-1980s, rental housing accounted for 60 per cent of the total housing stock in Addis Ababa. The low rental rates resulted in little to no investment in housing which led to a further deterioration of housing quality. The housing conditions were poorest in the centre of Addis Ababa. According to the 1985 analysis report by the Municipal Technical College for the Teklehaimanot Upgrading Scheme, the average house had a floor area of 20m², 35 per cent of all houses had only one room, and 39 per cent of the urban population lived in overcrowded housing that lacked basic services such as potable water and sanitation(ibid).

Since the overthrow of the 'Derg' by the Ethiopian People's Revolutionary Democratic Front (EPRDF) in1991, Ethiopia has been undergoing market-orientated reforms, structural adjustment policies, decentralization of governing structures, and a program of agricultural development led industrialization. Following the new constitution and federal system of government, in 1994 a rural development policy, named the Land Reform Program, was introduced. This sought to decentralize urban planning responsibilities and to encourage secondary cities to attract rural migrants to ease pressure on the already limited housing available for urban dwellers living in Addis Ababa and other major urban areas. Addis Ababa's first housing policy, incorporating the government's practice of maintaining public ownership, was also implemented at this time but it assumed that the housing market alone would meet the demand for affordable housing of the low-income population. Despite large subsidies and land provided at highly subsidized rates, the private sector has failed to deliver affordable housing at the large scale required. During this time house prices significantly rose making it extremely difficult for even professionals such as doctors and lawyers to access affordable housing (UN-Habitat, 2007).

The post-1991 housing sector can, therefore, be typified by the following four characteristics: The private housing sector has not been sufficiently engaged and therefore has not met the immense housing demand. The practice of low-cost government owned rental housing continues to be the dominant low-income housing strategy. The housing stock is of a very low quality, is poorly maintained, and needs either replacement or significant upgrading. Informal unplanned housing has proliferated as a result of high urbanization, limited housing supply, and unaffordability of formal housing (ibid).

2.1.7. Current Government Policy and Legal Frameworks Related to Housing.

Since 1991 Ethiopia has had a decentralized regulatory structure with considerable autonomy devolved to regional states regarding the management of their internal affairs. The country is divided into nine states and two autonomous administrative areas, the cities of Addis Ababa and Dire Dawa. The states are, in theory, financially independent from the national government. Each state comprises zones, districts (Woreda), cities, and neighbourhood administrations (Kebeles). In each region, the districts are the basic planning unit and have jurisdiction over the kebeles.

The capital city of Addis Ababa has ten sub-city administrations containing 11elected executives and 128 councilors at the city level. There are 99 Kebeles within the capital and 300 councilors between them to represent 30,000 people. All land is a property of the national government and is leased, not sold, for development (UN-habitat, 2011, p.3-4). Until recently, there were few national coordination policies regarding housing and urban development. In 2005, the Council of Ministers of the Federal Democratic Republic of Ethiopia formulated and approved a consolidated Urban Development Policy to link together the small-scale efforts made by regional governments and cities since 2000. They also created the national Ministry of Works and Urban Development (MWUD) to guide the overall development of the country's urban areas and conducting studies on its urbanization patterns. Within MWUD, the National Urban Planning Institute is responsible for preparing physical urban development plans, the Housing Development Bureau works towards the implementation of the Integrated Housing Development Program (IHDP) including the Micro and Small Enterprise(MSE) Development Programs, the Urban Development Support Services deal with financial planning, human resources, and capacity building(ibid).

A major player in providing housing is the state dominant manifested through its various arms such as regional governments, districts, and kebeles. The state controls the key of the rental accommodation and influences the supply of new housing through active involvement in material production and importation, land supply, and housing finance. Very few private housing developers exist. The private construction industry is very small and it is complicated and time-consuming to start a company, register it, and conduct business. Those that do exist operate only for high-income groups as there is little incentive to construct low-income housing (UN-Habitat, 2010).

Since the late 1970s housing cooperatives have also provided an avenue for home ownership. This delivery method was established in 1978, through Proclamation No. 138. The approach is for citizens to organize themselves into small groups for land allocation, develop savings capacity, prepare settlement plans, receive land and secure tenure, and largely build their housing themselves incrementally. Cooperatives have received varying levels of government support over the last 40 years. Between 1986 and 1992, housing supply by cooperatives did increase due to the significant subsidy of construction materials (60 per cent), land being allocated with no charge, and low mortgage interest rates, but this help was inadequate to meet the magnitude of housing demand. Between 1975 and 1992 housing, cooperatives produced a mere 40,539 units. In addition to its small scale, cooperative housing is challenged by the undesirable peripheral location of land allocated, low quality of allocated land making construction costly and difficult, and the exclusion of the poorest sector of society (ibid).

Informal unplanned housing provision constitutes a considerable proportion of the total housing supply, although there are vastly different estimates of the scale of urban informality. Informal housing is especially prevalent in Addis Ababa accounting for 34.1 per cent of total housing supply between 1996 and 2003 and it is the fastest growing supply method. Involvement in the housing market by Non-Governmental Organizations (NGOs), both national and international, has been of small scale. While many NGOs operate in Ethiopia, deal with housing and land issues. The three most visible NGOs dealing with housing are the Integrated Holistic Approach Urban Development Project (IHA-UDP), care and concern, who have been involved in the upgrading of sanitation and infrastructure and facilitating community participation in upgrading projects. They work mainly at the city and kebele level. The German Technical Corporation (GTZ) has been operating in Ethiopia for many decades, primarily in providing technical support and building capacity in building construction (UN-Habitat,2011, p.5-6). The existing housing stock is a very low physical quality. Using the UN-Habitat slum definition, 80 per cent of Addis Ababa is a slum with 70 per cent of this comprising government owned rental housing. The majority of low-income Ethiopians reside in rented kebele housing.

The quality of kebele housing stock is low typically constructed of mud, wood, and discarded materials. Kebele houses are old, having been constructed many decades ago and little to no maintenance has been carried out. Some houses remain with no access to water and electricity, and many do not maintain minimum standards of sanitation. Government

inactivity in kebele housing maintenance, as well as the low rents, is the major reasons why the kebele housing stock is of such a low quality. Although also of relatively low quality, owner-occupied houses are of a higher standard than kebele housing. They are less deteriorated due to age and greater attention to maintenance. Data on the national stock of informal housing unit's is not available although Addis Ababa in the year 2000 had an estimated 60,000 informal 'squatter' units representing 20 per cent of the city's housing stock.

The physical form of Ethiopian housing has been dominated by single-story construction, with a high proportion of 'terrace housing' (housing units adjoining other units rather than free standing). Nationally, in the 1994 census, 98.3 per cent of buildings nationwide were single storied and the remaining 1.7 per cent was multi-storied buildings. In terms of tenure, private house ownership levels are low. In Addis Ababa, only 30 per cent of houses are owner-occupied. Rental housing is the dominant tenure mode. In Addis Ababa, in the 1994 census, 57.3 per cent of the housing stock was government rental, either local municipalities or the National Agency for Administration of Rental Housing (ibid). The government estimates that the current housing deficit is between 900,000 and 1,000,000 units in urban areas and that only 30 per cent of the current housing stock is in a fair condition, with the remaining 70 per cent in need of total replacement.

In Addis Ababa alone, 300,000 units are required to meet the deficit. The housing deficit is set to increase concurrently with the foreseen high population and urbanization growth. Between 1983 and 2007, Ethiopia's population more than doubled, from 33.5 million to 81.2 million, and it is projected to more than double again by 2050 to reach 170.2 million. To accommodate future growth, the Urban Sector Millennium Development Goals Needs Assessment (2004) predicted that to meet the Millennium Development Goals (MDGs) in 2015requires 2,250,831 units, which equates to a considerable 225,000 houses per Annam. There is massive demand for serviced, healthy, affordable housing. This demand stems from both the current housing deficit and the poor quality of the existing kebele housing stock that is beyond repair. However, there is low effective demand. Effective demand is based on the ability and willingness to pay for housing, affected by income and what households are prepared to pay. Although effective demand is difficult to determine because it requires reliable data on income levels and expenditure patterns of households, their savings capacity and prioritization of housing vis-à-vis other forms of investment, it is the case that the

majority of Ethiopians cannot pay for formal housing supplied by the private market. Therefore, the greatest need is for affordable housing (CSA, 2007).

There is a distinct absence of a diversified and flexible housing finance sector in Ethiopia. For many years, the Construction and Business Bank (formerly the Housing and Savings Bank) was the only bank to offer housing construction loans and long-term mortgages for the procurement of housing. The Bank, which was owned by the government of Ethiopia, relied heavily on the Central Bank for its capital. During previous regimes, this was not a problem, as the government was responsible for the procurement of housing for the urban poor and housing units were completed and held by the government in a rental portfolio. However, in the 1990s, the Construction and Business Bank started lending money directly to housing cooperatives. Overall, this centralized financial set up has resulted in a housing finance sector that is very limited in its scope and diversity of the products it offers.

A major challenge facing securing affordable housing for low-income Ethiopians has been accessed to housing finance (UN-Habitat, 2011). Following the market led adjustments, implemented post-1991, subsidized interest rates were removed which significantly increased lending rates. Rates increased from 4.5 per cent for cooperatives and 7.5 per cent for individuals to 16 per cent for both severely reducing the opportunity for the low-income households to secure a home loan. Furthermore, with a high percentage of low-income people receiving income from informal sources and lacking the capital to use as collateral, access to formal credit has been limited or non-existent. The low level of domestic savings of the population, coupled with the shortage of external resources, has affected the availability of investment in the housing sector. At the household level, these translate into a low level of investment in housing, and little capacity of the low-income population to own minimum standard housing.

Houses of a minimum standard have simply been out of financial reach for the poor (ibid). Like other provision, the government significantly controls the construction industry. Before 1991 the government had a monopoly over the production and supplies of building materials. Even though the government is still active in retailing and some subsidies remain in place, material production and supply is gradually shifting to a market-based approach where prices are by and large market prices. Building materials are high in price and of a low quality relative to neigh boring countries. For low-income housing, the most common building materials used are wattle and daub (‘chikka’) for walls, with roof rafters of round tree lengths

covered with corrugated iron sheeting, and skim concrete or compacted earth floor. Larger multistory commercial and residential buildings in urban areas are composed of reinforced concrete frame and slab construction with hollow brick or fired brick infill walls. There is a pressing need for more cost-efficient alternative materials, as the current cost of construction materials is a high proportion of total construction cost, typically around 70 per cent (UN-Habitat, 2012).

The construction industry comprises four main sectors: building and residential development sector, civil engineering sector, professional services, and informal self-building sector. Construction companies are classified according to size, expertise, and financial capability. They must be registered with the MWUD and licensed to undertake construction work. There is little specialization in contractors' work, with contractors taking on all aspects of a building project the professional services sector comprises mostly architects, engineers and quantity surveyors. Logically, the informal self-building sector is not registered but supplies materials and labor at a very large scale, employing a large number of people. There is little cross-collaboration between the professional sector and informal sector (UN-Habitat, 2009).

The national Ethiopian Building Code, Ethiopian Building Proclamation 624/2009 is a legal document that outlines the building regulations and requirements, for use by local authorities to ensure building standards are maintained in their jurisdiction. The codes are only used and enforced in buildings developed in the formal sector. The construction sector is undergoing several changes. The government's plan for the budget year of 2008/09 was to enhance the capacity of the construction industry by making it capable and competitive, enhancing its contribution to the country's economy, enabling it to meet the demand for housing construction, and enabling it to create ample employment opportunities. It aimed to achieve this by improving construction industry policy; developing a construction industry capacity-building program and ratifying and implementing the national building proclamation (ibid).

2.1.8. Global and practical problems in housing

Construction projects are needed to be completed within the time frame, budgeted cost and required quality. However, unfortunately, many projects take a longer time to complete, cost more than necessary and some projects are cancelled because of various factors directly or indirectly related to it. Project failures have significant effect from economic as well as political points of view. If the project takes the longer time it requires additional resources, and budgets and this increases labor, material, machinery and equipment cost. This affects the

budget of other projects and in general, it affects the economy of the country. Similarly, due to delay in project implementation, the people and the economy have to wait for the provision of public services facility longer than necessary. Thus the failure of the project limits the growth of the economy because the outputs provided by the housing projects serve as input for many other sectors of the economy (www.getformsonline.com, 27/12/2016).

Project delay can be defined as an incident that causes extended time to complete all or part of a particular project. Delay can also be defined as the time overrun, either ahead of the date for project completion specified by the contractor further than the extended contract period where an addition of time has been granted. The project delay in the construction industry is a universal or large-scale observable fact affecting not only the construction industry but the overall economy of a country as well (ibid). Today, development is increasingly seen as an issue of managing change. This notion replaces solder idea of development as the transfer of knowledge of advanced technology. However, in straightforwardly addressing change technical cooperation projects have become much more complex.

In fact, coping with complexity has become the main challenge to projects. Management is the key to mastering complexity. However, classical project management approaches are often of little help for the management of institutional change. Many technical cooperation project advisors already employ elements of a systemic management approach, but often in contravention of established procedures and on an ad hoc basis. There is a growing disparity between project methods as hitherto standardized and prescribed in procedures and handbooks, and the reality of current project implementation there is a necessity to streamline and formalize the principles of project management as applied to organizational change. This will make them more useful and become a means of increasing the effectiveness of current project management. It must be remembered that project management is first and foremost a philosophy of management, not an elaborate set of tools and techniques. It will only be as effective as the people who use it (Hass, 2009).

When goals are not clearly identified; the whole project and team can suffer. When upper management cannot agree to undefined goals, the project in question typically has little chance of succeeding. The project manager must ask the right questions to establish and communicate clear goals from the outset. Scope Changes occurs when project management allows the project's scope to extend beyond its original objectives. Clients and supervisors may ask for changes to a project, and it takes a strong project manager to evaluate each

request and decide how and if to implement it, while communicating the effects on budget and deadlines to all stakeholders. The project can shine when each member of the team takes responsibility for his or her role in achieving project success. Conversely, a lack of accountability can bring a project to a complete halt. Finger pointing and avoiding blame are unproductive, but all too common features of flawed project management. Learning to direct teams toward a common goal is an important aspect of project management training (Ibid).

Contractor performance has a direct impact on project performance, for instance, poor contractors 'performance can lead to poor project performance. From the strength, weakness, opportunity, and threat (SWOT) analysis made by many researchers' low productivity, little interest in education and training among small construction companies. The other factor that negatively affects contractor performance is that contractors are non-customer oriented and focused; service and quality seem to be ignored.

Further added factors that negatively affect contractor performance in terms of quality for instance workers' skills, out of sequence work, late information, emphasis on production, project duration, poor specification, design change, employer change, bad weather, and late information and procurement system (Basheka and Tumutugyereize, 2012). Due to the above constraints, it is difficult for the contractor to deliver quality production; which then affects the construction sector as a whole. These attract international organizations to develop improvement program, as the construction sector is important to economic development since it comprises a wide variety of activities, products, and actors. Contractors are very important to development program to overcome poor workmanship and maximize development impact on projects in poor communities. Thus, development programs have to consider management options that encourage development, institutional roles that ensure coordination and project success and project options that match the project with development objectives (ibid).

The role of the consultant on a construction project is often not fully understood by the other parties involved in the project, including the consultant's client, the owner. Consequently, the consultant may find itself underutilized. There are also instances where the consultant itself is not fully aware of its duties and obligations to the owner and others, thereby exposing itself to potential liability claims. During construction, the role of a consultant is to administer the contract as described in the contract documents. However, the contract documents do not reference the agreement between the owner and consultant which outlines the professional services to be provided to the project. As noted above, the impact of the services provided by

the consultant can be significant. The contractor should make themselves aware of the arrangement in place between the owner and the consultant and understand the scope of that arrangement at the outset of the project. With increased awareness and understanding, all parties can benefit from the advantages of having a consultant involved in the construction process. With a clearer understanding of its obligations, the consultant can better carry out their obligations to the owner and others (Addo, 2015).

2.1.9. The Role of Government and Private Sector in Providing Housing

Serious challenges remain to fund projects to improve housing. In a fiscally tight environment, social investments have not typically been prioritized at the local or national government levels. Furthermore, in an era of decentralization, municipal or sub-national government agencies often face new responsibilities without sufficient capital transfers or statutory rights to mobilize local revenues. For example, there is often an absence of functioning municipal taxation systems and effective financial tools which capture land-value increases that could raise municipal revenue and lead to increased funding for housing.

Community-based finance options are also weak and disconnected from mainstream financial institutions, despite the critical role they play for poor urban dwellers to engage in savings and loans. Evidence suggests that the provision of urban services significantly raises land values and, under certain conditions, can promote private investment in housing (UN-Habitat, 2015c p.16). International agencies have a crucial role to play in supporting housing. At the strategic level, absentee governments and the weak performance of other actors created a gap and eventually contributed to housing overlooked as a priority in the international development agenda. Despite the benefits of adequate housing, including improvements to health and the environment, lending from several donor organizations has tended to move away from housing.

The donor community is a needed partner to stimulate innovation in housing finance, affordable housing designs, urban service delivery, and municipal revenue collection to ensure long-term financial sustainability. Equally important, the donor community can better promote hybrid value chains in which private sector companies' partner with microfinance providers and citizen groups to lower the cost of producing housing (ibid). As the state has shrunk in so many developing countries, the private sector has been left to take up the initiative informal housing supply, which in reality mostly provided just for the more

profitable and solvent top few per cent of the population, with privileged access to services and in the best location.

At the lower income levels, in developing countries, it is the informal private sector through partnerships between households and local artisan builders that continues to provide most housing, usually in tandem with informal land sub-dividers or customary owners as in the case of Sub-Saharan Africa (UN-Habitat, 2016c). The enabling approach sought to organize the building industry in four related ways: eliminating monopoly practices, encouraging small firm entry, lowering import controls, and supporting research. The approach advocated against long permit delays, restraints on competition, and public monopolies. Further recommendations included support for small-scale construction with dedicated credit mechanisms.

Many governments have indeed reorganized building Industries but the emphasis has been on firms building for the middle classes rather than the poor majority. The property lobby has reaped the benefits of public-private partnership (PPP) housing projects, encouraging governments to favor formal developments to the detriment of realistic efforts benefiting the poor. This is how in Accra or Lusaka, consortia with foreign contractors seem to have received tax breaks, import duty holidays, subsidized or free land, favorable loans, etc., instead of the small local builders who provide housing for the majority(ibid). In Chile, the Camera Chileans de Construction was a prime mover in designing the original capital subsidy programmed. In some countries, assistance to formal contractors has led to an oversupply of upper middle and high-income housing, as in Algeria.

In Addis Ababa, Dubai and Doha, as in many cities in China and India, major construction projects focus on the middle class, as well as attracting foreign companies. Smaller contractors, however, have received little of the help recommended even though they build the housing occupied by the majority of households. Still unrepresented in policymaking consultations and absent in subsequent programmers', these builders have instead often felt the heavy hand of bureaucracy or ineptitude disabling them from effective housing supply (UN-Habitat 2015b). If cities emerging futures must be sustainable, housing must be placed at the centre of urban policies.

With rapid population growth, high levels of poverty and pervasive urban inequality; it is evident that housing is inseparable from urbanization and should be a socioeconomic imperative. The housing policies put in place over the last 20 years through the enabling

approach have not succeeded in promoting adequate and affordable housing. Governments have backed away from direct supply without giving sufficient consideration to the markets and regulatory framework to enable other actors in the process to step forward and provide adequate and affordable housing.

After a long period in the wilderness, housing is emerging as an important sector once again (UN-Habitat 2013a). It is vital to recognize that the main housing supplier for the 60-90 per cent majority in developing countries is the informal sector. The Housing Strategy must recognize that single artisans and small-scale building contractors are the key suppliers of housing to the majority; continuing to ignore them in favor of the relatively small formal sector supply would be perverse. In developing countries, especially in Sub-Saharan Africa, many households are unlikely ever to find themselves in a position to sell a property. Therefore, secondary housing markets hardly exist, making it impossible for them to capitalize on the value of their property in times of need or to move to more expensive housing. Thus, the "housing ladder", so important in conventional property mechanisms, is weak to non-existent in many developing countries and any arguments on households filtering up through the housing stock are unlikely to be helpful(ibid).

The State should facilitate and assist the creation of private entities, also those not driven a priori by profit, such as cooperatives, to be development agents and mechanisms to mobilize resources. Cooperative housing organizations were highlighted as important actors in the UN Habitat Agenda and in the World Action plan because they stimulate mobilization of people and decrease the costs related to low-income housing (UN-Habitat, 2015/16). The success of the New Urban Agenda will depend on the collaboration in its design and implementation by all stakeholders. All levels of government will have a role in creating enabling environments for housing policies and legislation, and in ensuring that the right to adequate housing for all.

Civil society organizations will be critical in creating access to adequate housing and infrastructure by building partnerships with residents. The private sector will be essential in mobilizing resources to supply a menu of housing options including rentals, housing preservation, and rehabilitation, as well as in expanding the affordable housing stock. The donor community will play a key role in elevating the visibility and in mobilizing support for housing in the international development agenda (Ibid).

2.1.10.Challenges ofcondo housing Projects performance

There are various factors that contribute to causes of delays in construction projects. Delays occur in every construction project and the degree of these delays varies considerably from project to project. It is essential to define the actual causes of delay in order to minimize and avoid delay in any construction project. A number of studies have been carried out worldwide to determine the causes of delay in construction projects.

Sambasivan and Soon (2007) have identified the 10 most important causes of delay in Malaysia through a questionnaire survey. The questionnaire survey was carried out with clients, consultants, and contractors. About 150 respondents participated in the survey. Based on their survey results, the most important delay factors were: contractor's improper planning, contractor's poor site management, inadequate contractor experience, inadequate client's finance and payments for completed work, problems with subcontractors, material shortage, labor supply, equipment availability and failure, lack of communication between parties, and mistakes during the construction stage. A similar study in Malaysia was carried out by Alaghbari et al. (2007) with a list of 31 delay factors. The major delay factors from their survey results were: financial difficulties and economic problems, contractor financial problems, late supervision and slowness in making decisions, material shortages, poor site management, construction mistakes and defective work, delay in delivery of materials to the site and lack of consultant's experience.

Chan and Kumaraswamy (2002) conducted a survey in Hong Kong to determine and evaluate the relative importance of the significant factors affecting the construction delays. They analyzed and ranked the main factors affecting the construction time, and classified them into two groups: the role of the parties in the local construction industry and the type of projects. Based on their survey results, they indicated that the five major causes of delays were: poor site management and supervision, unforeseen ground conditions, low speed of decision making involving all project teams, client-initiated variations and necessary variations of works. Fugar and Agyakwah-Baah (2010) also studied the causes of delays in building construction projects in Ghana. They identified 32 possible causes of delay and further categorized into nine major groups.

The list of the causes of delay was conducted into a questionnaire survey, which included 130 respondents who participate in the survey. Based on their analysis, they concluded that the

delay in honoring certificates, underestimation of the costs of projects, underestimation of the complexity of projects, difficulty in accessing bank credit, poor supervision, underestimation of time for completion of projects by contractors, material shortage, poor professional management, fluctuation of prices/rising cost of materials and poor site management were found to be the top ten most important factors affecting the construction time. The study of El-Razek et al. (2008) was carried out to determine the causes of delay in building construction projects in Egypt. A questionnaire survey was carried out to confirm the causes and identify the most important delay factors. Based on the survey results, the top five delay causes were: financing by the contractor during construction, delays in contractor's payment by owner, design changes by the owner or his agent during construction, partial payments during construction and non-utilization of professional construction management.

Sweis et al. (2008) in a similar study carried out in Egypt, also concluded that financial difficulties faced by the contractor and too many change orders by the owner are the leading causes of construction delay. Both research outcomes showed that financial difficulties were important factors causing delays in Egypt. This factor will be included in the questionnaire survey of the present research to determine the severity of Western Australia's construction industry. Tumi et al. (2009) studied the delays in a construction project in Libya. They concluded that the main causes of delay in construction projects were improper planning, followed by lack of effective communication, material shortage, design errors and financial problem. Alwi and Hampson (2003) had a similar study on the causes of delays in building construction projects in Indonesia. A questionnaire survey was carried out targeting only the contractors.

The respondents were asked to assess the effects of the 31 potential delay factors on their projects. The delay factors were grouped into six major groups. The results showed that the top five most important delay causes were slow decision-making, which was ranked the highest, followed by design changes, poor distribution of labor, inappropriate construction methods, and poor coordination among project participants. The significant factors that cause a delay of construction projects in Malaysia, Alaghbari, Kadir, Salim and Ernawati (2007) classified the factors into four major factors; these are contractor factor, consultant factor, client factors and external factors. Financial problems, shortage of materials and poor site management practices were considered the topmost factors.

Client-related factors included delayed payments, slow decision-making, and contract scope changes. The most important factors by consultant were poor supervision, slowness to give instructions and lack of experience. External causes identified included shortage of materials available, poor site conditions and lack of equipment and tools in the market. In a related study of the causes and effects of delay in Malaysia construction industry Sambasivan& Soon (2007) found poor site management, inadequate experience' and poor subcontractors among the major causes of time delays on construction projects. Causes of delays as identified from previous studies include labor productivity, inadequate contractor experience, number of change orders, financial constraints and owners' lack of experience in construction, ground conditions, poor site management and supervision by consultants, environmental restrictions, exceptionally low bids (Odeh&Battaineh, 2002; Koushki, Al-Rashid &Kartam, 2005; Lo, Fung, & Tung, 2006).

Fetene (2008) categorized some of the major causes of cost overrun under faults of the clients, consultants, contractors, government, and others. Morris (1990) considered inadequate project preparation as the most important factor that underlies cost overrun, which often lead to scope changes during implementation. The inadequacies cover deficiencies in demand forecasts, ground surveys, and technology choice. Murali and Yau (2006) in their research identified contract-related factors such as change orders, mistakes, and discrepancies in the contract document as the major causes of cost overrun. Doloi and Young (2009) reported among these three categories, the five most significant sources of cost overruns as perceived by the consultants, clients, and contractors which are the extent of completion of pre-contract design, escalation of material prices, mistakes and discrepancies in contract documentation, client-initiated variations and a shortage of materials.

Previous studies in the Nigeria construction industry have shown that the issue of cost overrun is prevalent. Elinwa and Buba (1993) found that the most important cause of cost overruns was the increase in the cost of the materials, fraudulent practices, materials' prices increment, a high cost of types of machinery and poor planning. Mansfield, et al. (1994) in their study added that the lack of geotechnical studies before starting the construction and the delays caused by the involvement of complicated rules to check and approve construction processes can also be reasons for cost overruns in Nigerian constructions. Kasimu (2012) classified the causes of cost overrun in Nigeria into five: financial factor, construction parties, construction items, environmental factors and political factors. Factors of note in each category include market condition, the experience of parties involved in contract works,

insufficient time devoted to planning and design, project locations and monopoly of a material supplier.

The project sponsor may be an individual, a private company or a public authority. The project sponsor (or program manager in some cases), has ultimate responsibility for defining the characteristics of the project that is being procured. It is very important for desk officers to know exactly who the project sponsor is. If this cannot be clearly established, the risk of cost over-runs and even project failure will be high. It is important also to understand whether the project sponsor has any construction expertise or has staff who can work closely with the other members of the project team. If an inexperienced project sponsor has major responsibility for costing, this may lead to poor project cost estimates. It is important from an evaluation point of view to understand exactly what role the project sponsor has in project development (Abdul, 2011).

The project manager is responsible to a project sponsor for the overall planning, control, and coordination of a project and for ensuring that a project is completed within time, on budget and that it satisfies the project sponsor's specifications. The project manager may also be responsible for assembling the project team, assessing the project's viability and securing the funds to implement the project. The project manager's role will vary from project to project. It depends on the degree to which the project sponsor wants to be involved as opposed to delegating the responsibility to the project manager. Good project managers should be aware of all factors that can threaten the successful implementation of the project. They will ensure that adequate performance reporting is carried out at all stages. This ensures that problems can be identified quickly and measures are taken to mitigate them (Ibid).

Project management action is a key to project success suggested that by using the management tools, the project managers would be able to plan and execute their construction projects to maximize the project's chances of success. Then, the variables in project management include adequate communication, control mechanisms, feedback capabilities, troubleshooting, coordination effectiveness, decision making effectiveness, monitoring, project organization structure, plan and schedule followed, and related previous management experience. A number of attributes will affect this factor, including the communication system, control mechanism, feedback capabilities, planning effort, organization structure, safety and quality assurance program, control of subcontractors' works, and finally the overall managerial actions (ACIF, 2010).

The consents managers include the local authority officials' responsible for administering town or regional planning mechanisms, as well as other government agency officials with responsibility for licensing, safety aspects, environmental management etc. They have responsibility for ensuring that the project can legally be implemented in a particular location. At times they may also be involved in undertaking some of the feasibility work for a project and be responsible for assessing the potential environmental and economic impacts of the project (ibid). The architect is responsible for designing buildings, public spaces, and landscapes. In some Member States, the architect also undertakes certain consents duties. The architect may also act as the project manager. The costing or quantity surveyor is known in some Member States), is the person/s responsible for calculating the costs of a project, preparing tender documentation and also monitoring the value of the work undertaken during the construction phase.

The quality savoir may also be responsible for monitoring the project's cash flow. The quality servitors usually appointed at the beginning of any construction project to advise on costs and alternative forms and methods of construction which may be more cost-effective. If a project sponsor wants a change in the project's design or specification during construction, the quality servitor will cost these changes and assist in the decision-making on whether to agree with the changes (Puspasari, 2005). Engineers are the main professionals involved in the technical design of projects. There are many different types of an engineer but the most commonly used are civil/structural, and mechanical and electrical. Their responsibilities vary between the Member States. Civil and structural engineers have expertise in the following types of works: roads, railways, bridges, ports, dams, buildings. Mechanical and electrical engineers are concerned with the design and integration of machinery and electrical systems within infrastructure projects. Engineers may be hired separately by a project sponsors design consultants. Alternatively, they may work with a contractor in both design and construction roles. Engineers may be hired separately by a project sponsor as design consultants. Alternatively, they may work with a contractor in both design and construction roles. Also be responsible for designing the project as well. The contractor may be a single company but in some larger projects, two or more contractors may work together in a consortium (ibid).

Project participants as the key players, including project manager, client, contractor, consultants, subcontractor, supplier, and manufacturers. He considered the influence of client and client's representative as a significant factor in construction time performance. The client-related factors concerned with client characteristics, client type and experience,

knowledge of construction project organization, project financing, client confidence in the construction team, owner's construction sophistication, well-defined scope, owner's risk aversion, client project management (Mbachu and Nkando, 2007). Designers play a vital role as their work involves from inception to completion on a project considered that design team related factors consist of design team experience, project design complexity, and mistakes/delays in producing design documents. The main contractor and subcontractors start their main duties when the project reaches the construction stage. The variables include contractor experience, site management, supervision and involvement of subcontracting, contractor's cash flow, the effectiveness of cost control system, and speed of information flow. The project manager is another key stakeholder in a construction project and his competence is a critical factor affecting project planning, scheduling, and communication. Variables under this factor consist of the skills and characteristics of project managers, their commitment, competence, experience, and authority.

A construction project requires team spirit; therefore, team building is important among different parties. The team effort by all parties to a contract owner, architect, construction manager, contractor, and subcontractors is a crucial ingredient for the successful completion of a project. The attributes of this factor can be mainly divided into two categories: one is related to the client, another is the project team. For the first group, it includes client's experience and ability, nature of the client, size of a client organization, client's emphasis on cost, time and quality, and client contribution to the project. For the second group, it includes project team leaders' experience and skills, project team leaders' commitment on time, cost and quality, project team leaders' involvement, project team leaders' adaptability and working relationship, and the last one is support of the project team leaders' parent companies (Axson, 2013).

2.2. Empirical Literature Review

2.2.1. The Housing Constraints in Developing Countries

Every day, as people migrate to cities and new households are created, the demand for housing grows. The urban population has increased more than five-fold since 1950, from 746 million to 3.9 billion in 2014. This growth has greatly elevated the demand for adequate, safe, and accessible housing. In addition to the existing 980 million urban households in 2010, 600 million more are estimated to require housing in cities between 2010 and 2030. Responding to the existing housing deficit, while planning for anticipated future housing needs especially

in areas experiencing high urban growth forms the crux of the housing policy challenge. An effective response to this challenge will yield benefits beyond the housing sector itself, as housing not only drives urban development, urban form, and density but is also a key sector for generating employment and economic growth (UN-Habitat, 2015c, p.4).

The world's urban population has soared from 2.6 billion (45 per cent of the whole) in 1995 to 3.9 billion (54 per cent) in 2014. With urban populations expanding at unprecedented rates since 1996, it is perhaps unsurprising that many cities are falling short in housing supply. UN-Habitat's estimates show that there are 881 million people currently living in slums in developing country cities compared to 792 million in the year 2000 and all the while the enabling approach has been in force. By 2025, it is likely that another 1.6 billion to enable access to housing for all urban residents will require adequate, affordable housing. This should come as a wake-up call to governments, urging them to act determinedly (UN-Habitat, 2016, p.51). Given that housing has slipped from the development agenda since 1996, housing shortfalls represent a challenge that is hard to measure.

In 2010, as many as 980 million urban households lacked decent housing. Another estimate shows that one billion new homes are needed worldwide by 2025, costing an estimated US$650 billion per year, or US$9-11 trillion overall. In addition, shortages in quality are much larger than those in quantity; in Latin America, 61 and 39 per cent respectively. This suggests that long-term international vision and commitment are overdue to turn housing into an integral part of planned urbanization (UN-Habitat, 2016, p.52). Globally, a billion new houses are needed by 2025 to accommodate 50 million new urban dwellers per year; costs are estimated at USD 9 to USD 11 trillion by 2025. Funding for large-scale affordable housing and for expanding housing finance options for the urban poor has remained limited.

While private sector investment in housing has increased, significant challenges deter higher investment in pro-poor, affordable housing. Some studies suggest that the affordable housing gap now stands at $650 billion a year and is expected to grow. Live Applying the UN Millennium Project Task Force on Improving the Lives of Slum Dwellers estimations of the cost of neighborhood upgrading per beneficiary, it would cost approximately $6.3 billion each year from 2016-2036 to improve the lives of 20% of residents (176 million) who live in slums (the global slum population is 880 million).

The total amount would equal $111 billion. Based on the assumptions provided by the Task Force, donors would need to provide approximately $39.1 billion to achieve these goals by 2036. Governments of developing countries would need to cover $60.5 billion and residents of slums themselves would cover the remaining $11.2 billion (UN-Habitat, 2015c, p.15). Yet local and national government budgetary commitment is critical to a scaled-up effort at working with the urban poor to improve lives today and providing alternatives for the future. In countries in which governments have built housing for low-income households, it has had to be subsidized to significant levels.

In most developing countries, subsidies appear to benefit very few households compared with the need and have a built-in bias against poor households as they usually require a minimum income threshold of affordability or proof of formal employment (ibid). According to Un-Habitat (2013), around 33% of the urban population in the developing world in 2012, or about 863 million people, lived in slums. The proportion of urban population living in slums was highest in Sub-Saharan Africa (61.7%), followed by South Asia (35%), Southeast Asia (31%), East Asia (28.2%), West Asia (24.6%), Oceania (24.1%), Latin America and the Caribbean (23.5%), and North Africa (13.3%). Among individual countries, the proportion of urban residents living in slum areas in 2009 was highest in the Central African Republic (95.9%). The formation of slums is closely linked to urbanization. In 2008, more than 50% of the world's population lived in urban areas. In China, for example, it is estimated that the population living in urban areas will increase by 10% within a decade according to its current rates of urbanization.

The UN-Habitat (2008), reports that 43% of urban population in developing countries and 78% of those in the least developed countries are slum dwellers. Some scholars suggest that urbanization creates slums because local governments are unable to manage urbanization, and migrant workers without an affordable place to live in, dwell in slums. Rapid urbanization drives economic growth and causes people to seek working and investment opportunities in urban areas. However, as evidenced by poor urban infrastructure and insufficient housing, the local governments sometimes are unable to manage this transition. This incapacity can be attributed to insufficient funds and inexperienced to handle and organize problems brought by migration and urbanization (UN-Habitat 2008).

In many cities, the informal sector accounts for as much as 60 per cent of employment of the urban population. For example, in Benin, slum dwellers comprise 75 per cent of informal

sector workers, while in Burkina Faso, the Central African Republic, Chad, and Ethiopia, they make up 90per cent of the informal labor force. Slums thus create an informal alternate economic ecosystem that demands low paid flexible workers, something impoverished residents of slums deliver. In other words, countries, where starting, registering and running a formal business, is difficult, tend to encourage informal businesses and slums. Without a sustainable formal economy that raise incomes and create opportunities, squalid slums are likely to continue. Urban poverty encourages the formation and demand for slums. With the rapid shift from rural to urban life, poverty migrates to urban areas. The urban poor arrives with hope and very little of anything else. He or she typically has no access to shelter, basic urban services, and social amenities. Slums are often the only option for the urban poor (UN-HABTAT, 2010).

Problems of housing exist in many countries and have become a global phenomenon. There were nearly one billion people settling improper housing settlements in most cities of Latin America, Asia, and Africa, and a smaller number in the cities of Europe and North America. In 2012, about 863 million people in the developing world lived in slums. Of these, the urban slum population at mid-year was around 213 million in Sub-Saharan Africa, 207 million in East Asia, 201 million in South Asia, 113 million in Latin America and the Caribbean, 80 million in Southeast Asia, 36 million in West Asia, and 13 million in North Africa. Among individual countries, the proportion of urban residents living in slum areas in 2009 was highest in the Central African Republic (95.9%), Chad (89.3%), Niger (81.7%), and Mozambique (80.5%). These are sometimes called slum cities (UN-Habitat, 2012).

Ethiopia is one of the poorest countries in the world. It is ranked 169th out of 175 countries in the United Nations Development Program Human Development Index. Among other indicators demonstrating the massive developmental challenges facing Ethiopia, primary school enrolment is remarkably low at only 46 per cent, infant mortality is high at nearly ten per cent (98 child deaths per thousand), 53 per cent of the population is illiterate, and 40 per cent of the population lives below the poverty line. National unemployment is high at16.7 per cent, although in the capital city of Addis Ababa it is even higher at 32 per cent. With a population of 79 million, Ethiopia is the second most populous country in Africa. It is growing rapidly; the annual growth rate is 2.6 per cent, equating to two million births per year.

Despite having one of the lowest proportions of the urban population in the world at only 16.7 per cent, Ethiopia is rapidly urbanizing at a high annual growth rate of 3.49 per cent. In the space of seventeen years, the urban population more than doubled from 6.4 in 1990 to 13.8 million in 2007. The population is very young with 45 per cent under 15 years of age (UN-Habitat, 2011, p.1). The combination of high population and urban growth rates coupled with a high prevalence of urban poverty have placed enormous strain on Ethiopian cites. 80 per cent of the population lives in sub-standard slum housing that needs either complete replacement or significant upgrading. Ethiopian cities suffer from a high degree of homelessness, environmental degradation, and urban decay, a shortage of infrastructure and basic services, and high unemployment. These factors combine to produce the critical urban issue addressed in this publication: the lack of affordable, healthy housing for all sectors of the population (ibid). According to the 2007 Population and Housing Census by CSA, in Ethiopia, there are 15,103,134 housing units most of which, 12,206,116 units, are found in the rural areas and the 2,897,018 13 units are found in the towns of the country. Most of the housing units found in the towns, 836,074 units, are in the Oromia region. Out of the housing units found in the country, about 81.5 per cent are owner-occupied and around 9 per cent of the units are rented from private households. In the urban areas, the owner-occupied housing units' account for about 39 per cent and about 40 per cent of the urban housing units are rented from private households.

In Ethiopia, the average number of households per a housing unit is 1.044 and the average number of rooms per a housing unit is 1.8 (CSA, 2008).

2.2.2 The Housing Problem in Addis Ababa

Addis Ababa, the capital city, is relatively young having been established only one hundred and twenty years ago. It is located in the state of Oromia and has a population of approximately 3.4 million, ten times larger than the second largest city in the country, Dire Dawa. In the past ten years, Addis Ababa has risen from a city of self-built single-story homes to a city of towers. This growth is set to continue as in the coming 15 years the population is projected to grow by 3.8 per cent per year (UN-Habitat, 2011, p.2).

The major problem facing Addis Ababa is housing shortage and standard. The study of integrated housing development program (IHDP) undertaken in 2006 indicated that the housing deficit in the urban area of the country is 900,000 out of which 450,000 is the share of Addis Ababa. Similarly, 50% of the urban housing stock is in poor or irreparable

condition. The number of households of the urban area at the national level is 3,009,285 and households in Addis Ababa are 651,970. The average national household size in the urban area is 3.9 while the Addis Ababa household size is 4.1 and persons per housing unit are 5.5 with an average floor area per person is about 12m2, (CSA 2007). Housing which constitutes a living space with physical structure and basic infrastructure facilities is not only one of the basic necessities but also a right for human beings to survive.

The housing situation of Addis Ababa in spite indicates that housing shortage, poor quality of housing and poor living and working environment have remained as a critical problem of the majority of the population for more than 30 years. Measures taken to alleviate the problem by public and private sectors could not bring about a solution especially from the need of the poor. The city administration had difficulties to supply standard housing, in quantity as well as in quality terms and basic services. The scarcity of financial resource is the main factor for its inefficient performance in the sector. Housing construction by the private sector was also unsatisfactory for the reason that the construction cost of the units is unreachable to the low-income group of the city (Azeb, 2007). Generally, based on the above theoretical and empirical literature review knowledge, the researcher of this paper will study depends on the general objectives that mean the challenges of condominium housing projects in Addis Ababa with reference to the selected sub cities and organization

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter discusses how to do the study with appropriate methods, which comprises the research technique, method, sampling design, sources of data, how to gather data from the target population, investigate and present the analyzed data, so that enable the researcher to address the research objectives.

3.2. Descriptions of the Study Area

Akakiy-kality is one of the ten sub-cities of Addis Ababa. It has a total population of 195,273 (CSA, 2007). The district is the southernmost suburb of the city and borders with the districts of Nifas Silk-Lafto and Bole sub-city. Driving further East (pass the toll highway at Tulu Deemtu), you will enter the Oromia Special Zone Surrounding Finfinnee. Once you leave the city of Addis Ababa borders, the first town you will come across will be Debre-Gelan, and further East will be the town of Dukem."Kalitiy" redirects here. Many industries are found in this sub-city. Notable places Kalitiy and Kilnto Prison, a notorious prison where are under arrest.

Fig-1: The Map of Addis Ababa city Administration.

Source: Addis Ababa city Administration 2018

Koye-Feche project site: This is located in the Akaki-kalitiy County, next to Tirunesh Beijing Hospital. Cornerstone was laid on February 2014 for 50 thousand condos of 20/80 housing program at Koye-Feche site. The condominium project is constructing on 732 hectares of land and is the largest project of its kind that the Addis Ababa House Construction Project Office has carried out so far. Stating that agreements have been signed to carry out water and electricity activities, the manager remarked that measures were taken to avoid any delays. The project which 5.35 billion Birr has been allocated for its construction is expected to be completed in two years; and is expected to create job opportunity for some 45,000 people. The project was expected to completed in the first months of 2008 E.C., and it would be home for more than 200, 000 households (February 19, 2014, Addis News).currently according to AAHPO the constriction performance of koye -feche project site one information as shown from page 57 table 4.5 weighted average accomplished to date was reached about 91.44 per cent ,As the same manner as shown on page 59, Table 4.6 the current construction performance of koye project site two Accomplished to date in (%): weighted average of batch one & two was reached 65.14 percent.

3.3 Research Design

The study was employed explanatory research method; it was grouped to evaluate the Assessment of 20/80 Condominium Housing Projects performance in Addis Ababa: The case of Akaka -Kaliti Sub city. This is because, explanatory research design helps the researcher to plan and implement the study in a way that would help the researcher to obtain intended results, thus increasing the chances of obtaining information that can be associated with the real situation (Burns & Grove 2001).

According Burns and Bush (2006) exploratory research design is referred as gathering information in an informal and unstructured manner. The exploratory research design is proper when the researchers knows small about the opportunity or issue. Exploratory research design is not limited to one specific paradigm but may use either qualitative or quantitative approaches. It is conducted on one selected area of Akaka -Kaliti Sub city project site in Addis Ababa, Ethiopia. The data uses in the study are quantitative in nature which was collected from primary sources.

In the exploratory assessment analysis variables was measured the same impact analysis by using a single questionnaire. In addition, the study is also being associational in design because there is the intent to establish the relationship between dependent and independent variable of the study.

3.4 Research Approach

The study will be used quantitative and qualitative researcher approach which is it depends on a theory of "one is not better than the others" all of this depends on how the researcher wants to do a research of study (Creswell, 2005: p66-67).

Creswell (2005) asserted that quantitative research is;" a type of educational research in which the researcher decides what to study, asks specific, narrow questions, collects numeric (numbered) data from participants, and analyzes these numbers using statistics, and conducts the inquiry in an unbiased, objective manner. Variables can be defined as attributes or characteristics of individuals, groups, or sub-groups of individuals (Creswell, 2009).

Quantitative method is a study involving analysis of data and information that are descriptive in nature and qualified (Sekaran, 2003). Quantitative approach is one in which the investigator primarily uses postpositive claims for developing knowledge, i.e., cause and effect relationship between known variables of interest or it employs strategies of inquiry such as experiments and surveys, and collect data on predetermined instruments that yield statistics data (Creswell, 2009). Therefore, in terms of methods, this research was employed quantitative method while conducting the study.

3.5. Target populations Sampling and Sampling Techniques

3.5.1 Target Population

According to Hair et al. (2010), target population is said to be a specified group of people or object for which questions can be asked or observed made to develop required data structures and information. Therefore, for this study, the target populations were taken from Akaka - Kaliti Sub city city 20/80 project owners number of populations is 211 which is 100 from Addis Ababa housing project list and 111 from koyfeche project of them are dealing to sell to third person from sub city document registrations and authentications report, 2018. This place is selected due to higher sales of house which is data gathered from Akaka -Kaliti Sub city.

But, the eligible target populations were taken from different community groups from different grousers and hotels and other places added only they are concerned bodies related to research subject matters (i.e. From those condominium owners listed DRAA) are eligible for target populations for the study.

3.5.2. Sample size

According to Kothari (2009) target population is said to be a specified group of people or object for which questions can be asked or observed made to develop required data structures and information.

Table 3.1: Size of populations that have information and experience to the research study

Target population	Group of Respondents By Profession								Total size of population
	Human resource	Finance	Purchas	Supply mgt.	Budgeti	engineers	research	Communication	
AkakiKalitiy project offices	10	18	15	10	10	38	5	5	111
Addis Ababa housing project	10	15	13	10	8	30	6	8	100
Total	20	33	28	20	18	68	11	13	211

Source: AAHPO, March 2018

3.5.3. Sampling Techniques

The researcher uses purposive or judgmental sampling techniques. It is anon probability sampling techniques where the researcher uses his judgment or deliberately to select from the population member whom he feels would give him the desired or accurate information. Purposive sampling was employed to select respondent from the whole population for in-depth interviews and questionnaire. Judgmental sampling involves the choice of the subjects whom well equipped with information that will be relevant to the researcher focuses. In other words, the selection of the sample reflects the purpose or the object of the investigation. Purposive sampling techniques are employed especially when the desired population for the

study is uncommon or very difficult to locate and employed, the researcher targets particular group of people who background the experts related to the object of the study. If a researcher wants to find out what critical factors leading to the delay of condominium housing construction performance; the only people to be consulted to for the first hand information are the engineers, contractors, and consultants who have the adequate knowledge by virtue of their professional expertise for providing good data or information to the researcher. This technique is therefore useful when limits number or category people have the information that is required for the researcher (God FredAnnude, 2016).

As defined by Ker linger (1986), purposive sampling is another non-probability based sampling. It is characterized by a deliberate effort to obtain representative samples through the inclusion of groups or typical areas in a sample. To investigate the projects of housing in Addis Ababa in the selected research area, it needed some basic understanding and experience about the current issues of condominium housing. But there are problems to use organized or grouped homogeneous targeted population in order to gather the essential information. Then the better alternative way is purposively selecting the more professional, experienced and people related to the issue of study subject.

Therefore, Akaki-Kalitiy sub city Koye-Feche project sit one, site two and Addis Ababa housing project head offices' employees are more appropriate to answer the questionnaires and interviews, and more than half the population is used as a sample. Because, the purposively selected population is less in number, so the questionnaires were distributed to120 (one hundred Twenty) respondents and the semi-structured interview questions for eight (8) key informant officials were arranged.Some of these considerations as stipulated by Krejcie& Morgan (1970), are purpose of the study, nature and complexity of the population under scrutiny, degree of accuracy required, the amount of variability inherent in the population, the number of variables set out to be investigated and the type of statistical test the researcher wish to make. Therefore, taking each of the aforementioned considerations the sample size for this study is was determined via the following criteria. But, the eligible target populations were 120 by confidence level of 95% at marginal error of 5% added targeted for the study from two sub city project office stake holders.

	Confidence level = 95%			Confidence level = 99%		
	Margin of error			Margin of error		
Population size	5%	2,5%	1%	5%	2,5%	1%
100	80	94	99	87	96	99
500	217	377	475	285	421	485
1.000	278	606	906	399	727	943
10.000	370	1.332	4.899	622	2.098	6.239
100.000	383	1.513	8.762	659	2.585	14.227
500.000	384	1.532	9.423	663	2.640	16.055
1.000.000	384	1.534	9.512	663	2.647	16.317

Table 3.2: Size of sampling that has relevant information and experience to the research study

Sampling	**Group of Respondents By Profession**								Total size of sampling
	Human	Finance	Purchasin	Supply mgt.	Budgeting	Engineers	researches	Communication	
Akakiy-Kalitiy (koyeFeche) project sites	5	5	5	5	5	35	2	3	65
Addis Ababa housing project	5	5	5	5	5	25	3	2	55
Total	10	10	10	10	10	60	5	5	120

Source: AAHPO, March, 2018

3.6. Data Sources and Data Collection Instruments

Regarding the research design proposed above, both primary and secondary sources of data are preferred in this research to obtain the required data for conducting the research. The primary datasourcesare both quantitative and qualitative are through questionnaires and interviews. Secondary data sources were obtained from published and unpublished documents, different research, magazines, pamphlets, internets, information from Addis

Ababa housing project office and Akaki-kality yoke project sites weekly, monthlyandannual performance reports; etc. and the details are summarizing as follows.

3.6.1. Questionnaires

The questionnaires are organized into three main sections. The first Section basically considered at the general personal information of the respondents which included Gender, job location, organization type, jobs description, educational level and experience, etc. The second part of the questionnaire focused on obtaining the information about factors that affect the performance of construction of condominium housing related to clients 17 variables, consultants related factors include 15 questions, contractors related factors were contained 22 variables items, factors related to time delay and cost escalation factors were 16 variables and factors affecting quality of construction of condominium housing projects during the project process were 12 item, in total 82 variables with 5 Scale Liker questions were proposed and distributed for Addis Ababa housing projects and Akaki-kality professional respondents. Abbreviation described or stands as follows, SA=strongly agree, A=agree, UN=undecided, D= Disagree, and SD=strongly disagree, through close ended questionnaire from the selected respondents. The third section of the questionnaire looked at getting information with the help of open-ended questions from the sample respondents of the population.

3.6.2. Key informant interviews

The researcher has employed an important interview with the highest experienced members of the condominium housing project officials and those officials are taken from different department such as project managers, finance department, purchasing and supply management, administrative department, senior experts, contractors, consultant etc. And their numbers are 8respondents.

3.6.3. Secondary data

The researcher employed published and unpublished data sources related to the projects of 20/80 condominium housing projects. The secondary data obtained from AAHDPO and Akaki-kality koye Feche on the two project sites consultant and housing transfer section. Further, the researcher received the document which is shows the price of condominium housing before 2012 and after 2016 down payment and total payment document used for analysis bycomparingtheir differences with the current housing prices. The researcher

presented and discussed the condominium housing activity weekly, monthly and annual a performance report of the Akaki-kality project site collected from koye-Feche site one consultant office perfect architect engineering. And koye-feche site two similar weekly reports were received from Nomy consultant Engineering Plc. and used for analysis.

3.7. Validity and Reliability

According to Bryman and Bell (2007), reliability analysis is concerned with the internal consistency of the research instrument. Malhotra (2010) mentioned about three types of validity in his study: content validity, predictive validity, and construct validity. This study was discoursed content validity through the review of literature and adapting instruments which was used from previous research.

As multiple items in all constructs was used, the internal consistency/reliabilities of condo housing increment effect was conducted with Cornbrash's reliability analyses will expect to conduct each variable of the instrument. The reliability of the measures was examined through the calculation of Cronbach's alpha coefficients. For scale acceptability, Hair et al. (1998) suggested that Cronbach's alpha coefficient of construct is 0.6. If each domain obtains the value 0.6, it means that, the items in each domain are understood by most of the respondents. On the other hand, if the findings are far from the expected value of 0.6, this might be caused by respondents' different perception toward each item of the domain.

3.8. Method of Data Analysis

After the data has collected, descriptive statics such as; percentage, frequency, mean and standard deviations was employed to analyze the information as this study is quantitative in nature. The data was analyzed by using SPSS version 20. The statistical tools were aligned with the objectives of the research.

Thus, both the strength of the relationship between variables and the influence of independent on dependent variable and statistical significance was portrayed.

3.9. Ethical Consideration

Research ethics refers to the type of agreement that the researcher enters into with his or her research participants. Ethical considerations play a role in all research studies and all researchers must be aware of and attend to the ethical considerations related to their studies. Therefore, the researcher communicates legally and smoothly. The purpose of the study is marked clear and understandable for all participants. Any communication with the concerned bodies were accomplished at their voluntarily agreement without harming and threatening the personal and institutional wellbeing.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1. Introduction

This chapter deals with data presentation, analysis and interpretation. The data were mainly collected through questionnaires and key informant interviews which were distributed to Akaki-kality Sub city koye-Feche Project sites and Addis Ababa housing Project head office employees and Experts. The collected data were encoded and analyzed using SPSS, and then was presented using appropriate data presentation tools (table's frequencies, and percentages).

4.2. Response rate

Table 4.1: Respondent byorganization response rate

Respondent organization	Interviewees Response	Questionnaire distributed	Questionnaire returned	Response rate
Owner (AAHPO)	3	40	38	35.85%
Consultant	3	30	24	22.64%
Contractors	2	50	44	41.51%
TOTAL	**8**	**120**	**106**	**100%**

Sources: researcher's computation, April 2018

According to the above table (table 4.1), the researcher collected interview information from 8 key informant management of the projects and distributing120questionnaires for the purposively selected respondents in terms of their related profession and experiences. Out of which the distributed questionnaires, 106 respondents were filled the questionnaires properly and received on time. The general response rate for the questionnaire account was 88.3 present.

4.3 Profiles of Participants

The main objective of the personal information of the participants is to reveal their general background with regard to respondent's gender, location, organization type, education level, job experience, and their professions and to understand about the sample population, whether they have relevant contribution to the study or not.

Table 4.2: profile of study participants

Description		Items	Frequency	Percent
1	**Gender**	Male	92	86.8
		Female	14	13.2
		Total	106	100
2	**Current job location**	Akaki-kality sub city project sites	71	67.0
		Addis Ababa housing development project office.	35	33
		Total	106	100
3	**organization type**	Owner	38	35.8
		Consultant	24	22.64
		Contractor	44	41.5
		Total	106	100
4	**Level of education**	Secondary school	0	0
		diploma and certificate	13	12.2
		First degree and above	93	87.7
		Total	106	100
5	**job experience**	0-2 year	8	7.5
		3-5 years	26	24.5
		6years and above	72	67.9
		Total	106	100.0

Source: field study, April 2018

As shown in table above, majority of the respondents 92(86.8%) are male and the rest 14(13.2%) were female. It indicates that both male and female participated on this study. Regarding their working sites, 71(67%) of them are working at Akaki-Kality sub city project site and the remaining 35(33%) are from Addis Ababa housing development project sites. This representation helps the study to see more than one site that could reveal different conditions in different sites. Regarding organization types, around 44(40%) of the respondents are contractor. The proportion of owner and consultant is 38(35.8%) and 24(22.64%) respectively. Including different stakeholders that have direct contact with the construction work helps the researcher to get information rich participants thereby to collect primary information.

In respect to their educational level, 93(87.7%) of them are holders of first degree and above and the rest 13(12.2%) have diploma and certificate, and there are no respondents who have educational level of secondary school and below. It indicates that since they have abettor background dedicated; the majority of employees are in good position to easily communicate and understand the content of the questionnaires and their objectives. About68% of the participants have an experience of 6 years and above. Respondents worked for 3-5 years and 0-2 years are covered 24.5% and 7.5 % of the total sample. This implies that the majority of respondents as well as the construction stakeholders is educated and has enough experience to understand the study area.

4.4. Status of Condominium Housing Projects Performance

Table 4.3: Houses transferred to winners from 1-11th rounds

Round &year E.C	Studio(10/90)	Studio(20/80)	One bed room	Two bed room	Three bed room	Total
1st,1998	0	4,118	5,677	6,548	2,645	18,988
2nd,1999	0	2,592	5,070	6,263	1,106	15,031
3rd,2001	0	2,695	3,679	3,626	735	10,735
4th,2002	0	2,797	6,755	4,108	1,372	15,032
5th,2002	0	3,088	4,719	2,028	934	10,769
6th,2003	0	1,255	4,467	2,747	1,531	10,000
7th,2004	0	2,952	3,594	433	321	7,300
8th,2005	0	1,326	4,665	2,952	1,155	10,098
9th,2005	0	2,570	4,423	2,330	934	10,257
10th,2007	960	6,734	15,670	7,309	4,327	35,000
11th,2008	23,016	2,449	6,262	3,316	2,489	37,532
Total	23,976	32,576	64,981	41,660	17,549	180,742

Source: AAHPO, April, 2018

As shown in the table 4.3above, the information was obtained from Addis Ababa Housing Project Office (AAHPO) housing transfer section. According to AAHPO (2018), the demand for condominium housing before 2012 was around one million people.

But the total houses delivered to the beneficiaries with in eleven years are only 180, 742 houses. That means the project could address only 180,742 (18%) of the need even after eleven years. Here the data in table 4.3 shows that the number of condominium housing compared to the demand for housing is inadequate that means the demand for housing increasing at an increasing rate but the performance of condominium housing project does not show growth in quantity from time to time. For example, in the first round lottery in 1998, the total number of housing transferred to the beneficiaries were 18,988, but from the second round up to nine round the number of condominium housing does not indicate increasing. There was only good increasing rate in tenth round and eleventh rounds by the number of 34,040 and 37,532 houses respectively.

The other thing is that about the twelfth rounds 20/80 condominium housing project performance information, according to AAHPO (2017), more than 52,000 Houses by the end of the Fiscal Yearexpected to transfer for the winners. More than 50,000 of this condominium houses were being built at Akakiy-Koye Feche project sites, which had now reached 77% completion rate, according to general manager of the project's office explained. Construction of the remaining 41,000 houses at Bole Arabsa, Gulele, Kolfe and Nifas Silk sites had reached 41 per cent. The Addis Ababa City Administration has allocated 10 billion Birr for the finalization of condominium houses being constructed under the 20/80 housing scheme.

Currently, according to Perfect Architects consultant and Engineers PLC (April, 2018) performance report, at koye-Feche project site one, after six months the performance was increase from 77 per cent to reach at 91.44 per cent currently. It is already at finishing stage and ready for lottery winners. In the other hand, the twelve's round housing project performance are expected to shows progress. There was good increasing rate in eleventh round and 12^{th} rounds by the number of 37,532 and 52,650 houses respectively.

Table 4.4: The price (cost) of condominium housing between 2012 and 2016

Item	2012			2016		
	Down payment	Monthly payment	Total payment	Down payment	Monthly payment	Total payment
Studio	10,430.58	-	45,288.98	18,519	677	92,594
One bed room	18,117.88	-	82,202.67	35,105	1,292	175,525
Two bed room	36,032.97	-	168,233.64	65,984	2,728	329,469
Three bed room	43,789.01	-	205,479.32	95,364	3,957	476,821

Source: from only available secondary source AAHPO, March 2018

Table 4.4 is used to know the cost of condominium housing whether it is increased from time to time in order to more clarity the cost of condominium housing by taking previous and current price of condominium housing. The cost of condominium housing is increasing from time to time. For example, in 2012, the total price of studio was 45,288.99 birr, one bed room 82,202.67 birr, two bed room 168,233.64 birr and three bed room was 205,479.32 birr. But in 2016 the total price of studio is 92,594.00 birr, one bed room 175,525.00 birr, two bed room 329,469.00 birr and the three bed room is 476,821.00 birr for the same purpose.

As shown from the above table row 4, the total price of condominium housing in 2016 for three bed room is 476,821 birr, but before four years ago in 2012 the price of three bed room was 205,479.32 birr and their variation is 271, 341.68 birr (132 per cent). The worst thing is about people with low income who have registered for studio. For example, in 2016, down payment for studio is 18,519 birr, but in 2012 down payment for studio was 10,430.58 birr and their difference is 8,088.42 birr and this also increased by 77.55 per cent.

Table 4.5: performance of housing project at Akaki-koye Feche -one.

No. of contractor 62 Activities	G +4	G + 7
Total Number of blocks	156 block	15 block
Contract time	540 date	720 date
Revised contract time	1077 date	773 date
Commencement date	1-feb-14	5-jul-14
Completion date	-	-
Revised completion date	7-jul-2018	7-jul-2018
Elapsed time to date	1532 date	1408 date
Planned to date (%)	94.37	82.76
Accomplished to date (%)	92.37	81.72
Weekly planned (%)	0.59	1.33
Weekly accomplished (%)	0.03	0.00
Weighted average accomplished to date (%)	91.44	
Weighted average accomplished this week (%)	0.03	

Source: Perfect Architects and Engineers PLC, Apr 20, 2018

As shown in the above table (table 4.5), 156G+4 and 15 G+7 blocks were commenced on 1 February, 2014 and 5Jully, 2014 respectively. Because the blocks were not completed on their planned time, the completion dates were revised to 7 July, 2018. On 20 April, 2018, 92.37% of the G+4 blocks and 81.72% of the G+7 blocks were completed. In the case of the week march 21, 2018 to march 27, 2018, there was planned to accomplish 0.59% of G+4 and 1.33% of G+7 blocks.

The actual proportion on the end of the week shows that only 0.03 and 0.00% of them were accomplished. This is a very low achievement compared to the planned. Generally, the five years weighted average accomplished percentage of Koye Fleche project one is 91.44%. We can label as too late too little compared to the need and the planned project.

Table 4.6: Performance of condominium housing project in Koye site-two

Activities	G+4	G+7
1) Planned to accomplish in batch one (%)		91.94%
2) Accomplished to date of batch one (%)		65.34%
3) Planned to accomplish in batch two (%)		91.94%
4) Accomplished to date of batch two (%)		63.40%
5) Weekly planned in (%)	1.03%	1.03%
6) Weekly accomplish for batch two (%)	0.61%	0.29%
7) Weekly accomplished for batch one (%)	0.35%	0.49%
8) Accomplished to date in (%): weighted average of batch one & two		65.14%

Source: NOMY Engineering PLC. April 3, 2018

According to the above table, in respect to Koye-Feche site 2, as of April 3, 2018, the planned accomplishment of the two batches was 91.94%. But the actual accomplishment rate is found to be 65.34%. This huge gap is the manifestation of how the planned and achieved implementation is varying. Even when we see the weekly accomplishment, only 0.42 and 0.68 per cent of the batch two and one respectively were accomplished in G+4 the week; that is less than the weekly planned accomplishment (1.03%)

4.5. Analysis based on questionnaires and interviews

4.5.1. Evaluation of respondent's perception about the prospect of housing provision

Respondents were asked on the open ended question number 1 and on the section of interviews question number 6. Whether they think that only government can achieve the provision of condominium housing compared to the high demand of housing? All of them answered that the government cannot fulfill the current demand of housing problem unless it looks for other alternatives. Such as, allowing the involvement of private sectors, supporting real estate businesses, encouraging individuals and housing associations so as to help them employee their efforts on the area are the most frequent suggestions forwarded by respondents.

4.5.2. Challenges 20/80 Condominium Housing Project performance

Factors related to client, consultant, contractors and quality that can affect the implementation of housing projects are discussed below.

4.5.2.1.Challenge related to clients

Table 4.7: Failure Factors related to client in the construction of condominium housing

Items	No	Mean	Standard deviations
Problem of human resources in selection of competent, consultants and reliable contractors to carry out the work of project.	106	4.9342	1.11979
Absence of good methods and systems in purchasing, finance and supply management.	106	4.3947	1.12855
Lack of communication and insufficient coordination with contractors, consultant and suppliers	106	4.9079	.60193
Lack of incentive or benefit and training to employees	106	4.3553	1.31425
Inadequate knowledge and experience in purchasing, finance and supply management	106	4.9408	.81569
Slow decision making for critical issues of the project.	106	4.9342	1.11979
Delay in approving design document and site Preparation.	106	4.3947	1.12855
There are weaknesses in planning, leading and controlling the project activities.	106	4.8179	.60193
Variation or change orders from owner.	106	4.9342	1.11979
Financial constraints faced by the owner of completed work.	106	4.3947	1.12855
Lack of leadership skills of project manager.	106	4.5679	.89193

*****Mea Difference =1.00 - 2.50 = Low,**

******2.51-3.50 = Medium and 3.51-5.00= High**

*****Source from field survey data, 2018**

From above table 4.7, regarding to Failure Factors related to client in the construction of condominium housing:Problem of human resources in selection of competent, consultants and reliable contractors to carry out the work of projectshown in average mean variance of

4.9342by differences of ± typical nonconformities of 1.11979, Absence of good methods and systems in purchasing, finance and supply management shown in average mean variance of 4.3947by differences of ± typical nonconformities of 1.12855,

There is Lack of communication and insufficient coordination with contractors, consultant and suppliers shown in average mean variance of 4.9079by differences of ± typical nonconformities of.60193, Lack of incentive or benefit and training to employees shown in average mean variance of 4.3553by differences of ± typical nonconformities of 1.31425.

Inadequate knowledge and experience in purchasing, finance and supply management shown in average mean variance of 4.9408 .81569, Slow decision making for critical issues of the project shown in average mean variance of 4.9342by differences of ± typical nonconformities of 1.11979, there is Delay in approving design document and site Preparation shown in average mean variance of 4.3947by differences of ± typical nonconformities of 1.12855

There are weaknesses in planning, leading and controlling the project activities shown in average mean variance of 4.8179by differences of ± typical nonconformities of.60193, Variation or change orders from owner shown in average mean variance of 4.9342by differences of ± typical nonconformities of 1.11979, Financial constraints faced by the owner of completed work shown in average mean variance of 4.3947by differences of ± typical nonconformities of 1.12855 and there is Lack of leadership skills of project manager shown in average mean variance of 4.5679by differences of ± typical nonconformities of .89193.

The study finding indicated that challenges 20/80 Condominium Housing Project performance regarding to challenge related to client, consultant, contractors and quality that can affect the implementation of housing projects are Problem of human resources in selection of competent, consultants and reliable contractors to carry out the work of project; there is Absence of good methods and systems in purchasing, finance and supply management, Lack of communication and insufficient coordination with contractors, consultant and suppliers, Lack of incentive or benefit and training to employees, Inadequate knowledge and experience in purchasing, finance and supply management, Slow decision making for critical issues of the project.

Delay in approving design document and site Preparation, there are weaknesses in planning, leading and controlling the project activities, Variation or change orders from owner, financial constraints faced by the owner of completed work and Lack of leadership skills of project manager are major challenge.

4.5.2.2.Factors related to consultant Table 4.8: Problems related to consultant in the construction of condominium housing

No	Items	N	Mean	Standard deviations
1	Lack of knowledge and experience in the organization's consultant	106	4.2303	.84156
2	Underestimation of deadlines, complexities and costs for the project works	106	3.4211	1.13071
3	Long waiting in Changes of specification and drawing during construction.	106	4.8224	1.32276
4	Poor site management and difficulty in controlling contractors	106	3.5066	1.28154
5	Mistakes in specifications and drawings during the construction	106	3.7697	.98647
6	Poor coordination and communication by the consultant with the other project stakeholders	106	4.7434	1.54618
7	Slow response regarding to testing, inspection and progress payment to contractors	106	3.9342	1.11979
8	Lack of commitment to ensure construction work according to specification and design	106	4.3553	1.31425
9	Inadequate involvement to follow up and supervision the project progress.	106	4.2303	.84156
10	Qualified technical staff are not employed by the consultant	106	4.0943	.14321

*****Mea Difference =1.00 - 2.50 = Low,**
******2.51-3.50 = Medium and 3.51-5.00= High**
*****Source from field survey data, 2018**

From above table 4.8 regarding to Problems related to consultant in the construction of condominium housing: Lack of knowledge and experience in the organization's consultantshown in average mean variance of 4.2303by differences of ± typical nonconformities of 1.84156, Underestimation of deadlines, complexities and costs for the project works shown in average mean variance of 3.42111by differences of ± typical nonconformities of 1.13071. Long waiting in Changes of specification and drawing during constructionshown in average mean variance of 4.8224by differences of ± typical

nonconformities of 1.32276, Poor site management and difficulty in controlling contractorsshown in average mean variance of 3.5066by differences of ± typical nonconformities of 1.28154, Mistakes in specifications and drawings during the constructionshown in average mean variance of 3.7697by differences of ± typical nonconformities of 1.98647, Poor coordination and communication by the consultant with the other project stakeholdersshown in average mean variance of 4.7434by differences of ± typical nonconformities of 1.54618, Slow response regarding to testing, inspection and progress payment to contractorsshown in average mean variance of 3.9342by differences of ± typical nonconformities of 1.11979

Lack of commitment to ensure construction work according to specification and designshown in average mean variance of 4.3553by differences of ± typical nonconformities of 11.31425, Inadequate involvement to follow up and supervision the project progressshown in average mean variance of 4.2303by differences of ± typical nonconformities of 1.84156 and Qualified technical staff are not employed by the consultant shown in average mean variance of 4.0943by differences of ± typical nonconformities of 1.14321.

Study showed that Construction project are challenged by different stakeholders the following tables are indicate the consultant related factors.

4.5.2.3. Critical challenge related to contractor

Table 4.9: Failure related to contractors in the construction of condominium housing

No	Items	N	Mean	Standard deviations
1	Lack of experience and technical profession in the contractor's organization.	106	3.8926	1.23189
2	In effective planning, scheduling and handling of the project by contractors	106	3.5678	1.22027
3	Financing and cash flow challenges and delays in payments to sub-contractors.	106	3.9813	1.31022
4	Incompetent team leaders and technical staffs assigned to the projects	106	5.0000	1.54944
5	Lack of Employees motivation due to low payment.	106	4.4852	.87500
6	Insufficient coordination and communication with project stakeholders	106	3.4074	.96189
7	Less commitment by team leaders and experts to achieve the proposed cost, time and quality of projects	106	3.8148	.67500
8	Construction mistakes and defective work during the project process	106	4.5926	1.18071
9	Poor site management and supervision problem	106	3.5716	1.11027
10	Poor qualification of contractor's technical staff	106	4.6700	.94944 .
11	Improper construction methods implemented by contractors	106	4.1852	.67500
12	Rework due to errors during construction	106	3.8074	.88189
13	Conflict between contractors and other parties (consultant and owner)	106	3.8148	.67500
14	Lack of high technology mechanical Equipment and low level of equipment –operator's skill.	106	3.5926	1.21189

*****Mea Difference =1.00 - 2.50 = Low,**

******2.51-3.50 = Medium and 3.51-5.00= High**

*****Source from field survey data, 2018**

From above table 4.9, regarding to Failure Factors related to contractors in the construction of condominium housing,Lack of experience and technical profession in the contractor's organizationshown in average mean variance of 3.8926by differences of ± typical nonconformities of 1.23189.

In effective planning, scheduling and handling of the project by contractorsshown in average mean variance of 3.5678by differences of ± typical nonconformities of 1.22027. Financing and cash flow challenges and delays in payments to sub-contractorsshown in average mean variance of 3.9813by differences of ± typical nonconformities of 1.31022

Incompetent team leaders and technical staffs assigned to the projectsshown in average mean variance of 5.0000by differences of ± typical nonconformities of 1.54944, Lack of Employees motivation due to low paymentshown in average mean variance of 4.4852by differences of ± typical nonconformities of.87500, Insufficient coordination and communication with project stakeholdersshown in average mean variance of 3.4074by differences of ± typical nonconformities of .96189, Less commitment by team leaders and experts to achieve the proposed cost, time and quality of projectsby differences of ± typical nonconformities of 3.8148by differences of ± typical nonconformities of.67500.

Construction mistakes and defective work during the project processshown in average mean variance of 4.5926by differences of ± typical nonconformities of 1.18071, Poor site management and supervision problemshown in average mean variance of 3.5716 by differences of ± typical nonconformities of 1.11027, Poor qualification of contractor's technical staffshown in average mean variance of 4.6700by differences of ± typical nonconformities of.94944, Improper construction methods implemented by contractorsshown in average mean variance of 4.1852by differences of ± typical nonconformities of.67500.

Rework due to errors during construction shown in average mean variance of 3.8074 by differences of ± typical nonconformities of.88189, Conflict between contractors and other parties (consultant and owner) shown in average mean variance of 3.8148 by differences of ± typical nonconformities of.67500, Lack of high technology mechanical Equipment and low level of equipment –operator's skill.shown in average mean variance of 3.5926by differences of ± typical nonconformities of 1.21189.

The overall result showed that Failure related to contractors in the construction of condominium housing is highly challenged the project performance.

4.5.2.4 Challengecontributed to delay and cost

Table 4.10: challenge contributing to delay time and cost

No	Items	N	Mean	Standard deviations
1	Poor site management and supervision	106	4.2303	.84156
2	Mistakes during the construction stage	106	3.4211	1.13071
3	Lack of consultant's experience and profession on engineering, procurement and finance	106	3.8224	1.32276
4	Slow speed in decision making on critical issue of the project.	106	3.5066	1.28154
5	Underestimation of costs and complexities of the projects	106	3.7697	.98647
6	Shortage and rising costs of materials and also delay in delivery to the project sites	106	4.2951	.52521
7	Design and specification changes by owner or his agent during construction	106	3.4180	1.13429
8	Poor in planning , scheduling and handling of the project by the contractor	106	3.6721	1.23611
9	Inadequate number and modern equipment	106	4.7377	1.03495
10	Slow response regarding to testing, inspection and progress payment to contractors	106	4.5738	.92636
11	Lack of good management and leadership in planning, leading and controlling the project activities by owner	106	4.2295	.84096
12	Unforeseen ground condition and incomplete project information	106	4.3761	.82922
13	Inflexible government rules and regulations leads to slow decision making on the projects	106	4.2951	.52521
14	Poor selection of competent consultant and reliable contractor to carry out the work of project	106	3.2303	.84156
15	Inadequate information and communication technology by project participants	106	3.4211	1.13071
16	Poor sub-contractors activity	106	2.8224	1.32276

*****Mea Difference =1.00 - 2.50 = Low,**

******2.51-3.50 = Medium and 3.51-5.00= High**

*****Source from field survey data, 2018**

From above Table 4.10 result, regarding to challenge contributing to delay time and cost; Poor site management and supervisionshown in average mean variance of 4.2303 by differences of ± typical nonconformities of.84156, Mistakes during the construction stageshown in average mean variance of 3.4211 by differences of ± typical nonconformities of 1.1307, Lack of consultant's experience and profession on engineering, procurement and financeshown in average mean variance of 3.8224by differences of ± typical nonconformities of 1.3227, Slow speed in decision making on critical issue of the projectshown in average mean variance of 3.5066by differences of ± typical nonconformities of 1.28154, Underestimation of costs and complexities of the projectsshown in average mean variance of 3.7697by differences of ± typical nonconformities of.98647.

Shortage and rising costs of materials and also delay in delivery to the project sitesshown in average mean variance of 4.2951by differences of ± typical nonconformities of.52521, Design and specification changes by owner or his agent during constructionshown in average mean variance of 3.4180by differences of ± typical nonconformities of 1.13429.

Poor in planning, scheduling and handling of the project by the contractor shown in average mean variance of 3.6721by differences of ± typical nonconformities of 1.23611, Inadequate number and modern equipmentshown in average mean variance of 4.7377by differences of ± typical nonconformities of 1.03495, Slow response regarding to testing, inspection and progress payment to contractorsshown in average mean variance of 4.5738by differences of ± typical nonconformities of.92636, Lack of good management and leadership in planning, leading and controlling the project and activities by ownershown in average mean variance of 4.2295by differences of ± typical nonconformities of.84096

Unforeseen ground condition and incomplete project informationshown in average mean variance of 4.3761by differences of ± typical nonconformities of.82922, Inflexible government rules and regulations leads to slow decision making on the projects shown in average mean variance of 4.2951by differences of ± typical nonconformities of.52521, Poor selection of competent consultant and reliable contractor to carry out the work of projectshown in average mean variance of 3.2303by differences of ± typical nonconformities of.84156. Inadequate information and communication technology by project participantsshown in average mean variance of 3.4211by differences of ± typical nonconformities of 1.13071.

Poor sub-contractor's activityshown in average mean variance of 2.8224by differences of ± typical nonconformities of 1.32276 showed moderately influential.

The overall result regarding to challenge contributing to delay time and cost is the second moderate challenge for the akak kality 20/80 housing project performance.

4.5.2.5. Challenge that affected project quality in the construction of condominium housing

Table 4.11: challenge affecting project quality

No	Items	N	Mean	St. deviations
1	Changes in design, plan and schedule frequently	106	3.9426	.89189
2	Unavailability and delay in supply of materials as planned and specification during the construction	106	3.4074	1.23653
3	Improper integration, coordination and inspection by the participant of the projects	106	3.2222	1.11027
4	Less quality techniques and mechanisms are adopted in the construction	106	3.9474	1.50843
5	Less consultants commitment to ensure construction according to specification and design	106	3.3289	1.16105
6	Poor supply quality of labor,equiepment and raw materials in the projects	106	4.6711	1.42716
7	Poor selection of well standard consultan and contractors during bidding	106	4.8562	1.21421
8	Improper training ,motivation and payment to labor	106	3.7566	1.41420
9	Financial problems arise during construction	106	3.8421	1.12235
10	Heavey and continous rainfall during the project	106	3.9277	1.20841
11	Lack of management commitment to continual quality improvement	106	3.7474	1.50843
12	Lack strong coordination between designers and contrctors	106	3.3289	1.16105

*****Mea Difference =1.00 - 2.50 = Low,**

******2.51-3.50 = Medium and 3.51-5.00= High**

*****Source from field survey data, 2018**

From above table 4.11, regarding to Challenge that affected project quality in the construction of condominium housing; there is Changes in design, plan and schedule frequently shown in average mean variance of 3.9426 by differences of ± typical nonconformities of .89189.

Unavailability and delay in supply of materials as planned and specification during the construction shown in average mean variance of 3.4074 by differences of ± typical nonconformities of 1.23653, Improper integration, coordination and inspection by the participant of the projects shown in average mean variance of 3.2222 by differences of ± typical nonconformities of 1.11027, Less quality techniques and mechanisms are adopted in the construction shown in average mean variance of 3.9474 by differences of ± typical nonconformities of 1.50843 and Less consultant's commitment to ensure construction according to specification and designshown in average mean variance of 3.3289 by differences of ± typical nonconformities of 1.16105.

Poor supply quality of labor, equipment and raw materials in the projects shown in average mean variance of 4.6711 by differences of ± typical nonconformities of 1.42716, Poor selection of well standard consultant and contractors during bidding shown in average mean variance of 4.8562 by differences of ± typical nonconformities of 1.21421, Improper training, motivation and payment to labor shown in average mean variance of 3.7566 by differences of ± typical nonconformities of 1.41420.

Financial problems arise during construction shown in average mean variance of 3.8421 by differences of ± typical nonconformities of 1.12235, Heavy and continuous rainfall during the project shown in average mean variance of 3.9277 by differences of ± typical nonconformities of 1.20841.

Lack of management commitment to continual quality improvement shown in average mean variance of 3.7474 by differences of ± typical nonconformities of 1.50843 and Lack strong coordination between designers and contractors shown in average mean variance of 3.3289 by differences of ± typical nonconformities of 1.16105.

Result shows that there is lack of project quality in the construction of 20/80 Akakikality condominium housing performance.

4.5.3. Results of interview Data

Eight key informants with a position of finance head officer, project client officer, and construction management head coordinators, AHPO housing construction were interviewed from the two sites. The first question they asked said "how do you evaluate the status of condominium housing project performance against the objectives?"

The finding showed that the project is not going as per the set objective. Initially, the plan was to build 400,000 units of houses till the time. But, only 175,000 of it were completed and transferred for winners. It is less than the intended plan. They think that the government could not achieve what it planned at the beginning and the prospect will be questionable. In terms of time, the construction process as well as the transfer was too much slower compared to the plan. This made the clients dissatisfied and they are given up on it even much number of them took out their money from the bank.

The quantity and quality of the houses were also not as intended. The other point here is that the matter of the housing cost. Because of numerous reasons, the cost of the condominium houses has been increasing from time to time. This is against the main objective of the project i.e. providing houses for people who has low income with a low cost.

The main reason for the delay is because the government is a supplier for every materials and it could not provide those materials timely. The micro and small enterprises were assigned as a producer of materials and they cannot deliver it because they are immature to attain the required capacity in terms of time, money and quality. The other reason was the methodology that the contract done. The government deals with the macro contractors; they intern deals with the subcontractors and then small and micro enterprises. These chains took many of the project time. The major factors that affect the quality of condominium housing project identified by the interviewees were:

- Low human resource competence, consultants lacks knowledge, technical profession, and experience in the area
- Lack of leadership skills and project management
- Materials provided by the government and small scale enterprises lacks the required quality
- Wastage of resources at the project sites during construction,

For the time delay also, the following factors were identified:

- Slow speed in decision making on critical issues of the project
- Design and specification changes in the meantime
- Poor labor productivity and lack of sufficient experience and competence
- Poor working culture
- Slow material supplies
- Shortage of electric and water supply around the project area
- Poor planning, scheduling, and handling of the of time

Interviewees were asked whether the government alone can achieve the provision of condominium housing compared to the high demand.

All of them said NO!!! In the last 12 years the government tried to do that but it has achieved not more than 30% of the planned project. Moreover, it cannot be satisfied with the government's effort. Other alternatives should be considered and opened in order to minimize the problem. The private sector should be participated and the government should be focus on the procedures and making the ground workable.

Shortage and delay of materials, financial issues, and lack of infrastructures, government policy problems and political intervention were found to be external factors for the construction of condominium houses. Lack of coordination, delay in the process of purchasing and supplying were also found to be the critical factors.

4.6 Summary of the findings

It was obviously indicated at the onset that the purpose of this chapter apply to answering the research questions as specified under section 1.3 of chapter one on page 7 "What are the major factors that affecting condominium housing projects in the selected sub city of Addis Ababa?" The analysis and discussion of data from various sources reveal the following important points that are specifically relevant in terms of effectively answering the research questionnaires, interviews and secondary data under consideration.

Concerning to this there are many problems regarding to the government such as problems in selection of competent consultants and reliable contractors, absence of good methods and systems in purchasing and finance and supply management, slow speed in decision making,

poor in planning and leading and controlling the project activities, lack of leadership skills of project manager, poor coordination and communication with contractors and consultants and suppliers, Financial constraints faced by the owner, and finally lack of sense of ownership and degradation of moral obligation.

Regarding to the consultant the major problems indicated that there is lack of knowledge and experience in the organization's consultant, poor management and difficulty in controlling contractors, poor coordination and communication by the consultant with the project stakeholders, slow response regarding to testing and inspection and progress payment to contractors, lack of commitment to ensure construction work according to specification and design, there is benefit relationship with contractors by affecting the project performance, underestimation of deadlines, complexities and costs for the project works.

Likewise depending on the contractors key constraints described are lack of experience and technical profession in the contractor's organization, poor planning and scheduling and handling of the project, financial difficulties and delays in payments to subcontractors, insufficient coordination and communication with project stakeholders, lack of leadership quality in the contractor's organization, low commitment by team leaders and experts to achieve the proposed cost and time and quality of projects, wastage of resources around the project sites, construction mistakes and defective works during the project process, and the worst thing that complained by the respondents are some contractors do not have commitment and love to their country, only their mind set is to get money from the government.

Farther more, the constraints that was mentioned by the participant of the research was based on factors affecting time and cost of condominium housing projects are; poor selection of competent consultants and reliable contractors, Lack of qualified profession and leadership in planning and leading and controlling the project activities by owner, inflexible government rules and regulations leads to slow decision making on the projects, poor in planning, scheduling and handling of the project by the contractor, shortage and rising costs of materials and also delay in delivery to the project sites, lack of consultant's experience and profession on engineering and procurement and finance, slow response regarding to testing and inspection and progress payment to contractors, poor site management and supervision, inadequate information and communication technology by project participants,

Underestimation of costs and complexities of the projects, mistakes during the construction stage, unforeseen ground condition and incomplete project information.

Finally, the serious problem that was identified by most respondents is that, about factors affecting quality in construction of condominium housing projects these are; poor selection of competent consultan and reliable contractors,lack of management commitment to continual quality improvement,poor quality of workmanship of supply of labor and equiepment and raw materials,less quality techniques and mechanisms are adopted, unavailability and delay in supply of materials as planned and specification, low consultants commitment to ensure construction according to specification and design, insufficient training and payment to labor,lack of strong coordination between designers and contractors, improper integration and coordination and inspection by the participant of the projects.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5. Introduction

The main objective of this research is to assess condominium housing projects in Addis Ababa: The case of Akakiy-kality sub city. This thesis is also enormously encouraged to examine the client's institutional capacity to provide adequate and quality condominium housing to the low and middle income people and also major factors affecting the construction of condominium housing in terms of time (It is the length of time that extends the project duration),cost escalation(changes in the cost or price of specific goods or services in a given economy over a period) and quality(suitability for purpose) of the project based on the character of the project participants. Using a mixed concurrent triangulation strategy and giving emphasis to quantitative aspects, the study investigated the performance of the construction of condominium housing projects and pointed out the suggestions of this research study. Using relevant theoretical and conceptual frameworks developed in chapter two, the analysis and interpretation of primary and secondary data has led to key findings, which the researcher believes have effectively answered the two research questions posed under section 1.3 of chapter one on page seven. The following conclusion and recommendations, which are carefully informed by analysis and interpretation of data, are drawn or made.

5.1. Conclusion

This study is conducted to assess the status of condominium housing projects implementation and to factors for the implementation. The study participants were consultants, contractors and officials from Akakiy-kality sub city project office or site and Addis Ababa housing development project office.

Problem of human resources in selection of competent, consultants and reliable contractors to carry out the work of project, absence of good methods and systems in purchasing, finance and supply management, lack of communication and insufficient coordination with contractors, consultant and suppliers, lack of incentives or benefits and training hinders the implementation, inadequate knowledge and experience in purchasing finance and supply management slow decision making for critical issues of the project, delay in approving design

document and site preparation were found to be the main factors related to clients that affect the implementation of housing project in Addis Ababa.

On the side of consultants, lack of knowledge and experience in the organization's consultant, poor time management, poor site management and difficulty in controlling contractors, poor coordination and communication, lack of commitment to ensure construction work according to specification and design, inadequate involvement to follow up and supervision the project progress, benefit relationship were supported by at least 80% of the respondents as a factor.

Lack of experience and technical profession, in effective planning, scheduling and handling of the project, incompetent and less motivated team leaders and technical staffs, insufficient coordination and communication experts to achieve the proposed cost, time and quality of projects, construction mistakes and defective work during the project process, wastage of resources, lack of leadership quality, poor provision of information, inadequate technical staff are found to be contractor related factor.

For the quality problems of the houses, changes in design, plan and schedule frequently unavailability and delay in supply of materials as planned and specification, improper integration, coordination and inspection, less quality techniques and mechanisms, less consultants commitment to ensure construction, poor supply quality of labor, equipment and raw materials, poor selection of well standard consultant and contractors, improper training, motivation, financial problems, lack of management commitment to continual quality improvement and lack strong coordination between designers and contractors were identified as a factors.

The main reason for the time delay related factor is because the government is a supplier for every materials and it could not provide those materials timely. The micro and small enterprises were assigned as a producer of materials and they cannot deliver it because they are immature to attain the required capacity in terms of time, money and quality. The other reason was the methodology that the contract done. The government deals with the macro contractors; they intern deals with the subcontractors and then small and micro enterprises. These chains took many of the project time.

Generally, the study revealed that the Addis Ababa condominium housing project implementation is extremely low compared to the housing demand. In eleven years, only

30% of the need was achieved hardly. The planned quality, time and quantity of the project did achieve as per the demand. The prospect also is not promotable. The study found that it has exhaustive factors for the weak implementation of condominium housing in the city. Although the main challenge for the implementation is accounted to the government, both the consultants, contractors and all stakeholders have their contribution. Therefore, the government should look on other options to attain the demand.

5.2. Recommendations

As concluded in the above sections the "Akaki-Kalitiy koye Feche project and AAHPO" condominium project has so many weaknesses especially on its capacity building programs, recruitment competent of project participants such as consultant, contractors and MSCEand the management of the project. The sample is too small to conclude that the entire projects AAHDPO running has identical problems and shortcomings, due to the shortage of finance, time and researcher ability. However, it can be an indication for further studies of other sites for comparison and draw conclusion of the overall program.

Based on the findings of the study, the following recommendations are forwarded:

- The status and realities of condominium housing projects call for collaboration of the public and private sector at large because the government capacity is very limited in providing adequate houses though it promised to build many condominium housing to the society.
- The AAHDP should establish strong mechanisms that can eliminate the challenges related to poor quality, time delay, contractors and consultant ineffectiveness.
- The government should pay special attention in facilitating a comprehensive national housing policy by providing land, funds, discounted interest rate, and infrastructures to allow the private sector and the individual citizens to solve the housing deficit.
- The study found that the government could not attain the need of housing in Addis Ababa only by the effort of government. So, local and international investors should been courage to participate in housing project.
- Government Ruther than monopolized the work of construction of housing project than participated the potential investors and private sectors to alien other alternatives, such as, supporting associations and individuals and investors should be considered to support them overcoming the financial problem by facilitate loan fund, provide lease and tax free land construction Equipment's, government should have made simple,

flexible systems by minimize strong bureaucratic challenges to participate in housing projects.

- Benefit relationship or Corruption especially between consultant and contractors is the most dangerous threat that will worsen the area. Therefore, a massive effort to maintain the rotten construction area is needed from the government and other concerned bodies.
- Owners, consultants and contractors often meet weekly for discussion. Weekly meeting assist them for monitoring, updating and controlling the progress through project implementation. In addition, they can solve problems, evaluate current performance, and improve future work.
- Most consultants and contractors stated that the project delays due tolate payment by the owner. Contractors usually suffer from this problem. Delay in payment lead to delay of contractors' performance and caused problem. This may also lead to disputes and claims between owner and contractor of project. All of that will affect the overall performance of project which has been implemented.
- The study showed that there is high government bureaucracy in the project management especially in purchasing, finance and supply management affects the projects in their time, cost and quality; therefore, the study recommended that government should provide appropriate and flexible rules and regulations concerning the project characteristics
- Government should focus on selection of competent consultants and reliable contractors to carry out the work of condominium housing project. It should make assure that continuous coordination and relationships exist among project participants.
- Government should check the relationship between project consultants and contractors. Because it can lead to corruption and highly affect the quality performance of the project.
- As the main responsible body for the supervision of quality works, the consultants need to carry out their duties to assure quality construction. They need the project office that all material delivered to the site need to be tested and approved by their supervisors. They also need to inspect and approve construction works continuously. HDPO also need to make sure that the consultants carry out their duties and responsibilities in accordance with the contract.
- The training organized for contractors and MSEs must be based on their level of competence. Because, the training given to the MSEs need to incorporate technical

and management program. In addition, the training should be adequate to equip MSEs to become technically capable to be part of the project and also to increase managerial capability of both small-scale contractors and MSEs. HDPO on the other hand, need to give attention to the quality of the building to avoid defects, which affect durability and functionality of the building.

- Finally yet importantly, all parties in the project need to coordinate all their efforts for the construction of quality houses for the better and developed housing delivery system.

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APENDEX ONE

Department of Public Administration and Development Management

Master's Program in Public Management and Policy

Sample Questionnaire Distributed for stockholders Respondents

Research Title: The Assessment of Condominium Housing Projects in Addis Ababa: The case of AkakiKalitiy Sub city.

Questionnaire to be filled by AkakyKalitiy sub city Koye project sites and Addis Ababa housing project office employees who are familiar with and participated in the project sites of the mentioned sub city. This questionnaire used to collect data from respondent to the fulfill the requirement of master's degree research entitled. "The Assessment of Condominium Housing Projects in Addis Ababa: The case of AkakiKalitiy Sub cities." Your experiences and opinions will significantly add value as an input to this thesis. The researcher assures you that the information you provide used only for academic research purpose and anonymity of the respondent maintained throughout the research process. Thank you for your cooperation. Tilahun Lemma mobile 0912018916.March 2018, Addis Ababa.

A. respondent's Personal data of the (personal information):

1. Gender A. male Female

2. Where is your job location now? (A) Akaki Kalitiy sub city project office or site (B) Addis Ababa housing development project office.

3. What is your organization type? (A) Owner (B) consultant (C) contractor (D) Other.

(Please specify) …….

4. Your job description and position: ----------

5. You're level of education :(A) Secondary school (B) Diploma and certificate (D) First degree and above.(6). Your job experience: (A) 0-2 year (B) 3-5 year (C) 6 year and above

B. questionnaire for the selected sample respondents:

1. Failure Factors related to client in the construction of condominium housing:

For the following questions, please put (✓) mark in the box corresponding to your preferred

No	Major weakness factors related to client or owners	Scale				
		SA	A	UD	D	SD
1	Problem of human resources in selection of competent, consultants and reliable contractors to carry out the work of project.					
2	Absence of good methods and systems in purchasing, finance and supply management.					
3	Lack of communication and insufficient coordination with contractors ,consultant and suppliers					
4	Lack of incentive or benefit and training to employees.					
5	Inadequate knowledge and experience in purchasing, finance and supply management					
6	Slow decision making for critical issues of the project.					
7	There are weaknesses in planning, leading and controlling the project activities.					
8	Delay in approving design document and site preparation.					
9	Financial constraints faced by the owner of completed work.					
10	Variation change order					
11	Lack of leadership skills of project manager.					

2. Failure Factors related to consultant in the construction of condominium housing

For the following questions, please put (✓) mark in the box corresponding to your preferred response using the scale below:

No	**Major weakness factors related to consultants**	Scale				
		SA	A	UD	D	SD
1	Lack of knowledge and experience in the organization's consultant					
2	Underestimation of time and costs for the project works					
3	Long waiting in Changes of specification and drawing during construction.					
4	Poor site management and difficulty in controlling contractors					
5	Mistakes in specifications and drawings during the construction.					
6	Poor coordination and communication by the consultant with the other project stakeholders,					
7	Slow response regarding to testing, inspection and progress payment to contractors					
8	Lack of commitment to ensure construction work according to specification and design.					
9	Inadequate involvement to follow up and supervision the project progress.					
10	Qualified technical staff are not employed by the consultant					

3. Critical Factors related to contractor in the construction of condominium housing:

For the following questions, please put (✓) mark in the box corresponding to your preferred response using the scale below.**SA**: Strongly Agree **A**: Agree UD: Undecided **D**: Disagree **SD**: Strongly Disagree

No	**Major weakness factor related to contractors**	**Scale**				
		SA	**A**	**UD**	**D**	**SD**
1	Lack of experience and technical profession in the contractor's organization.					
2	In effective planning, scheduling and handling of the project by contractors					
3	Financing and cash flow challenges and delays in payments to sub-contractors.					
4	Incompetent team leaders and technical staffs assigned to the projects					
5	Lack of Employees motivation due to low payment.					
6	Insufficient coordination and communication with project stakeholders					
7	Less commitment by team leaders and experts to achieve the proposed cost, time and quality of projects					
8	Construction mistakes and defective work during the project process					
9	Pure site management and supervision					
10	Poor qualification of contractor's technical staff.					
11	Improper construction methods implemented by contractors					
12	Rework due to errors during construction					
13	Conflict between contractors and other parties (consultant and owner)					
14	Lack of high technology mechanical Equipment and low level of equipment –operator's skill.					

4. Factors contributing to delay time and cost of projects;

For the following questions, please put (✓) mark in the box corresponding to your preferred response using the scale below:

SA: Strongly Agree A: Agree UD: Undecided D: Disagree SD: Strongly Disagree

No	Factors affecting Project **time** and **cost**	Scale				
		SA	A	UD	D	SD
1	poor site management of clients, consultant, and contractors					
2	Mistakes during the construction stage.					
3	Lack of consultant's experience and profession on engineering, procurement and finance.					
4	Slow speed in decision making on critical issue of the project.					
5	Underestimation of costs and complexities of the projects					
6	Shortage and rising costs of materials and also delay in delivery to the project sites					
7	Design and specification changes by owner or his agent during construction					
8	Poor in planning , scheduling and handling of the project by the contractor					
9	Inadequate number and modern equipment					
10	Slow response regarding to testing, inspection and progress payment to contractors					
11	Lack of good management and leadership in planning ,leading and controlling the project activities by owner					
12	Unforeseen ground condition and in complete project information					
13	Inflexible government rules and regulations leads to slow decision making on the projects					
14	Poor selection of competent consultant and reliable contractor to carry out the work of project					
15	Inadequate information and communication technology by project participants					
16	Poor sub-contractors activity.					

5. Factors affecting project quality in the construction of condominium housing:

For the following questions, please put (✓) mark in the box corresponding to your preferred response using the scale below:

SA: Strongly Agree A: Agree UD: Undecided D: Disagree SD: Strongly Disagree

No	**Factors Affecting project Quality**	Scale				
		SA	A	UD	D	SD
1	Changes in design ,plan and schedule frequently					
2	Unavailability and delay in supply of materials as planned and specification during the construction					
3	Improper integration, coordination and inspection by the participant of the projects					
4	Less quality techniques and mechanisms are adopted in the construction					
5	Lessconsultants commitment to ensureconstruction according to specification and design					
6	Poor supply quality of labor ,equiepment and raw materials in the projects.					
7	Poor selection of well standard consultan and contractors during bidding .					
8	Improper training ,motivation and payment to labor .					
9	Financial problems arise during construction					
10	Heavey and continous rainfall during the project					
11	Lack of management commitment to continual quality improvement					
12	Lack strong coordination between designers and contrctors					

C. Questions for the selected sample respondents.

1. Do you think that only government can achieve the provision of condominium housing compared to the high demand? What is your opinion please? Put other alternatives.

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2. What major problems do you see with construction of condominium housing?

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3. What do you suggest for the problem of condominium housing construction in general?

Appendix Two
Interview Guide for Key Informant Interviews

Addis Ababa University, College of Business and Economics, Department of Public Administration and Development Management, Master's Program in Public Management and Policy

Research Title: The Assessment of Condominium Housing Projects in Addis Ababa: The case of Bole and Akaky-Kaliti Sub cities

In-depth structured interview technique to collect relevant data from key informants in the projects of condominium housing stakeholder (owner, consultant and contractor) parties

Interview Date: _____Time: _____
Location: _____Organization: _____
Year of experience: _____Current Position: _____

Introduction: Thank you for your willingness to participate in this study as a respondent. This interview is used to collect data for the master's research entitled. "The Assessment of Condominium Housing Projects in Addis Ababa: The case of Akaky Kaliti Sub cities." Your experiences and opinions will significantly add value as an input to this thesis. The researcher assures you that the information you provide used only for academic research purpose and anonymity of the respondent maintained throughout the research process. Thank you for your cooperation.Tilahun Lemma

1. How do you evaluate the status of condominium housing project performance against the objectives?

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2. What are the major weaknesses of condominium housing in terms of quality, time, and cost and client satisfaction?

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3. How much is achieved the construction of condominium housing until now compared to

the objectives?----------

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4. What are major factors that affect the quality of condominium housing projects? ……

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5. What major factors do you observe that affect the time schedule and cost of

Construction in the project? ……

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6. Do you think that only government can achieve the supply of condominium housing compared to the high demand?

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7. What are the external factors that impact the performance of housing construction?

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8. What is your understanding about the purchasing, finance and supply management in light of the persistence of the projects?

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9. Is there any fluctuation cost of construction material to run easily the project of

condominium housing? ----------

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10. How do you evaluate the completed of condominium housing project in terms of customer satisfaction?

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11. How do you understand the coordination and communication of project stakeholders?

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12. What do you say about the process of selecting competent consultant and reliable contractors to carry out the work of projects?

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13. Does government follow well flexible methods and systems in purchasing, finance and supply management to speed up the project activities?

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14. Do you have opinions on employees' motivation, training and development based on their long-term contribution to the project?

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15. What other major constraints do you see during the project of condominium housing?