

ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES PRACTICES AND PROBLEMS OF CONDOMINIUM HOUSING CONS TRUCTION PROJECTS: THE CASE OF LIDETA SUB-CITY HOUSING CONSTRUCTION DEVELOPMENT PROJECTS IN ADDIS ABABA

BY DEMEWOZ ERKIYHUN

> FEBRUARY/2022 ADDIS ABABA,ETHIOPIA

PRACTICES AND PROBLEMS OF CONDOMINIUM HOUSING CONS TRUCTION PROJECTS: THE CASE OF LIDETA SUB-CITY HOUSING CONSTRUCTION DEVELOPMENT PROJECTS IN ADDIS ABABA

BY

DEMEWOZ ERKIYHUN

A THESIS SUBMITTED TO THE DEPARTMENT OF PROJECT MANAGEMENT FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN PROJECT MANAGEMENT.

> FEBRUARY/2022 ADDIS ABABA,ETHIOPIA

ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF PROJECT MANAGEMENT

PRACTICES AND PROBLEMS OF CONDOMINIUM HOUSING CONS TRUCTION PROJECTS: THE CASE OF LIDTA SUB-CITY HOUSING CONSTRUCTION DEVELOPMENT PROJECTS IN ADDIS ABABA

BY: DEMEWOZ ERKIYHUN

APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies

Muluadam Alemu (Ph.D)

Advisor

Dr. Dereje Teklemariam

External Examiner

Dejene Mamo (PhD)

Internal Examiner

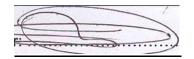
Signature

14/02/22

Signature

Feb.14/2022

Signature



Signature

FEBRUARY, 2022

ADDIS ABAB, ETHIOPIA

DECLARATION

I, the undersigned, declare that this thesis is my own original work, prepared under the guidance of Muluadam Alemu (Ph.D). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis hasn't been submitted either in part or in full to any higher learning Institution for the purpose of earning any degree.

Demewoz Erkiyhun

ACKNOWLEDGEMENTS

First and for most I would like to put forward my greatest gratitude towards St. Mary's University for giving me a chance for free Scholarship to attend the MA program in project management.

With greater and special feelings of admiration, I would like to express my deepest and heartfelt gratitude to wards my fundamentals of project management and project risk management courses instructor as well as my thesis advisor Dr. Muluadam Alemu, for his tremendous patience and dedication in giving me professional as well as constructive comments and timely feedbacks that shaped the thesis. Without his support, my work would have never been accomplished successfully.

I would also like to thank AtoHabtamuMulu a directorate director of the city government of Addis Ababa housing development project office for his kindness and support in giving constructive idea during the research process, and in coordinating individual respondents while filling out the questionnaire. My heartfelt thanks also goes to the respondents in both of the AAHDPO, LHDPO staff members as well and for all of the respondents in each construction sites who collaborated me in giving the needed data for this study.

Finally I would like to acknowledge Engineer DejenieYirgue for his material support and collaboration throughout the whole work especially during the data encoding and the analysis phase of the research work.

Table of Content

Title	Contents	Page
APPROVAL		ii
DECLARATION		iii
ACKNOWLEDGEMENTS		iv
Table of contents		V
List of Tables		viii
Acronyms and Abbreviations		ix
Abstract		X

CHAPTER ONE

1. Introduction	.1
1.1. Background of the Study	1
1.2. Statement of the Problem	. 3
1.3. Objectives of the Study	4
1.3.1 General Objective	.4
1.3.2 Specific Objectives	4
1.4. Basic Research Questions	5
1.5. Significance of the Study	. 5
1. 6.Scope of the Study	5
1.7. Organization of the paper	6
1.8. Definition of Terms	6

CHAPTER TWO

2. REVIEW OF THE RELATED LITERATURE	7
2.1. Theoretical Review	7
2.1.1 The Definition and Concept of Housing	7
2.1.2. Condominium housing	8
2.1.3. Laws, Policies and programs of housing	8

2.1.3.1. The International law	8
2.1.3.2. The Ethiopian Constitution	9
2.1.4. The Impact of Ethiopian Governments on Housing	10
2.1.5. The Ethiopian Integrated Housing Development Program	13
2.1.6. Assessment of the Housing Sector in Addis Ababa	15
2.1.7. Key Players in Housing Development	16
2.1.8. The concept of Project Management	17
2.1.9.The project constraints	18
2.1.10. Problems Contributing to Poor Workmanship in Building Construction	18
2.1.11.Measures to minimize workmanship problems	21
2.1.12.Construction Stakeholders and their Objectives	23
2.1.13.Construction Project Resource Utilization	24
2.2. Empirical Review of the study	24
2.3. Conceptual framework	25

CHAPTER THREE

RESEARCH METHODOLOGY	27
3.1. The Research Methodology	
3.2. Sources of Data	27
3.3. Sample size and Sampling Techniques	
3.4. Instruments and Procedures of Data Collection	29
3.4.1. Instruments of Data Collection	
3.4.1.1. Questionnaire	
3.4.1.2. Interview	30
3.4.1.3. Field Observation.	30
3.4.1.4. Pilot test	31
3.4.2. Procedures of Data Collection	
3.5. Methods of Data Analysis	31
3.6. Validity and Reliability	32
3.7. Ethical Issues	32

CHAPTER FOUR

4. DATA PRESENTATION ANALYSIS AND INTERPRETATION	
4.1 General Characteristics of the Respondents	
4.2 Analysis of data on the practices and challenges of condo housing projects4.2.1 Analysis of data on the practice of project plan preparation	
4.2.2 The practices of management body performing project activities	38
4.2.3 Challenges of Condo Construction Projects	40
4.2.4. Monitoring and Evaluation Practices and Related Challenges	42

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMENDATION	45
5.1. Summary of key findings	.46
5.2. Conclusions	49
5.3 Recommendations	.50
References	.52
ANNEXES	58

List of Tables

Tables		pages
Table 1	population and sample size	
Table 2	participants for the interview	
Table3	Age of the respondents	33
Table 4	Educational background	34
Table 5	Sex of the respondents	34
Table 6	Years of services in construction	35
Table 7	Responses regarding to plan preparation	
Table 8	Responses regarding practices of the management body project works	39
Table 9	Responses regarding the challenges of condo construction project	40
Table 10	Responses regarding to monitoring and evaluation	42

ACRONYMS AND ABREVATIONS

AAHCP	Addis Ababa Housing Construction Project
AAHCPO	Addis Ababa Housing Construction Project Office
AAHDPO	Addis Ababa Housing Construction Development Project Office
ACHPR	African Charter on Human and Peoples' Rights
AARH	Agency for the Administration of Rental Houses
CBB	Construction and Business Bank
CBE	Commercial Bank of Ethiopia
CSA	Central Statistical Agency
EPRDF	Ethiopian Peoples Republic Democratic Front
GTP	Growth and Transformation Plan
GTZ D	eutsche Gesellschaft fur TechnischeZusammenarbeit/German Technical Cooperation
HDPO	House Development Project Office
IHDP	Integrated Housing Development Program
LHDPO	Lideta sub-city Housing Development Project Office
MoFED	Ministry of Finance and Economic Development
MWUD	Ministry of Work and Urban Development
PMI	Project Management Institute
RCPSP	Resource Constrained Project Scheduling Problem
RLP	Resource Labeling Problem
SPSS	Statistical Package for Social Sciences
TCPSP	Time Constrained Schedule Problem
TGE	Transitional Government of Ethiopia
UDHR	Universal Declarations of Human Rights
UN	United Nations

UN-HABITAT United Nations Human Settlement Program

ABSTRACT

The study was conducted aiming at assessing the practices and problems of Condominium housing construction in Lideta Sub-City in Addis Ababa. The research design was descriptive in nature and the quantitative method supported by qualitative approach. Data was generated via questionnaire, interview and document analysis. Accordingly, the data was collected from 194 sample respondents out of the total of populations 613. First construction project sites were selected based on judgmental sampling techniques whereas, the AAHDPO and the staff, the LHDPO with their staff, contractors, consultants and SMEs members were selected based on both judgmental and convenient sampling techniques as well. The data obtained through questionnaire, were analyzed using statistical package for social sciences/SPSS/ using statistical tools such as frequency, count, percentage, mean score and waited mean. On the other hand the data obtained through interview, observation and document analysis were analyzed qualitatively to substantiate the result of the quantitative analysis. The findings of the study showed that a significant number of respondents were relatively qualified in the position they hold currently. The findings also indicated that there was a high level of need to conduct close supervision, monitoring and serious evaluation. Besides this the resource provision and management, project planning, capacity building, lack of stakeholder involvement, infrastructural issues were the major problems of the project activities. Realizing the fact to the great mismatch between the demand for and the supply to housing, introducing alternative housing approach is unquestionable. Moreover, the housing policy of the government should consider multi directional approaches. Such as: Participative planning and implementing campaign that build up understanding and cooperation between the concerned stakeholders is very important. Maintain proper monitoring and evaluation systems and take as early corrective actions for a variation from the bench mark. Applying alternative low cost durable local material and technology and encouraging different actors involved in the construction of condominium housing is indispensable to address the targets of IHDP.

Keywords: housing, household, housing shortage, overcrowding, slum, squatter settlement, kebele

CHAPTER ONE

INTRODUCTION

This chapter is dedicated to give an insight about the general objective of the study and/or the problem leading to the study, to review some literatures about the problem and their deficiencies in addressing the problem at hand and asserting the significance and purpose of this particular study for condo housing construction projects.

1.1. Background of the Study

Ethiopia is the second most populous and the fifth least urbanized country in Africa. Just 21% of the population lives in cities, well below the sub-Saharan Africa average of 40.4%, Although Ethiopia's urban population is projected to grow between 3.8% to 5.4% per year, from 2000 to 2015, Addis Ababa's population grew by 37% (from 2.8 million to 3.8 million) and its built-up area by 32% (from 85km2 to 113km2). While the rapid pace of urbanization in Ethiopia could generate many benefits, it is driving an urgent need for adequate, resilient and affordable housing, and it also brings the challenge of urban sprawl, which must be met through the delivery of compact urban development (Matsumoto, & Crook, 2021).

Ethiopia's current urban housing stock has a number of characteristics that make urgent action important – both to support residents' well-being and to create sustainable cities. These characteristics include: a housing market historically dominated by owner-occupiers a highly fragmented, informal and closed rental market; overcrowding and low-quality housing conditions; and fast growing, unmet housing demand that outpaces the provision of affordable housing.(Matsumoto, & Crook, 2021).

The rapid process of urbanization in developing countries accompanied by lack of adequate and affordable housing is one of the 21st century's main development challenges. Like most African countries, the spatial, physical and socio-economic condition of Ethiopia is by far behind the requirements fundamental to sustain the livelihood of the citizens. Ethiopia is one of the poorest countries in the world estimated to be ranked 169 out of 177 countries of the world. The agriculture sector which accounts for the average 45% of the country's GDP, is the main source of livelihood for about 80% of the country's population (World Bank, 2015). With a population of about 116,722,101 as of February15, 2021 based on (United Nations). Ethiopian population is equivalent to 1.47% of the total world population. The country ranked number 12 in the list of countries and dependencies by population. 21.3% of the population is urban

(24.463, 423 people in 2020). Ethiopia is the second most populous country in Africa. Moreover, its population is growing rapidly at an annual growth rate of 2.6 per cent (CSA, 2012).

Addis Ababa is located almost at the naval of the country which is the capital city of Ethiopia, with an estimated population of almost about nearly to 3 million (2,757,729). The combination of high population and high urban growth rates coupled with a high prevalence of urban poverty has placed enormous strain on Ethiopian cities. This is especially true in Addis Ababa as it has a share of 23% of the country's urban population (UN, 2021).

The City government of Addis Ababa's house construction development project office has been a longstanding challenge. For over the last consecutive decades, the rapidly growing population in the city has been unable to be provided both adequate and sufficient housing facilities particularly for the low-income citizens. Reflecting the city's general housing history, a series of surveys have been conducted in accordance with Addis Ababa's master plan revision during the early 2000s, declared a massive shortage of housing units – particularly for low-income dwellers – and a generally poor condition of the existing housing stock. Over 95% of the total housing units were identified as single-story shelters, showing substantial deficits regarding sanitation, cooking, and personal hygiene facilities.

These challenges have affected both peripheral and central areas: while an estimated 25% of units in the suburbs derive from squatting activities and thus mostly poorly built shelters, almost 60% of the units within the city center were identified as dilapidated, and thus in need of substantial upgrading or total replacement.

Recently, the government implemented a new housing project in Addis Ababa which is divided into four different groups based on payment modalities: 10/90, 20/80, 40/60 and housing associations. The payment modality for the last one necessitates hundred percent upfront settlements, while the others incorporate 10, 20 and 40 percent down payment mixed with a long-term mortgage plan. Majority of the people demanding houses focused on the former three alternatives. Registrations for 20/80 and 10/90 schemes took place from June 10 to June 28, 2013followed by the 40/60 and individual housing construction associations (Ebisa, 2014).

Currently, in Addis Ababa, there is strong housing demand as a result of the mismatch between the expanding urban population and limited housing supply. Offices are working starting from 1997. lideta sub-city House construction development project office/LHDPO is one of the project offices working

under Addis Ababa House Construction Development Project Office/AAHDPO. Lideta Housing construction Development Project Office/LHDPO was established in 1997E.C. The project office works together with project consultants and other stakeholders.

1.2. Statement of the Problem

The main objective of this study was to assess the practices and problems of condo housing construction development projects in Lideta sub-city Housing Development Projects. Housing is a highly politicized and contentious issue, particularly in developing countries like Ethiopia which experience rapid urbanization and where, as a result, huge competition for housing exists. Although shelter is a basic human need, it is also more than that: "housing is about everything other than houses. It is about the availability of land, about access to credit, about affordability, about economic growth, about social development and about environment" (Khan, 2003). In addition to these, it also implies gaining access to services and infrastructure, as well as creating feelings of security and pride in living at home.

Housing problems today in most areas of the country are originated from the largely misguided policies and socio-economic factors of the long past as lack of housing is among visible problems of Addis Ababa. The main problem lies here is that whether or not the objective of condominium construction program has to address the shelter need of the low income groups.

The city government of Addis Ababa housing construction development project office invests huge amount of money on housing construction projects to reduce the gap of housing problems. The development of housing construction projects which are suitable to the majority of residents have significant impact on urban development by rectifying housing problems, creating job opportunities, enhancing saving culture and overcoming the problem of dilapidation and urban suffocation. Hence, special attention should be given to housing construction projects in urban development activities. As a result, the Addis Ababa city administration launched grand low cost condominium housing projects through integrated housing development program in 2004 to minimize housing backlog, slums and to provide decent shelter to middle and low income groups.

The ongoing housing construction development projects have been continued within different parts of the city. However, the condo construction projects are going on under different obstacles, implementation challenges and misunderstandings from different sections of the citizen (UN-HABITAT, 2010).

There are many documents about the implementation of Addis Ababa city administration construction projects in general and housing construction projects with regard to Condominium Housing in particular. There are also studies conducted on EIHDP, AAHDPO giving special emphasis on condo housing construction development projects that affect the delivery of housing with regard to Addis Ababa condominium housing projects.

Tesfaye A. (2011) conducted a research on problems and prospects of housing development in Ethiopia. Tesfalem T. (2017) conducted an assessment on factor affecting housing delivery of condominium project in Addis Ababa housing development projects on Gulele sub-city as a case.

Matsumoto & Crook (2021) conducted a research on sustainable and inclusive housing in Ethiopia emphasizing on the policy assessment.

Despite the attempts made to assess housing projects, there are no adequate studies conducted to investigate the practices and problems of condo housing construction projects by taking LHDPO as a case. Unless, urban planners and management take in to account the practices and problems of condominium housing construction projects, the invested budget will be wasted. Remarkably, lack of adequate study in the area especially conducted on Lideta sub-city housing construction projects initiated the researcher to conduct this study. This research is thus intended to fill the gap related to housing construction practices and problems that affect the condo housing projects.

1.3. Objectives of the Study

1.3.1. General Objective

The main objective of this study was to assess the practices and problems condominium house construction projects inLideta sub-city in Addis Ababa..

1.3.2. Specific Objectives

- 1. To assess the current practices associated with condominium housing construction projects undertaken by Lideta sub-city housing construction development project office.
- 2. To assess the problems that affect the condominium housing construction projects undertaken by the sub-city housing construction development project office.
- 3. To provide the possible suggestions of what should be done for further improvements of the housing construction projects in the sub-city.

1. What are the major practices associated with condominium housing construction projects undertaken by Lideta sub-city housing construction development project office?

2. What are the major problems that are affecting the condominium housing construction projects undertaken by Lideta sub city housing construction development project office?

3. What should be done for further improvements of the condominium housing construction development projects by the sub-city housing?

1.5. Significance of the Study

This study is expected to be significant to identify the achievements made so far, the practices in the undertaking of housing construction projects in general and the problems encountered to the condo housing construction projects in particular. Moreover, it is expected to be significant in putting forward recommendations to retain the best practices and to overcome the problems and to throw light on the issue hence, draw the attention of the different stakeholders for the successful implementation of the condo housing construction projects more specifically.

Therefore the study is expected to be significant:-

1. To Addis Ababa city administration housing development project office in identifying the range of critical problems that negatively influence the effectiveness of condo housing construction projects that help administrators, designers, and program evaluators.

2. It enables Lideta sub-city Housing construction Development Project Office to gain valuable information about the major problems of condominium housing construction development projects.

3. To the policy formulators in that, it will indicate the grass root practices and problems of construction project planning and implementation and thus to design policy in accordance with the issue.

4. It will also be served as a source for individuals who do have an interest to conduct further research in the similar areas of study.

In general the study enables the authorities, other stakeholders and the housing construction development project offices to evaluate the status of condominium housing construction implementation and strive for better performances and to enhance access in the city.

1.6. Scope of the study

Thousands of condominium houses are under construction in different towns at different sites throughout the country in this mega project. Although housing is a nation- wide problem that requires large scale and rigorous study, due to constraints of time, resource and access of information and manageability forced the researcher to limit the scope and determining the location and the population size was very important. Hence, the study was delimited to Addis Ababa Housing Construction Project Office Lideta sub-city housing construction development project branch office practices and problems of condo housing construction sites undertaken by the sub-city housing construction development project work. The study tried to cover Bole-Arabsa and Koyefeche condo housing construction sites undertaken by the sub-city housing construction development project office. It was also limited to cover the last three consecutive years that was between 2019 to 2021 EC.

1.7. Organization of the study

The thesis is organized and dividing into five chapters. The first chapter provides the introductory aspect of the study which encompasses the Background of the study, Statement of the research problem, the Research questions, Objectives of the study, Significance of the study, Scope of the study, Definition of terms, Organization of the paper. The second chapter explores the related Literature on the subject matter. The third chapter presents the Research methods, Target population, Sampling strategy and Data source and collection techniques of the study. The fourth chapter deals with the Presentation, Analysis and interpretation of data. The fifth chapter winds-up the study with Summary, Conclusion and Recommending solutions to the problem.

1.8. Definition of Terms

1. **Housing** - any building or construction which is principally built to serve a single household or family for residential purpose (Solomon, 1985).

2. **Household:** - It is an arrangement made by persons, individually or in groups for providing themselves with food and other essentials of living (UNCHS,2001).

- 3. Over-crowding:- the sharing of one room by 2.5 or more persons per room (CSA, 1999).
- 4. **Slum:** a highly congested residential neighborhood in a given city which is predominantly comprised of sub-standard dwellings and is occupied mainly by persons that belong to the lowest income stratum (Solomon,1985).
- 5. **Squatter settlement**:- a concentration of dwellings built on land neither owned nor rented by builders.
- 6. Kebele:- (Amharic word), the lowest administrative unit in the urban areas of Ethiopia.

6 | P a g e

CHAPTER TWO

2. REVIEW OF THE RELATED LITERATURE

Introduction

The rapid process of urbanization in developing countries accompanied by lack of adequate and affordable housing is one of the 21st century's main development challenges. Like most African countries, the spatial, physical and socio-economic conditions of Ethiopian cities are by far behind the requirements fundamental to sustain the livelihood of citizens. The development of housing project which is suitable to the majority of residents has significant role in urban development by rectifying housing problems, creating job opportunity, enhancing saving culture and overcoming the problem of dilapidation and urban suffocation.

2.1 Theoretical Reviews

2.1.1. The Definition and Concept of Housing

Housing is one of the three basic needs of mankind and it is the most important one for the physical safety and security of man after the provision of food for survival. Adequate housing contributes to the attainment of physical and moral health of a nation and stimulates the social stability, the work efficiency and the development of the individuals. It is also one of the best indicators of a person's standard of living and of his place in the society. Housing, both in units or multiple forms is a significant component of the physical form and structure of a community, while the human and family contents of the house is part of the very spirit of life and prosperity of the society. Housing is a very important aspect in life. It is a multidimensional concept. It has been defined differently by different people depending on the emphasis of analysis.

-The United Nations however defined housing not simply as shelter, but also as a means of creating communities, giving great emphasis on the functions which housing has to perform. According to the United Nations, housing is a means which should perform a double function: the interior, one of providing a place where a household of different age, sex, education, occupation, intellectual modes and values can meet in harmony; and the exterior, one of providing meeting grounds for groups of households and for the healthy and enjoyment enrichment of their lives and the life of the community.

- In economic terms, housing is considered as a commodity which has a market value and can be bought and sold. Housing reflects a person's economic standing and his affordability to attain a

certain level of quality of life. Housing is also considered as a security which a person owns for the benefit of one's future.

2.1.2. Condominium houses

The word condominium usually shortened to condo, is a type of real estate divided into several units that are each separately owned, surrounded by common areas jointly owned. Residential condominiums are frequently constructed as apartment buildings, but there has been an increase in the number of "detached condominiums", which look like single-family homes but in which the yards, building exteriors, and streets are jointly owned and jointly maintained by a community association.

Unlike apartments, which are leased by their tenants, condominium units are owned outright.

Additionally, the owners of the individual units also collectively own the common areas of the property, such as hallways, walkways, laundry rooms, common utilities and amenities, such as the system, elevators, and so on as well. Many shopping malls are industrial condominium in which the individual retail and office spaces are owned by the businesses that occupy them while the common areas of the mall are collectively owned by all the business entities that own the individual spaces.

2.1.3. Laws, Policies and programs of housing

2.1.3.1. The International law

Housing protects people against street crime. At the household level, housing also fulfills important functions. It provides a physical enclosure for domestic behavior: a place for daily activities, where people cook, eat, socialize and rest, away from the public realm and a place where, in many cultures, they are born and die. At the same time, through its location, housing forms the basis for activities in the community and outside world, such as interactions with neighbors, work, school and shopping (UNCHS, 2001). Housing also has of great importance to households in both developed and developing economies, because it is the largest fixed capital investment that households make. In developing countries, housing accounts for 10-30 percent of household expenditure, 6 - 20 percent of the Gross National Product, and 10 - 50 percent of gross fixed capital formation (Malpezzi, 2000).

The United Nations itself unequivocally states that every citizen of the world is entitled to be sheltered. The 1992 resolution of the United Nations Committee on Economic, Social and Cultural Rights, for instance, stressed the right of an individual or a household to adequate housing (Gutema, 1994, cited UNCHS, 1993). Yet, a great part of the world's population is housed in unfit and unhealthy dwellings and physical surroundings. Thus, more than one billion of the world's city residents live in inadequate housing, mostly in the sprawling slums and squatter settlements in developing countries (UNCHS, 2001). This is also true in Ethiopia, where housing problems are mainly found in the major urban centers of the country.

One can find the right to housing recognized in different international and regional and national human rights instruments either directly or indirectly. At global level, the right to housing came into existence in 1948 with the adoption of the Universal Declaration of Human Rights (UDHR) there by joining the body of international, universally applicable and universally accepted human rights law (Janka, 2007). After the adoption of the UDHR, many other international human rights treaties have recognized the right to housing as human right.

At regional level, the major African human rights document, the African Charter on Human and Peoples' Rights (ACHPR), does not expressly provide for the right to housing. Nevertheless, the African Commission on Human and Peoples' Rights (the Commission) adopted the approach of generous and purposive interpretation which led to the development of the doctrine of implicitly guaranteed rights: reading rights which are not expressly recognized by the ACHPR "into" it. Luckily, the right to housing is one of the two such rights read 'into' the ACHPR by the Commission. Ethiopia ratified all the three instruments. By virtue of article 9(4) of the Ethiopian Constitution, therefore, they are integral part of the law of the land thereby creating the obligation to realize the right to housing.

2.1.3.2. The Ethiopian Constitution

The Ethiopian Constitution does not mention the right to housing as a human right at all. But article 41(3) states that every Ethiopian national has the right to equal access to publicly funded social services while article 41(4) imposes obligation on the state to allocate its ever increasing resources to provide to the public social services. Assessment of Affordability of Private Residential Developments in Addis Ababa Similarly, article 41(5) of the Constitution imposes duty on the state, within the available means, to allocate resources to provide assistance to the physically and mentally disabled, the aged and the children who are left without parents or guardians (Tesfaye, 2011).

This attempt to situate the right to housing in the Constitution itself is important particularly in Ethiopian context where relying on international law, albeit they become integral part of the law of the land up on

their ratifications, before the judiciary is almost impossible. Before commencing the reading 'into' work, it is important to pay a brief attention to article 13(2) of the Constitution for it facilitates reading the right to housing 'into' other constitutional rights (Tesfaye, 2011).

2.1.4. The Impact of Ethiopian Governments on Housing

The presence or absence of effective housing policy of a certain government to manage and construct houses has a great influence on the existing housing conditions of a country. According to UN (1988), the physical condition and quality of dwelling units in the urban centers of a country vary in accordance with each country's percapita-income and policies towards the sector. "Although recently, third world countries generally begun to show serious concerns over their urban housing problems. Some countries have attempted to launch some kind of housing programs as early as in the 1950s and 1960s (Solomon, 1985).

Ethiopia, like many other third world countries did not show serious concern over the deteriorating urban housing conditions until very recently. The interest of the Ethiopian government in the formulation of housing policies dates back to 1959, when the Department of Housing was established in the Ministry of Public Works. It was after the creation of this housing department that we saw for the first time that the housing sector was given some consideration in the country's national development plans (Solomon, 1985). Since then, governments in different periods in the country have followed different housing policies and programs, which might have resulted in major housing problems in most urban centers of the country including Addis Ababa.

Before 1974, the Ethiopian government showed little interest in intervening in the housing sector. The housing market during this period was characterized by the free market principles, where by landlords were leasing urban land and constructing residential houses, and there was no restriction with regard to selling, buying and renting of houses. However, the concentration of urban land in the hands of few landlords (who for instance in Addis Ababa constituted 5 percent but owned about 95 percent of the city's land) resulted in the high rise of urban land price. In general, the pre-1974 period, the government followed a lassies-faire policy in housing sector resulting in the unplanned development of most urban centers and its direct involvement in housing production and provision was also insignificant.

During the Derg regime, the government had intervened extensively in the housing and urban development sector by nationalizing all urban land and extra houses. All this was materialized through the proclamation No. 47/1975, "a proclamation to provide for government ownership of urban lands and extra

urban houses." All extra houses became government property and no person or family or organization was allowed to obtain income from land or house rent. The objective of the elimination of private sector rental system was to abolish exploitation of the urban population by landlords in accordance with the tenets of socialist philosophy.

With respect to housing, the proclamation abolished private ownership of land and nationalized all extra housing units. The proclamation effected a reduction of rents varying from 15 to 50 percent on all rental housing units whose rents were up to 300 Birr per month (Solomon, 1985). However, the reduction of housing rent was mainly political decision rather than economic and the effect still influence the maintenance condition of kebele administered dwelling units in most urban centers of the country. After the proclamation, all urban houses excluding owner occupied, are administered by two public institutions. Kebeles were given responsibilities for the administration of those houses whose rent were below Birr 100 per month and the Agency for the Administration of Rental Houses (AARH) was made responsible for the management of those whose rent was above Birr 100.

However, Kebele authorities had neither the qualification nor the interest to manage public housing effectively. As a result, there has been inadequate maintenance, lack of provision of services and considerable amount of uncollected rent from Kebele administered dwelling units. Little or no emphasis was given to their physical improvements. Up grading and renewal activities are out of the reach of either local or central government.

During few years that followed the proclamation, access to urban land for house construction was greatly improved. The individuals were encouraged and supported to build and own their own homes. The encouragements were through the provision of land and standard house designs free of change. For further promotion of home ownership, the concept of housing cooperatives was introduced in Addis Ababa and gradually to the other major regional towns. To address the housing demand of all income categories, three types of housing co-operatives were introduced. The special subsides provided for these cooperatives had attracted thousands of people to be organized into co-operatives. Thus, between the years 1976 and 1985, a total of 4797 and 7875 housing co-operatives and individual house builders, respectively, constructed their own houses through the loan obtained from housing and saving bank. However, on the negative side, the proclamation out-law all private investments. Private landlords were not allowed even for renting rooms or partitions of their own premise and the government was the sole player in housing market.

Finally, the government realized its inability to supply adequate shelter that matched the demand for rental accommodation. Hence, in 1986 the government issued a proclamation, which amended the article of the previous proclamation which out-law private rental housing suppliers. Instead, owners and tenants of the public premises were allowed to sub-let their holdings (Gutema, 1994). Even though, the proclamation had been amended, the housing problems were aggravated in all urban centers of the country including. In general, urban housing policy during the Derg regime, neither gave room for the private sector intervention both in managing and construction of houses, nor emphasized the creation of efficient and coordained institutional framework to accommodate all aspects of housing units (MWUD, 1993). Thus, housing problems have remained to be an outstanding issue even for the present government.

After the downfall of the Derg regime, the country has changed its economic policy from that of a command economy to a market – oriented one. The Transitional Government of Ethiopia (TGE) issued the country's new economic policy in November 1991. Policies pertaining to the housing and urban development include:-

- 1. The government retains ownership of all urban land but ensures its equitable distribution for housing construction;
- 2) The right to ownership including the right to use, rent, transfer the house, etc, will be guaranteed;
- 3) Private individuals can construct houses for rent and;
- 4) The state will sell nationalized houses, but, priority to buy will be given to the present occupants. Compensation will be given to the previous owners whenever appropriate.

EPRDF, after winning the 1995 General Election, has issued the five year program of Development, Peace and Democracy. The major policies of the program related to the housing and urban development include:-

1. Regarding development of the urban economy at large, it emphasizes the development of infrastructure such as electricity, roads and rail ways, telecommunication, water supply and sanitation; and

2) The housing problem is also rampant in all towns of the country. Hence, EPRDF plans to alleviate the problem of the construction of low cost houses by municipalities, allocation of plots for private home builders and encouragement of private investment by real-estate developers. However, the implementation of the program was minimum. Furthermore, other proclamations have been issued. These include:

1) The urban land lease holding proclamation No. 80/1993,

2) The income tax amendment proclamation No.62/1993 and

3) Capital gain tax of proclamation NO. 108/1994. The present leasehold system favors the middle and high income groups, as it requires depositing about 20 percent of the project cost before construction commences.

Generally, the current housing policy advocates, among other things, the involvement of the private sector and to some extent municipalities in the provision of housing. However, there are no any appreciable improvements in the construction or provision of residential houses. Currently, there is a wide gap between housing supply and demand, resulted in housing shortage. Moreover, proclamations, such as, rental income tax and capital gain tax may have also a discouraging effect on investment on housing sector.

To sum up, the inadequately defined housing policies and shelter strategies, particularly on rental accommodations, are not conducive for the effective participation of the public, private and community sectors in housing production and maintenance program. It is also evident that the present policies of housing failed to solve the housing problems of the poor.

2.1.5. The Ethiopian integrated housing development program/EIHDP/

The Ethiopian integrated housing development program /EIHDP/ is a large-scale program designed by the Ethiopian government to address the current housing deficit, the poor quality of existing housing stock, and the future housing needs due to continued rapid urbanization. Unlike prevailing piecemeal approaches to solve urban housing problems in several African countries, Ethiopia's housing program of the past more than ten years has been an ambitious large scale project that integrates a number of complementary policy objectives such as employment and saving mobilization. The program is primarily focused to address the challenges of access to affordable housing by low- and lower middle-income urban households that typically live in precarious housing conditions. Through the provision of low-cost housing units, the EIHDP is intended to greatly improve the living conditions and tenure security of low income households. The EIHDP, being implemented in the past ten years, marked a radical departure from the previous government-owned rental housing approach to that of private home ownership.

Following the over throw of the Derg regime in 1991, Ethiopia drafted a new constitution that introduced a federal system of government. A rural development policy, named the Land Reform

Program was introduced in 1994. This sought to decentralize urban planning responsibilities and to encourage secondary cities to attract rural migrants to ease pressure on the limited houses available for urban dwellers living in Addis Ababa and other major urban areas. Addis Ababa's first housing policy, incorporates 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 the large subsidies and land provided at highly subsidized rates, the private sector has failed to deliver affordable houses 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.

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 the limited affordability of formal housing to do away with urban poverty and to improve housing access to low and middle income residents of urban areas, government has designed and implemented an indigenous urban housing development program known as Integrated Housing Development Program (IHDP). The major development components in the IHDP were the construction of condominium units, creation new jobs opportunities, promotion for the development of micro - and small - enterprises, enhancing the capacity of the construction sector, regenerating inner-city slum areas, and promoting homeownership for low-income households in urban area.

According to the UN-HABITAT's evaluation of the IHDP, the Integrated Housing Development Program was an ambitious achievement for Ethiopia. It is a physical manifestation of the transition from a static urban housing sector based mainly on publicly provided and controlled poor-quality rental housing to a dynamic homeownership-based approach with intelligent cross subsidization for the poor, where the focus is on building the capacity of private companies and on economic development in general. Whereas there is much interest for the program in Addis Ababa and few larger cities, lately implementation of the program was suspended in the regions because of low effective demand and weak ability to pay the down payment and the monthly mortgage (principal and interest). And lack of adequate financing from the national bank of Ethiopia.

The program was also unable to meet its targets due to a shortage of skills in construction, project management and planning, construction design and poor logistic support and the shortage of construction

materials. The shortage of qualified contractors, both big and small, considerably slowed the space of housing construction and delivery Massive Interventions undertaken by government towards improving access to housing and infrastructure during the last decade.

In general, investment in housing and infrastructure has helped to reduce urban poverty through its multiplier effect in the entire economy. According to National report explanation vigorous effort by government towards improving access to housing in the country, the Ethiopian urban housing situation reflects a gloomy picture. The Urban Sector Millennium Development Goal(MDG) Needs Assessment(December 2004): Improving the Lives of Slum Dwellers estimated that, the additional housing units will be needed due to population growth or formation of new households between 2005 and 2015 will be 2,250,831 units – approximately1.125 million during the 2005-2010 period – or 225,000 each year. To meet this need will require a substantial effort from the public sector supported by private sector and community participation.

2.1.6 Assessment of the Housing Sector in Addis Ababa

Rapid urbanization is one of the greatest socio-economic changes during the last five decades or so, has caused the growth of squatter and informal housing all round the rapidly expanding cities of the developing world (UN-Habitat, 2010). Despite having one of the lowest proportions of urban population in the world at only 16.7 per cent, Ethiopia is rapidly urbanizing at a high annual growth rate of 3.5 per cent. Addis Ababa, the capital city of Ethiopia dominates the urban hierarchy with a population assessment of affordability of private residential developments in Addis Ababa of 3,739,551 holding 23 per cent of the total urban population in the country (CSA, 2012). Addis Ababa occupies an area of 522 square kilometers has an estimated more than 3 million inhabitants. The city is sub-divided into ten sub cities, each of which has an average population of around 300,000 people. The three largest sub-cities by population are Kolfe Keranio (with 463,417 inhabitants), Yeka (374,583 inhabitants) and Nefas Silk Lafto (341,743 inhabitants). In terms of land area, the largest sub-cities are Akaki Kality, Bole, and Yeka each of which covers an area exceeding 80 square kilometers. Population densities vary considerably among the sub-cities, with Addis Ketema and Arada showing the most densely populated neighborhoods while Bole and Akaki Kality are the least densely populated sections of the city. One of the continuing challenges posed by unprecedented Urbanization in the developing countries is the provision of adequate housing. Although population growth shows the demand for housing, the rate of increase in households is believed to provide a direct measure of potential housing demand. The 2007 census showed that the total number of urban households in Addis Ababa exceeded the total number of housing units by approximately

26,134, or about 4 per cent of the total urban households in the city. Given this increase, the city's housing demand is increasing. Accommodating this increased demand will require additional housing development and construction in the city.

According to estimates by the Ministry of Works and Urban Development (2008), the housing deficit in Addis Ababa alone is about 300,000 units. The housing deficit in Addis Ababa is not just measured by the large number of units that are required today; it is also observable in the quality of the housing stock and the extremely small sizes of most available dwelling units. What is even more worrying in this regard is that the problem has worsened between the two recent census surveys. For instance, the proportion of single-room dwelling units in Addis Ababa has risen from 33 per cent in 1994 to 39.4 per cent in 2007 (CSA, 2007: CSA, 1994). This is a serious cause for concern, according to CSA (2007) the average household size is 4.1 individuals, as the poor, who make the bulk of the population, typically tend to have large families. This will be the second time that re-registration is taking place after the first repeat in 2013 when new people were registered along with the old ones who first registered in 2005. The 835,000 people have saved 11 billion Br in the two schemes

2.1.7. Key Players in Housing Development

According to Addis Ababa City Government, 2004 as cited in Haregewoin (2007), the main suppliers of housing in Addis Ababa are the public, cooperatives, individuals (formal), real estate developers and the informal sector. The dominant player in housing development is the state as it controls the majority of the rental accommodation and influences the supply of new housing units through active involvement in material production and importation, land supply, development of condominium housing and housing finance. The Government has taken the decision that low income housing development should primarily be undertaken by the public sector. This is a subsidized initiative to make houses affordable to the target group.

The program was pioneered by the Addis Ababa City Government with support from GTZ in 1996.

Addis Ababa has established the House construction Development Project Office (HDPO) as a semiautonomous agency to supply housing at low and affordable cost. This is an ambitious plan to redevelop the kebelehousing, by the construction of 4 storey walk-up blocks of flats for sale as condominium units. The aim was multi-faceted: To speed up supply of low-cost housing for the poor; to dandify and "renew" prime urban land, to boost the building/construction industry, and pump cash into the economy by generating employment opportunities for the poor and to redevelop the existing run-down

kebele housing and the residents into the new flats, thereby freeing up the land area for the construction of more new housing. Other kebele residents would be moved into this housing.

The Government's plan to provide affordable housing to low- and middle-income through the condominium project has not been without problems, and the program is increasingly coming under scrutiny because of doubts as to whether this scheme will provide sufficient affordable housing for the low and very low income groups. According to Meheret (2009) the concerns are:

Lately, there have been sharp rises in prices of construction materials such as iron, cement, wood and other building materials. While this has not put a dent on the construction industry in the short-to medium term, its long term consequences and particularly its effect on the supply and demand for housing have yet to be seen.

Although unit prices were set at the original estimate, many units are occupied by higher income households who can afford to pay full price "at one go" or a "larger down payment". This means that moderate income families are benefiting from the scheme intended for poor and low-income households. The Government has not officially admitted the problem but they are aware that this is primarily caused by escalating costs of construction, which has rendered housing unaffordable for the poor;

Many people have found it very difficult to adapt their living patterns to multi-storey living. Whether for this reason, or the opportunity for windfall profits, many families move out and sub-let their dwellings to higher income families. The gap between the amount paid by the official allotted and the rent he can charge can be as much as five times.

The Government is aware of the potential contribution of the private sector towards easing the housing problem and aims to encourage its participation in the housing industry (Meheret, 2009). As a result, private real estate developers have increasingly been involved in the construction of standard housing units, mainly for the middle and high income groups. To make housing affordable, the Federal government has been helping private developers through incentives, for example, giving free land to real estate developers to build rental housing for low-income families and also facilitating the supply of essential infrastructure, like water, roads, telephone and electricity services, etc. However, the efforts were to no avail.

2.1.8. The concept of Project Management

Project management can be defined from management concept, resource utilization point and as a system. According to Kerzner (2009), project management is the planning, organizing, directing, and controlling of company resources for a relatively short-term objective that has been established to complete specific goals and objectives. Furthermore, project management utilizes the systems approach to management by having functional personnel (the vertical hierarchy) assigned to a specific project (the horizontal hierarchy) (Kerzner, 2009).

Project management is an organized common-sense approach that utilizes the appropriate client involvement in order to meet sponsor needs and deliver expected incremental business value (Wysocki, 2014). Project management is about people and the systems, processes, tools, and the methodologies they use. In order to manage any kind of project there should be some kind of system with group of people who can run the established system. There are also different tools and methodologies that help to manage a project. Project management is concerned with several objectives at once. The objectives typically fall under the headings of time, cost and quality (Roberts and Wallace, 2004).

2.1.9. The project constraints

There are constraints when managing a project. These constraints are time, cost and quality. The benefits and advantages of project management are identification of functional responsibilities to ensure that all activities are accounted for, regardless of personnel turnover, minimizing the need for continuous reporting, identification of time limits for scheduling, identification of a methodology for trade-off analysis, measurement of accomplishment against plans, early identification of problems so that corrective action may follow, improved estimating capability for future planning, knowing when objectives cannot be met or will be exceeded (Kerzner, 2009).

2.1.10. Problems Contributing to Poor Workmanship in Building Construction

Different studies have been conducted regarding problems contributing to poor workmanship in building constructions. Ali and Wen (2011) studied the factors contributing to poor workmanship and possible measures to minimize the problem in Malaysia. They found lack of experience and competency of labors, language barrier to communication and lack of communication, unsuitable of construction equipments, poor weather condition, limited time and limited cost as the causes of poor workmanship. According to Abdul Rahman et al. (1996), the workmanship was classified as one of the most frequent non-conformance of the construction site. Through his literatures, eight variables that related to the causes of poor quality in construction projects had been found out.

a. Poor Project Management

Dai et al. (2009) mentioned that incompetence management is generally recognized as a major factor of poor construction productivity. He further stated that the management factors may due to the insufficient of supervision on site. In fact, poor supervision on site contributes to the poor workmanship on a construction site and it can be seen on many occasions on the job site. In addition, the ability of management of the construction site is the primary cause that affects labors' daily productivity. Kasun et al. (2006) stated that the quality of project manager is one of the causes in affecting project quality. Therefore, poor project management is one of the factors contributing to poor workmanship.

b. Complicated Role of Sub-contractor

Khalid et al. (2006) agreed that the role of subcontractor is one of the factors contributing to construction deficiency (poor workmanship) and many people are not always focus on this factor. However, in fact, the role of subcontractor is important in construction work. This is because most of the site work is completed by subcontractors and the main contractors just depend on the subcontractors. He further stated that approximate 90percent of the site work is executed by variety of subcontractors whereas the main contractor focuses on management and coordination. Besides, Chan et al. (2006) also mentioned that labor sub-contracting also arise severe problems in the co-ordination of work and attainment of quality standards. Since there are various types of subcontractors involved in the same construction project, the main contractor is difficult to inspect, supervise and control the works that have been done by the subcontractors. Therefore, complicated role of subcontractor in construction projects can contribute to poor workmanship.

c. Lack of Experience and Competency of Labors

Kasun et al. (2006) mentioned that "productivity cannot be achieved by speed and hard work only without adopting better work practices". Besides, industry stakeholders agreed that insufficiency of skilled manpower is the most important matter that their concern is all about. According to Chan et al. (2006), some construction companies in Turkey usually prefer to employ short term unskilled labors and consequently cause the fault in the process of attaining the stability of quality associated issues. Hence, lack of experience and competency of labors must be taken into account as a factor contributes to poor workmanship.

d. Language Barrier to Communication and Lack of Communication

e. Different language between the foreign labors and local supervisors causes the communication failure on the job site. A survey conducted by Kasun et al. (2006), showed that exceeding 40 percent of the respondents from the construction site protested about the insufficiency of communication. Indeed, language barrier indirectly causes the lack of communication between the supervisors and labors. This consequently causes the misunderstanding by the labors in their work scope and then lead to poor workmanship.

f. Unsuitable Construction Equipment's

Faisal et al. (2006) stated that suitability of construction equipments can influence the workmanship quality in construction. Insufficiency of the latest information about the available equipments can influence the project quality. The poor quality of mass housing projects in Turkey mostly because low cost construction techniques which are totally disregarded. Therefore, unsuitable construction equipments can cause low quality of workmanship in construction.

f. Poor Weather Condition

Dai et al. (2009) stated that the extreme climatic condition is one of the factors that affecting construction labor productivity and workmanship. From the research of Faisal et al. (2006), found that the climate of Saudi is hot and severe during summer that causes some of the construction works very hard to carry out, such as concreting. As a result, the quality of workmanship is affected.

g. Limited Time

Insufficient time caused the construction projects executed to be rushed. According to Andrew (1999), a number of "show houses" on the site were required for many construction projects. Many concurrent works were carried out and inadequate checking had been carried out by the senior managers sequentially caused by the speed of working. As a result, the deficiency of workmanship had been happening. In short, limited time causes a low quality of workmanship in construction.

h. Limited Cost

Insufficient cost or budget would cause inadequate allocation of cost in construction project. Labor cost is included in construction cost. Proverbs et al. (1999) stated that Labor element is considered as the most difficult component to price within the reasonable level of accuracy. Obviously, labor cost estimation is considered as uncertainty. In addition, contractors who are not preparing the sufficient budget for the

project will cause the labor cost cut down correspondingly. As a result, the labors supplied are not sufficient to complete a project and construction problems may appear.

i. Administrative restriction

Many construction projects are bonded with the administrative system. Some of the standards and guidelines are enforced in many companies for the purpose to ensure that the products of contract projects are within the standards of quality. Takim et al. (2003) also agree that the approved guidelines and standards is one of the objectives of quality assessment system in construction model which is recently applied by the construction industry development board of Malaysia to evaluate the quality measurement in construction. He further pointed out that the evaluation of workmanship can be done derived from the approved specifications

2.1.11. Measures to minimize workmanship problems

There are six possible measures that are suggested by different researchers in order to minimize workmanship related problem

A. Strict Supervision

The quality by strict supervision at a construction site is one of the criteria of recent practices in the construction sector. Daily supervision should be carried out by the contractors or subcontractors so that workmanship problems can be identified and the remedial work can be executed immediately. Besides, when executing the supervision, contractor supervisory staff must possess the knowledge, expertise, and capabilities to administer the construction work and superintend the craft worker efficiently (Maloney, 2002).

B. Training and Capacity building

According to Chan et al. (2006), many researchers agreed that appropriate training and enlarging experience is necessary in transferring the quality project. Labor productivity is becoming significant in construction because of its impact in the process of completing projects. They also stated that the construction quality can be enhanced by increasing the capability of site laborers.

C. Proper Communication between Parties Involved

Proper communication is a necessary in construction. From the research done by Augusto et al. (2009), 80 percent of the Hispanic workers in the U.S. construction sector mentioned that the communication with the supervisors is vital and need to be improved. Therefore, American supervisors suggested that the training in communication skills is essential to eliminate the language gap between themselves and the foreign labors. Augusto et al. (2009) no communications means any management apart from the communication between supervisors and construction and subcontractors. Through a continual communication between parties involved, working relationship between the construction parties can be closer. From a research of Proverbs (1999), it is found that better quality performance of Japanese construction projects can be attained attributed to steady and durable working relationship between the relationship between the construction team and consequently improve the workmanship quality in construction.

D. Proper Construction Management

Proper construction management would enhance the workmanship; quality in construction. Dai et al. (2009) stated that the capability of construction managers to manage, arrange and lead the work would affect the construction labor productivity. If a construction manager fails to lead and control the construction project, the quality problems may arise. Therefore, a proper construction management is very crucial for every construction project.

E. Proper Manpower Management

Robby et al. (2001) have proposed that manpower management in term of amount and quality of skill workers is an important determinant of contractor performance and extremely prioritized by employers. A construction project which has a well arrangement of manpower will produce a high quality of the project. Besides, he also mentioned that manpower is the sole productive resource; hence construction productivity is essentially relying on human endeavor and performance. Therefore, the management of manpower in every construction project should be arranged skillfully.

F. Proper Design

WaiKiong and Sui Pheng (2005) found that good design can get rid of workmanship defects and help to avoid the defects. Inadequately worded specifications and uncertain designs always cause the low construction. A better design may correct some defects which due to workmanship in masonry work. In addition, they stated that well-prepared designs and drawings affect the future works to become easier and the defects can be identified and rectified more effectively.

2.1.12. Construction Stakeholders and their Objectives

Projects in construction, as well as in any other industries, are subject to a variety of external and internal influences. These influences result, among others, from the interests of individuals or

groups which claim to have a stake on the project and its outcome (Olander and Landin 2005).

The groups and individuals having an interest in the project are referred to as stakeholders. According to Freeman "...a stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization's

The specific structure and group of stakeholders varies from company to company as well as from industry to industry. The interests of stakeholders are diversified and sometimes also discrepant. Hence, they often lead to lively arguments and conflicts about the implementation of a project (Olander and Landin 2005). Concluding, stakeholders significantly influence the success of a company or project. Hence, project failures, such as:

Poor scope and work definition, inadequate quality and quantity of resources assigned to the project, unforeseen regulatory changes, and negative community reaction could in principle be tackled by project planners and managers by actively integrating stakeholders and their interests into the planning process of a project (Jergeas et al. 2002).

Groups of potential stakeholders can be further distinguished into internal stakeholders and external stakeholders. Internal stakeholders are in legal contract with the client and are further separated into internal demand side and supply side actors. In the construction industry, internal stakeholders comprise the construction company or project owners, usually with a financial stake in the project, as well as organizations, teams and individuals who have a contractual relationship with the project owner, for instance, construction material suppliers and employees. In contrast, external construction stakeholders are broken down into private and public actors. They might inert a positive or negative influence through political lobbying, regulation or direct action and include governmental organizations on the local,

national and international level, different interest groups like non-governmental organizations (NGOs), environmentalists, trade unions or residents in the vicinity, Ward and Chapman (2008).

Each of these groups of construction stakeholders follows particular objectives. Hence, the success of a construction project may have to be evaluated by different types of performance measures. These measures depend on the type of the project which is undertaken and on the particular objective of each of the stakeholders involved.

2.1.13. Construction Project Resource Utilization

In construction projects, a huge amount of equipment is very cost-intensive, for instance, cranes, scaffolding, and on-site facilities. Hence, underutilization of equipment and facilities leads to the occurrence of unnecessary equipment holding costs. In particular, machine downtimes or underutilization is to be avoided, instead it should be aimed at leveled resource utilization. Regarding the RCPSP, this problem is considered as resource labeling problem (RLP) for instance, Neumann and Zimmermann (2000). The RLP serves to achieve an even capacity utilization of, for instance, construction equipment by assigning start and finishing times to activities such that the available resources are evenly distributed among the activities and a leveled resource profile is generated. Thereby, the close relationship to the TCPSP becomes obvious. While costs are the essential part in the TCPSP, the focus of resource oriented objectives is not to allocate resources to activities minimizing costs or maximizing benefits but to allocate resources in a way such that deviations in resource consumption per period are minimized.

2.2. Empirical Review of the study

UN-HABITAT. (2010). this publication documents the IHDP and outlines how the project has been designed and implemented. The purpose of this publication is to document the genesis of the program and the country's experience since its inception, focusing predominantly on events within Addis Ababa as this is where most efforts have been made. The publication is based on desktop studies, literature reviews and a field survey undertaken by UN -HABITAT under invitation from the Ministry of Works and Urban Development of Ethiopia.

UN-HABITAT. (2010). Factors and decisions that contributed to the success of the program have been examined, and some of its current shortfalls have been evaluated, all with an aim to increase global understanding of the use of such an integrated program to solve an existing low-cost housing shortage and

reduce poverty through housing production. It documents a case study of the Ethiopian experience so that other countries may be able to adapt and apply this logic to their own public housing systems.

According to Mariana C.(2021). The issue of providing housing to low income citizens has been a real challenge in Addis Ababa during the recent years and will continue to be given that its population is growing extremely fast. it examines the tensions between the universal aspirations and the local realities in the case of some of Ethiopia's most ambitious mass pro-poor housing schemes, such as the Addis Ababa Grand housing program (AAGHP), which was launched in 2004 and was integrated in the integrated housing Development Program (IHDP)in 2006. The study argues that the quotation practices of communities and their socio-economic and cultural characteristics are related to the spatial attributes of co-housing practices of daily life of the poor citizens of Addis Ababa, it is pivotal to invite them to take part in the decision-making process regarding their resettlement. Departing from the fact that a large percentage of the housing supply in Addis Ababa consists of informal unplanned housing, the study also compares the coming practices in kebele housing blocks built in the framework of the IHDP for the resettlement of the kebele dwellers. The key argument of the study is that urban planning and architecture solutions in Addis Ababa should be based on the principle of the so-called negotiated planning approach, which implies a close analysis of the interconnections between planning infrastructure and land.

2.3. Conceptual Framework of the study

A conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. Strong conceptual frameworks capture something real and do this in a way that is easy to remember and apply. A researcher tried to develop a conceptual frame work itis related to the research study area and the concept of housing construction projects.

Internal Proj. factors

Managment competency Planning Procurement Monitoring and evaluation Lessons learned Infrastructure Key Players AAHDPO LHDPO Contractors Consaltants SMEs

project completition Cost Time Quality External factors stakeholders involvement regulations Material unavailability Infrastructure Poor coordination among stakeholders

Source own survey of (2021)

CHAPTER THREE

3. RESEARCH METHODOLOGY

Research is the systematic process of collecting and analyzing information to increase our understanding of the phenomenon under study. In order to achieve the main objective of the study, using an appropriate methodology has to be given a priority attention. Therefore, this chapter includes research methodology, sources of data, sample size and sampling techniques, instruments and procedures of data collection, methods of data analysis.

3.1. The Research Methodology

The main objective of this study was to assess the practices and challenges of condominium housing construction projects and to forward alternative solutions as well. To this end, the study used a blend of both quantitative and qualitative approaches to research. "Quantitative research is used to answer questions about relationships among measured variables with the purpose of explaining, predicting, and controlling phenomena."(Leedy & Ormrod, 2001). The qualitative approach is used to evaluate the policy implications and the processes applied towards condominium housing construction in Addis Ababa. The researcher used descriptive type of design and answered the objective of the research. Descriptive research design is used to describe an event or phenomena as it exists at present and is appropriate when the study is concerned in specific predictions, narrative of facts and characteristics concerning individuals or situations (Kothari, 2003).

More specifically, the study tried to describe the practices, challenges and prospects of project managers and other stakeholders in planning and implementation of house construction development project of Lideta Sub-city administration.

3.2. Sources of Data

Primary as well as secondary sources of data were used in the study. Primary sources of data were firsthand information that obtained from the respondents. Secondary sources were second hand documents such as description of an event on the basis of what was heard from others, or a summary of more extensive primary information.

The primary sources of data were the sub-city house construction development office project managers and staff members, AAHDPO project managers, directorate directors and other staff members, finance managers, site engineers and supervisors, contractors, construction consultants, members of SMEs. The reason to use these subjects as a source of data was based on the expectation that they may have better exposure and information about the practices and challenges of condo construction projects understudy. Besides, to strengthen the information obtained through questionnaires and interview from primary sources, secondary sources such as documents substantiated by observation checklists were consulted.

3.3. Sample size and Sampling Techniques

Sample size may depend upon the nature of the populations of interest or the data to be gathered and analyzed, subject availability and list factors are legitimate considerations in determining appropriate sample size.

Regarding the population, the AAHDPO and LHDPO/project managers, directorate directors, engineers and officers, construction site practitioners, the finance department members, contractors with their staff, consultants and SMEs members were involved in the study. This is because it was believed that those members can provide relevant information expecting them having better understanding of the issue understudy.

Institution	Total	sample
	population	
AAHDPO	289	87
LHDPO	47	15
Contractors with staff	236	71
SMEs	64	19
Consultants	3	2
Total	639	194

Table 1 population and sample size

Source: survey data of (2021)

The participants were selected using judgmental sampling technique. Judgmental sampling is a form of convenient sampling in which the population elements are selected based on the judgment of the researcher. The researcher, by exercising judgment of expertise, selected the elements to be included in

the sample since the researcher believed that they were representatives of the population of interest or otherwise appropriate.

According to Saunders et al (2009), this method is appropriate for small inquiries and researches by individuals. It is appropriate if the research is aimed at explaining a phenomenon rather than making a generalization.

The researcher kept in mind ethical issues in the process of involving the participants and did the best to get their consent.

For the interview a total of ten representatives were participated.

R.no	participants	Representation	Number	Total
1	Finance officers	AAHDO	1	2
		LHDO	1	
2	Site engineers	AAHDO	1	2
		LHDO	1	
3	Procurement managers	Bole arabsa site	1	2
		Koyefeche site	1	
4	Contractors	Bole Arabsa site	1	2
		Koyefeche site	1	
5	Site supervisors	Bole arabsa site	1	2
		Koyefeche site	1	
		Gr	and total	10

Table 2 participants for the interview

Source: survey data of (2021)

Ethical considerations were applicable in the process of data collection. Subjects of the study were aware of the whole process; there consent was checked through a formal agreement before data collection. The other issue was anonymity and confidentiality which was about keeping the participants/subjects name away in order to keep them from all physical and mental consequences. Who is conducting the research, what outcomes are expected and who will benefit from the result were disclosed for respondents before data collection.

3.4. Instruments and Procedures of Data Collection

There were different kinds of tools in which the data to be collected. The major ones were questionnaire, interview, observation, pilot test and document analysis.

3.4.1. Instruments of Data Collection

3.4.1.1 Questionnaire

The questionnaires were used commonly to gather data for descriptive survey. Both open ended and close ended questions have been used in the study. The researcher used the questionnaire to address the large number of respondents in an efficient way. The open ended questions were designed to get detailed information on the practices and challenges of housing construction development project offices of AAHDPO as well as of LHDPO, contractors with their staff, consultants, and SMEs. The close ended questions were comprised of multiple choice items, based on Likert scale and the questions were designed to get the desired information about the issue.

3.4.1.2. Interview

Regarding the participants in the interview, among the selected sites the finance and procurement department officers, construction site engineers, supervisors and contractors were participated. The interview questions were used and the questions were focused on the practice and challenges of stakeholders in planning, practices of stakeholders, and challenges of construction projects, monitoring and evaluation of house construction project activities. The purpose of using interview was to collect more information about the interviewee's point of view, to cross check the questionnaire responses.

Concerning the interview questions a semi-structured interview questions were used to gather data from participant respondents. The interview has a set of compiled questions with brief orientation to the participants about the purpose of the interview conducted. Participants were selected using stratified and convenient sampling techniques. In so doing, two finance managers each from the AAHDO and LHDO, two site engineers from Bole-Arabsa and Koye-feche sites, two procurement officers from each site, two supervisors from each site and in a total of 10 participants were involved in the interview.

3.4.1.3 Field Observation

Field observation was conducted as a data gathering tool in the two selected sites. Using this technique the infra-structure of the sites, the available and adequate construction materials and equipments and other inputs necessary for the house construction, the overall situation of sites surrounding were well observed

to get adequate information that elicit to what extent the construction processes were being undertaken in both sites to make the construction process a better place for participants under study.

3.4.1.4. Pilot test

For setting out the difficult, vague and ambiguous items and concepts, piloting has a paramount importance. So the instruments were tested to check whether they can generate the desired information [validity] and to judge their internal consistency [reliability].Therefore, before the administration of the actual questionnaire to the actual subjects in the study, one sub city housing construction project officer, one project manager, one site engineer, one finance officer and six site SMEs members totally, ten participants were involved in the pilot test. In the meantime, participants were invited to forward any comments, suggestions, regarding the clarity of language, terms, spelling and grammar, depth and breadth of the questionnaire, to check the relevance and clarity of each item of the questionnaire. Based on the feedback obtained, the necessary amendments were made for the actual usage.

3.4.2. Procedures of Data Collection

Both quantitative and qualitative data were collected from sample sites using the selected data gathering tools/ the questionnaire, interview, observation and documents/.First, the researcher developed those tools and checklists for observation and documents based on the existing literature. After refinements made the pilot test was conducted. This helped improve the quality of research that enabled to collect multiple set of data. The researcher settled and distributed the questionnaires, conduct interview and observation, consult documents using checklist with the collaboration of participants. Finally, the data obtained through interview, questioner, observation, and from the documents analyzed and interpreted using statistical package /SPSS/.

3.5. Methods of Data Analysis

Data analysis refers to sniffing organizing summarizing and synthesizing the data so as to arrive at the results and conclusions of the research. The intended methods of data analysis in the study were interchangeably be both qualitative and quantitative methods of data analysis and presentation that enabled the researcher to forward viable summary, conclusion and recommendations about the issue under discussion. The quantitative data was analyzed through the use of SPSS excel statistical techniques. The data obtained through questionnaire and interview, were tallied, categorized and systematically organized in items and tabulated. The questionnaire was analyzed quantitatively using frequency counts,

percentage, mean and waited mean. Descriptive statistics, percentile and mean, waited mean were employed to analyze the quantitative data. The qualitative data was organized in to meaningful information and crosschecking findings from multiple points of view. The document analysis was used to strengthen the information obtained through questionnaire, interview and observation.

3.6. Validity and Reliability

Validity and reliability issues are used for checking quality of instruments. These are the criterion for evaluating the research tools. According to Pasteur (2001), policy statements can offer a valuable source of information, but should not be too heavily depended upon as proof of practice. At the same time however, a lack of documented policy should not automatically be viewed as representing a fissure in policy (Pasteur, 2001). The researcher took cognizance of the fact that many policy actors may have other political and personal agendas that may influence their responses in interviews (Pasteur, 2001). As a result, careful consideration was took when including statements from interviews into this study. The information on the LHDP and AAHDPO was obtained from key people who were intimately involved with the project itself. Documentation on the National Housing Policy and Housing Allocations Policy were gathered from the National Department of Housing's website, thereby adding to the reliability of the study. Although every effort was made to ensure comprehensive coverage of the most important issues, a possible obstacle to the reliability and validity of this study could be omissions with regards to literature and statistics. Validity of the questionnaire was done through consultations with the advisor. This was established any built-in errors in the measurement of the questionnaire. The instrument for practices and challenges affecting housing construction questionnaire was pilot tested for reliability to ensure internal consistency.

3.7. Ethical Issues

Ethics are standards of behavior that guide the moral choices about our behavior and our relationship with others. All parties in research should observe ethical behavior. Research ethics was put into consideration when developing and administering data collection tools and techniques, to avoid any form of destruction or violation. This was done through obtaining consent before the research; ensuring confidentiality of data obtained and learning more about the organization's culture and project before the research and where necessary absolute sensitivity and caution was exercised.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Introduction

This chapter has two parts: the first part deals with the characteristics of the respondents and the second part presents the data analysis and interpretation. The data analysis part has also three parts. The first part is devoted to the detail analysis of the data obtained through the questionnaires. The second part deals with the detail analysis of the data obtained from the interview. The third part gives emphasis on the analysis of the field observation. The main objective of this study was to assess the practices and problems of condo house construction. To this end, both quantitative and qualitative data obtained through questionnaire, individual interviews, observation checklist were used to answer the basic research questions in order to get insights about the whole picture of the sample sites.

Among the 194 sample respondents which comprises of project managers and officers, contractors and their practitioners /site engineers, supervisors quantity surveyors etc/ consultants, and SMEs, 181(93.2%) of them filled out the questionnaire and included in this section for analysis. Data was analyzed using simple descriptive statistics such as percentages, mean and waited mean and presented using tables.

4.1. General Characteristics of the Respondents

The study discussed respondents' sex, age, and educational level, years of services in project management, finance, consulting, contractors and SMEs members

		Frequency	Percent	Valid Percent	Cumulative Percent
					rereent
	21-30	53	29.3	29.3	29.3
	31-40	83	45.9	45.9	75.1
Valid	41-50	30	16.6	16.6	91.7
	51 and above	15	8.3	8.3	100.0
	Total	181	100.0	100.0	

Table3.Age of the respondents

Source: Survey data of (2021)

Regarding the age of respondents, out of 181 participants, 83(45.8%) of them were belonging to the age group of 31-40, 53(29.3%) were from 21-30, 30(16.5%) 41-50, 15(8.3%) 51 and above. This indicates that respondents were mature enough to give relevant data for the purpose of the study. Moreover majority of the respondents were relatively energetic, matured and fit to take responsibilities. Having reasonably

matured age significantly impacts on project success because these people are ready and fit to take responsibilities as per needed.

Table 4. Sex of the respondents

		Frequency	Percent	Valid Percent
	Male	112	61.9	61.9
Valid	Female	69	38.1	38.1
	Total	181	100.0	100.0

Source: Survey data of (2021)

As shown in Table 2, out of the 181 respondents, the majority 112 (61.9%) of them were males while 69(38.1%) were females. This implies that the greater majority of the participants in the sample respondents were males. The above data indicates that females, let alone occupy managerial positions, their participation at project level was reasonably insignificant compared to their male counterparts.

		Frequency	Percent	Valid Percent	Cumulative
					Percent
	Below diploma	60	33.1	33.1	33.1
	diploma	11	6.1	6.1	39.2
Valid	BA or BSC	72	39.8	39.8	79.0
	MA MSC	38	21.0	21.0	100.0
	Total	181	100.0	100.0	

Source: Survey data of (2021)

Concerning the educational level of the sample respondents currently engaged in the project sites, 72(39.8%) were first degree holders, 60/33.1% were below diploma level and 38(21%) were second-degree holders, 11(6.1%) were diploma holders. This implies that most of the participants were qualified enough to the corresponding level.

Table 6. Years of services in construction

		Frequency	Percent	Valid Percent	Cumulative Percent
	0-5	57	31.5	31.5	31.5
	6-10	51	28.2	28.2	59.7
Valid	11-20	47	26.0	26.0	85.6
v anu	21 and above	26	14.4	14.4	100.0
	Total	181	100.0	100.0	

Source: Survey data of (2021)

As shown in the above table, most respondents 57(31.5%), had 0-5 years of experience in construction sector, the rest 51(28.2%), 47(26%), and 26(14.4%) of them had 6-10, 11-20, 21 and above years of experiences in the sector respectively. This indicates that most respondents have 5 and above years of experience in their profession which enables them to easily manage the day to day activities of their own duties and responsibilities.

In general, the data illustrates that most of the stakeholders have reasonably adequate experiences to carry out their responsibilities and to provide sufficient information about what is going on in their respective duties.

In sum, having relevant and adequate work experience definitely attracts and contributes a lot to the delivery of the project work. Besides, an experienced project, finance and or construction manager and the respective staff can influence his/her fellow counterparts/work colleagues to strive to bring and align their efforts in order to bring about the successes of construction projects.

4.2. Analysis of data on the practices and problems of condo housing projects

4.2.1. Analysis of data on the practice of project plan preparation

The questions in table 7 were prepared to gather data about the **different types of plans preparation practices by the project managers and other stake holders.** Among the 194 sample respondents which comprises of project managers and officers, contractors and their practitioners /site engineers, foreman, quantity surveyors etc/ consultants, and SMEs, 181(93.2%) of them filled out the questionnaire and included in this section for analysis. Data was analyzed using simple descriptive statistics such as percentages, mean and waited mean and presented under this section.

Table 7, Responses regarding to plan preparation

o VH H M M N	Ν	Items		Rati	ngs								Mea
InterpretationInterp	0		VH		Н		М		L		VI	_	n
appropriate strategic planning regarding to condo house constructionImage: Second constructi			Ν	%	Ν	%	Ν	%	Ν	%	N	%	
2Interviewent to which the project managers prepare the project scope management plan3016.63117.17541.4158.3316.3.093The extent to which the project managers prepare the schedule management plan158.36133.74524.96033.13.174The extent to which the project management plan168.84625.47541.44424.33.195The extent to which the proper planning of risk management plan147.71058.64625.418.32.666The trend of the financial management plan preparation.6033.14625.44524.93016.63.757To what extent are the alignments of the house construction project plans with the goals by the IHDP of Ethiopia137.23217.776426033.12.998To what extent is the project management plan for each milestones in the project3016.6462510583.349To what extent is the project management plan for each milestones in the project3016.6462510583.349To what extent is the project management plan for each milestones in the project3016.646251058<	1	appropriate strategic planning regarding	15				45	8.3	75	41.4			3.15
prepare the project scope management plan1.1 structure prepare the project scope management plan158.36133.74524.96033.13.173The extent to which the project management plan168.84625.47541.44424.33.194The extent to which the project management produce the quality management plan168.84625.47541.44424.33.195The extent to which the proper planning of risk management plan147.71058.64625.4158.33.756The trend of the financial management plan preparation.6033.14625.44524.93016.63.757To what extent are the alignments of the poolas by the IHDP of Ethiopia137.23217.776426033.13.348To what extent is the project management polect senser use on structure for each projects76429049.7158.33.349To what extent is the project management plan for each milestones in the project works3016.6462510583.599To what extent is the project management plan for each milestones in the project works3016.646251058- <t< td=""><td></td><td>to condo house construction</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		to condo house construction											
3The extent to which the project managers prepare the schedule management plan158.36133.74524.96033.13.174The extent to which the project management produce the quality management plan168.84625.47541.44424.33.195The extent to which the proper planning of risk management plan147.710 658.64625.418.32.666The extent to which the proper planning of risk management plan147.710 658.64625.418.32.667To what extent are the alignments of the house construction project plans with the goals by the IHDP of Ethiopia137.23217.776426033.12.998To what extent is the project management projects76429049.7158.33.349To what extent is the project management group prepare a monitory and evaluation plan for each milestones in the project works3016.64625.410583.59	2	prepare the project scope management	30	16.6	31	17.1	75	41.4	15	8.3			3.09
prepare the schedule management planImage of the schedule management projectImage of the schedule management planImage of the schedule management projectImage of the schedule management planImage of the schedule management project plans with the goals by the IHDP of EthiopiaImage of the schedule management project management project management management project management management project management projectImage of the schedule management project management management project management manag		^	1.5		1					22.1			0.15
management produce the quality management planmanagement quality qualitymanagement qualitymanagement qual	3		15	8.3	61	33.7	45	24.9	60	33.1	-	-	3.17
of risk management planoooo6o5o6The trend of the financial management plan preparation.6033.14625.44524.93016.63.757To what extent are the alignments of the house construction project plans with the goals by the IHDP of Ethiopia137.23217.776426033.12.998To what extent is the project management body prepares the work breakdown structure for each projects76429049.7158.33.349To what extent is the project management group prepare a monitory and evaluation plan for each milestones in the project works3016.6462510583.59	4	management produce the quality	16	8.8	46	25.4	75	41.4	44	24.3	-	-	3.19
plan preparation.iiiiiiii7To what extent are the alignments of the house construction project plans with the goals by the IHDP of Ethiopia137.23217.776426033.12.998To what extent is the project management body prepares the work breakdown structure for each projects76429049.7158.33.349To what extent is the project management group prepare a monitory and evaluation plan for each milestones in the project works3016.6462510 5583.59	5		-	-	14	7.7		58.6	46	25.4		8.3	2.66
house construction project plans with the goals by the IHDP of Ethiopia76429049.7158.33.348To what extent is the project management body prepares the work breakdown structure for each projects76429049.7158.33.349To what extent is the project management group prepare a monitory and evaluation plan for each milestones in the project works3016.6462510 5583.59	6	÷	60	33.1	46	25.4	45	24.9	30	16.6	-	-	3.75
8To what extent is the project management body prepares the work breakdown structure for each projects76429049.7158.33.349To what extent is the project management group prepare a monitory and evaluation plan for each milestones in the project works3016.6462510 5583.59	7	house construction project plans with the	13	7.2	32	17.7	76	42	60	33.1	-	-	2.99
group prepare a monitory and evaluation plan for each milestones in the project works	8	To what extent is the project management body prepares the work breakdown	-	-	76	42	90	49.7	15	8.3	-	-	3.34
	9	group prepare a monitory and evaluation plan for each milestones in the project	30	16.6	46	25		58	-	-	-	-	3.59
				Wei	l ighted	mean v	alue						3.21

Source: Survey data of (2021)

Respondents were asked to provide their opinion on the extent to which the availability of appropriate strategic planning regarding to condo housing construction, Accordingly, the data in table 7, item 1 reveals that, 75(41.4%) of the respondents said high, 45(24.9%) of the respondents replied medium, 31(17.1%) of the respondents replied very low and 15(8.3%) of respondents said very high and very low.

This indicates that majority of the respondents indorsed for the availability of appropriate strategic planning for condo housing construction.

Regarding item two as depicted in table 7, respondents were asked to provide their view about the extent to which the project managers prepare the project scope management plan 75 (41. %) of them confirmed that there was a medium practice, 31 (17.1%) of the respondents replied high, 30 (16.6%) remarked very high and other 30 (16.6%), 15(8.3%) indicated very low and low respectively. This implies that most of the project managers prepare the project scope management plan but lacks orientation regarding the plan. Because, great number of the respondents said medium in this regard.

Participants during the interview also disclosed that there were times when plan orientation sessions held on at the second month of the budget year. But they endorsed that the allotted time for the orientation was very brief therefore they were unable to understand the real essence of the plan,

Respondents were asked to forward their view about the project managers produce schedule management plan, 61 (33.7%) of them agreed on at high, another 60(33.1%) agreed on low, 45(24.9%) agreed medium, 15(8.3%) very high. The above data implies that relatively high number of the respondents argue that project managers prepare the schedule management plan.

When respondents were asked to forward their view regarding the extent to which the project managers produce the quality management plan, majority 75(41.4%) of the respondents replied medium, 46(25.4%) high, 44(24.3%) very low and 16(8.8%) responded replied very high. This shows that the extent to which the project managers produce the quality management plan were at medium level. Here it is possible to conclude that there is a lack of attention given and a shortage of close supervision needed from the responsible offices at all level.

Respondents were asked to give their view the availability and proper planning of risk management planning and the greater majority 106(58.6%), of the respondents endorsed on that the extent to which the availability of proper planning of risk management plan was at a medium level. Whereas 46(25.4%), 15(8.3%), 14(7.7%) of the respondents said low, very low and high respectively. This indicates that project risk management planning practice was not properly managed. Since project risks are not properly managed with appropriate and sustainable plan and unless the project risk managers plan and work in collaboration with the rest of stakeholders the condo construction project may not be successful.

Respondents were asked to forward their opinion about the trend of the financial management plan preparation, regarding this when we look at table 7 item 6, 60(33-1%), 46(25.2%), 45(24.9%) and 30(16.6%) 3(3.9%) said very high, high, medium, low and very low respectively. This implies that

relatively greater majority of the respondents were agreed on that the trend of project management financial plan preparation was at a very high level. Then it could be scaled up as a good practice for other project offices.

Regarding the alignments of the condo construction project plans with the goal of the 76(42%), of the respondents argue that the alignment of the project plans with the goals of the IHDP was at a medium level. On the other hand, 60(33.1%), 32(17.7%) & 13(7.2%), of the respondents were agreed on, low, high and very high respectively, whilst no one said very low. The above figure clearly shows that the majority of respondents were highly agreed on that, the alignments of the house construction project plans with the goals by the IHDP of Ethiopia was at medium level. However it needs attention since 60(%) of the respondents replied low and further efforts should be in place.

When respondents were asked to give their opinion on the extent to which the project managers prepare the work break down structure, 90(49.7%), 76(42%), 15(8.3%) of the respondents replied on medium, high and low respectively. Based on this result, one can conclude that there was a need for a proper supervision regarding the planning and preparation of the work breakdown structure since it was at medium level.

Respondents were asked to give their opinion on the preparation of monitory and evaluation plan, 105(58%) of the respondents replied medium, 46(25%) of the respondents replied high, 30(16.6%) of the respondents replied very high. As per the above result, one can concluded that most of the respondents agreed on the extent of preparing the monitory and evaluation plan for each milestone in the project works by the project management office were at a medium level. In general, the waited mean value (3.21%) depicted in table 7 shows that, the practices of the strategic as well as other subsidiary plans preparation by the project offices were at a medium level. From this result, it is possible to conclude that there was lack of adequate and proper follow up and supervision that alerts the responsible body to lead to adequate planning for the project success.

4.2.2. The practices of management body performing project activities

The questions in table 8 were prepared to gather data about the practices of the management body performing project activities. Among the 194 sample respondents which comprises of project managers and officers, contractors and their practitioners /site engineers, foreman, quantity surveyors etc/ consultants, and SMEs, 181(93.2%) of them filled out the questionnaire and included in this section for analysis. Data was analyzed using simple descriptive statistics such as percentages, mean and waited mean and presented under this section.

Table 8 Responses regarding to the practices of the management body on project activities

Ν	Items		Rat	ings								Me
0		SA		MA		А		ΜI)	SD		an
		Ν	%	N	%	Ν	%	Ν	%	N	%	
1	The responsible body of condo construction with the respective stakeholders prepares the infrastructure on time	-	-	-	-	30	16.6	46	25.4	10 5	58	1.5 9
2	There is a relevant coordination between the stakeholders to be involved in the project work	12	6.6	91	50.3	33	18.2	30	16.6	15	8. 3	3.3
3	The project managers properly identify the context in which the project is being executed	30	16. 6	32	17.7	30	16.6	61	33.7	28	15 .5	2.8 6
4	The project managers record the lessons learned from each milestones for the next project work	15	8.3	16	8.8	30	16.6	90	49.7	30	16 .6	2.4 3
5	The extent to which the efficiency and effectiveness of resource management and coordination	30	16. 6	29	16	47	26	63	34.8	12	6. 6	3.0 1
Weighted mean value											2.6 4	

Source: Survey data of (2021)

The respondents were asked to express their level of agreement on a likert scale whether the responsible body of condo construction with the respective stakeholders prepare the infra structure on time. The data on table 8, revealed that, 105(58%) of the respondents replied strongly disagree, 46(25.4%) of the total respondents replied moderately disagree 30(16.6%) of the respondents said agree and no one replied moderately agree on this issue. This indicates that majority of the respondents endorsed that the responsible body of condo construction do not closely work with project stakeholders to prepare the infrastructure on time. From this one can conclude that without timely preparation of the infrastructure it is impossible to complete any construction work.

When respondents were asked to show their level of agreement on the involvement of stakeholders in a coordinated manner, 91 (50.3 %) of the respondents replied moderately agree, 33 (18.2%) replied agree, 30 (16.6%) replied moderately disagree, 15 (8.3%) replied strongly disagree, 15(8.3%) replied strongly

disagree and 12(6.6%) replied strongly agree. This implies that there was lack of coordination between the stakeholders to be involved in the project work.

Respondents were asked to forward their level of agreement whether the project managers properly identifying the context in which the project was being executed or not, 61 (33.7%) of the respondents moderately disagreed, 32(17.7%) them moderately agreed, 30(16.6%) of respondents and other similar number of respondents replied strongly agree and agree respectively, 28(15.5%) replied strongly disagree. This implies that relatively high number of the respondents argued that the project managers were unable to properly identify the context in which the project was being executed.

Respondents were asked to indicate their level of agreement on a likert scale whether the project managers record the lessons learned from each milestones for the next project work, 90(49.7%) of the respondents indicated moderately disagree, 30(16.6%) indicated strongly disagree, other 30(16.6%) indicated agree, 16(8.8%) indicated moderately agree and 15(8.3%) of respondents indicated strongly agree. This shows that there was a problem with project managers to record the lessons learned from each milestones for the next project work. Here it is possible to conclude that special attention should be given and a close supervision is needed from the responsible offices. Regarding to the efficiency and effectiveness of resource management and coordination respondents expressed their level of agreement as, 63(34.8%), moderately disagree 47(26%) of the respondents agree, 30(16.6%) strongly agree, 29(16%) moderately agree, and 12(6.6%) of the respondents strongly disagree. This indicates that the greater majority of respondents argued on the extent to which the efficiency and effectiveness of resource management and coordination.

4.2.3. Problems of Condo Construction Projects

The questions in table 9 were prepared to gather data about the problems of condo construction projects. Among the 194 sample respondents which comprises of project managers and officers, contractors and their practitioners /site engineers, foreman, quantity surveyors etc/ consultants, and SMEs, 181(93.2%) of them filled out the questionnaire and included in this section for analysis. Data was analyzed using simple descriptive statistics such as percentages, mean and waited mean and presented under this section.

No	Items		Ra	tings								Mea
		VH	I	Н		М		L		VL		n
		N	%	Ν	%	Ν	%	N	%	N	%	
1	The extent to which the project managers and other	-	-	30	16.6	76	42	46	25	29	16	2.59
	responsible bodies work in collaboration with to								.4			

Table 9 Responses regarding to the problems of condo construction projects.

	solve the problems related to land and infrastructure preparation											
2	The extent to which the adequate and timely withal to solve problems regarding to the payments to contractors and consultants.	-	-	45	24.9	61	33. 7	60	33 .1	15	8.3	2.75
3	To what extent is the timely and adequacy of responses given to construction inputs related questions	-	-	16	8.8	105	58	42	23 .2	18	9.9	2.66
4	The degree to which the availability of full and organized information.	-	-	79	43.6	29	16	73	40 .3	-	-	3.03
5	The extent to which the accountability of individuals who committed dacoit	6 1	33 .7	32	17.7	60	33. 1	28	15 .5	-	-	2.7
		W	eighte	ed mear	1							2.74

Source: Survey data of (2021)

Respondents were asked to provide their opinion the extent to which project managers and other responsible bodies work in collaboration to solve the challenges related to land and infrastructure preparation. Accordingly, the finding revealed that about, 76(42%) of the respondents said medium, 46(25.4%) low, 30(16.6%) said high, 29(16%) of respondents said very low. This indicates that majority of the respondents indicated the extent to which the project managers and other responsible bodies work in collaboration with to solve the problems related to the land preparation and other infrastructures were at a medium level.

Respondents were asked to provide their opinion on the extent to which the adequate and timely withal to solve problems regarding to the payments to contractors and consultants, 76 (42. %) replied medium, 46 (25%) replied low, 30 (16.6%) replied high and other 29 (16%) replied very low, and no one replied very high. This implies that the extent to which the adequacy and timely withal to solve problems regarding to the payments to contractors and consultants was at medium level which become a bottleneck for projects to be completed on the schedule and leads to huge amount of extra cost, delay and degraded quality project work.

Regarding the timely and adequacy of responses given to construction inputs related questions, 61 (33.7%) of the respondents said medium, 60(33.1%) low, 45(24.9%) high, 15(8.3%) very low. The data table 7 revealed a relatively high number of the respondents argued that the timely and adequacy of responses given to construction inputs related questions were at medium level. But it needs special attention since nearly equal number 60(33.1%) of respondents replied low in this regard.

Considering the availability of full and organized information, when respondents were asked to give their opinion, 79(43.6%) of the respondents replied high, 73(40.3%) of the respondents replied low, 29(25.4%) of the respondents replied medium; neither of the respondents responded very high nor very low. This shows that the availability of full and organized information in project offices were high. But there was a discrepancy as it was triangulated with other data gathering tools of. During the field observation, it was very difficult to get an organized and adequate information for this survey purpose for instance it was after many ups and downs that the researcher found the information about human and other resources and the number of condo sites under actual construction, where the sites were located as well.

Respondents were questioned to put forward their view about the level of accountability specially on those who committed dacoit, 61(33.7%), 60(33.1%), 32(17.7%), 28(15.5%) of the respondents replied very high, medium, high and low respectively and no one replied very low. This indicates that the extent to which the accountability of individuals who committed dacoit was at a higher level though it needs special attention since relatively a large number 60(33.1%) of respondents replied low.

4.2.4. Monitoring and Evaluation Practices and Related problems

The questions in table 10 were prepared to gather data about the monitoring and evaluation practices and related problems. Among the 194 sample respondents which comprises of project managers and officers, contractors and their practitioners /site engineers, quantity surveyors etc/ consultants, and SMEs, 181(93.2%) of them filled out the questionnaire and included in this section for analysis. Data was analyzed using simple descriptive statistics such as percentages, mean and waited mean and presented under this section.

No	Items		R	ating	gs							Mean
		VH		Η	Н		Μ			VL	4	
		N	%	N	%	N	%	N	%	N	%	
1	The extent to which the monitoring and control undertaken by the project managers defend the project against project creep.	-	-	3 5	1 9. 3	1 2 6	6 9. 6	2 0	1 1	-	-	3.08
2	The extent to which the project monitoring and control team recommend preventive and corrective actions to bring the project in line with the planned expectations in the project plan.	-	-	45	2 4. 9	9 1	5 0. 3	2 7	1 4. 9	1 8	9. 9	2.9
3	The project managers properly and periodically	-	-	1	6.	9	5	6	3	1	8.	2.57

Table 10 Responses regarding to monitoring and evaluation practices and related problems

	keep track of the projects progress.			2	6	4	1. 9	0	3. 1	5	3	
4	The degree of proper follow up and timely solutions for the identified problems related to the client contractor or consultants	15	8. 3	4 0	2 2. 1	8 1	4 4. 8	4 5	2 4. 9	-	-	3.14
5	The adequacy of corrective measures taken after supervision and inspection of the project work	-	-	7 6	4 2	6 0	3 3. 1	4 5	2 4. 9	-	-	3.17
6	There is an improved tracking and reporting of on project status	-	-	8 1	4 4. 8	7 0	3 8. 7	3 0	1 6. 6	-	-	3.28
7	The extent to which the monitoring and evaluation system undertaken by the responsible body regarding the production and related processes by SMEs is	-	-	6 0	3 3. 1	9 1	5 0. 3	3 0	1 6. 6	-	-	3.17
Weighted mean 3								3.04				

Source: Survey data of (2021)

Respondents were asked regarding their perception on the extent to which the monitoring and control undertaken by the project managers to defend the project against project creep. As indicated in Table 10, more than two-third 126(69.6%) of the respondents said medium, 35(19.3%) of the respondents said high, 20(11%) of the respondents replied low and neither of them responded very high nor very low. This indicates that the extent to which the monitory and control undertaken by the responsible body to defend the project against project creep was at a medium level. Condo house construction needs a very huge amount of resource, be it financial, infrastructural, human, time and material. Being medium on monitoring and control on such a huge investment leads to too much wastage, corruption and bankruptcy and become the main problem for project creep and failure.

Respondents were asked their opinion about the level of performance on project monitoring and control team recommend preventive and corrective actions to bring the project in line with the planned expectations in the project plan, 91 (50.3. %) said medium, 45(24.9%) said high, 27 (14.9%) said low and 18 (9.9%) said very low and no one was replied very high. This implies that the degree of the project monitoring and control team recommend preventive and corrective actions to bring the project in line with the planned expectations in the project plan was at a medium level.

Respondents were asked regarding their perception on the commitment of project managers properly and periodically keep track of the projects progress, 94(51.9%) of the respondents replied medium, 60(33.1%)

of the respondents replied low, 15(8.3%) of the respondents replied very low, 12(6.6%) of the respondents replied high. This implies that more than half the total respondents believed that the practices of the project managers to properly and periodically keep track of the projects progress was still at a medium level beyond the need of the sector to be accelerated.

Respondents were asked regarding their perception on the proper follow up and timely solutions for the identified problems related to the client contractor or consultants item, 81(44.8%) of the respondents said medium, 45(24.9%) of the respondents said low, 40(22.1%) of the respondents said high and 15(8.3%) of the responded said very high. This shows that the degree of proper follow up and timely solutions for the identified problems related to the client, contractor, consultants and SMEs was at medium level. It is clear that if any project work lacks proper follow up and timely corrective actions and possible remedies for challenges identified, the project is at risk.

Regarding the perception of respondents in relation to the adequacy of corrective measures taken by the responsible body after supervision and inspection of the project work, 76(42.8%), 60(33.4%), 45(24%) of the total respondents replied low, medium, and high respectively. No one replied very high and very low. This indicates the adequacy of corrective measures taken after supervision and inspection of the project work was low.

Respondents were asked to put forward their view on improved tracking and reporting of on project status, 81(44.8%), 70(38.7%), 45(24%) of the total respondents replied medium, low and high, respectively, but no one was responded very high and very low. This implies that relatively greater majority of the respondents agreed on that the rate at which an improved tracking and reporting of on project status was at a medium level.

Regarding the extent to which the monitoring and evaluation system undertaken by the responsible body regarding the production and related processes by SMEs, 91(50.3%), 60(33.1%), 30(16.6%) of the respondents replied medium, high, and low respectively. No response was given for very high and very low. The above figure clearly revealed that the extent to which the monitoring and evaluation system undertaken by the responsible body regarding the production and input related processes by SMEs was at the medium level.

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMENDATION

This chapter presents the summary of the major findings, the conclusions drawn on and the recommendations forwarded based on the major findings.

5.1 Summary

The main purpose of this study was to examine and analyze the practices and challenges of condo house construction project works by Lideta sub-city housing development project office in Addis Ababa. Hence, to find out the current practices and problems, descriptive survey method was employed and data were collected from client project managers and their staff officers, contractors, consultants, SMEs members by using instruments such as questionnaire and semi-structured interview questions. A total of 181 respondents for the questionnaire and 10 respondents for the interview were participated in the survey and the data drown from different sources were analyzed using SPSS and statistical tools such as frequency distribution, percentages, mean and weighted mean.

Condominium housing is a new form of housing delivery in our country. It is strategic response to rapid urban population growth, high prevalence of urban poverty, and urban unemployment in major Ethiopian cities. This implies that besides the massive housing delivery, the project is instrumental in creating large number of job opportunities to reduce prevalent unemployment rate and create a saving culture in the public. From this point of view, the main purpose of this study was to assess the practices and challenges of condo house construction project activities in Lideta sub-city housing development project office in Addis Ababa city administration. To this end the following guiding basic research questions were formulated:

- 1. What are the major practices associated with condominium housing construction projects undertaken by Lideta sub-city housing construction development project office?
- 2. What are the major problems that are affecting the condominium housing construction projects undertaken by Lideta sub city housing construction development project office?
- 3. What should be done for further improvements of the condominium housing construction development projects by the sub-city housing?

Key findings

- With regard to age, majority of the respondents were found to be young, matured and energetic people to properly understand the questionnaire. Having reasonably matured age significantly impacts on project success because these people are expected to be ready and fit to take responsibilities as per needed.
- Regarding the educational qualification of the respondents currently engaged in the project sites, though the range extends from certificate to post graduate holders. Majority of the respondents were well qualified in respect to the position they hold and this reveals that majority of employees were qualified as per the standard of Ministry of Urban Development, Housing and Construction (MoUDHC).
- It was reported that most categories of respondents have relatively adequate experience in project implementation.
- In Sum, having relevant and adequate work experiences definitely attracts and contributes a lot for the delivery of the project work. Besides, an experienced project, finance and or construction manager and the respective staff can influence his/her fellow counter parts/work colleagues to strive for and align with their efforts in order to bring about the success of construction projects.

Practices regarding to Planning related issues

- Construction planning is a process of identifying activities and resources required to make the design physically realized. Hence, construction is the implementation of a design envisioned by architects and engineers. In both design and construction, numerous operational tasks need to be performed with a variety of precedence and other relationships among the different tasks. The result in this regard indicated the availability of appropriate strategic planning regarding to condo house construction but, inadequacy of orientation given regarding the different plans performance due to the allotted time given during orientation.
- Concerning other subsidiary plans, the data revealed that there was inconsistency. It also shows that the extent to which the availability of the quality management plan, the project risk management plan and the likes preparation and execution etc... Were not confirmed at this level. Here it is possible to conclude that attention must be given and a close supervision is needed from the responsible offices at all levels.
- Regarding the alignments of the plans with AAHDA/IHDP, the figure clearly shows that the majority of respondents were highly agreed on that, the alignments of the house construction project plans with

the goals by the AAHDA/IHDP of Ethiopia was at medium level. However it needs attention and further efforts should be in place.

In general, the waited mean value in relation to plan preparation shows that the practices of the strategic as well as other subsidiary plan preparation were at a medium level. From this result it is possible to conclude that there was a lack of proper follow up and supervision that alerts the responsible body to lead to adequate planning for the project success.

Practices of the management body in relation to availing the required infrastructure

The responsible body of condo construction projects with respect to stakeholders were with a great problem in relation to the preparation of infrastructure/land preparation, electric power supply etc/ on timely basis. From this one can conclude that without timely preparation of the infrastructure/Shortage of electric power, from the construction period up to completing the construction, the power problem which is a nationwide shortage of power and the consumption of power in projects were not in line. Therefore it is impossible to complete any construction work on time. Besides of this, infrastructures like; road, water, and telecom services took long period of time then infrastructure problems were one of the major causes the delay of the housing project work.

Practices related to Project lessons learned

"Lessons learned" are one of the most important and "value added" aspects of the project management lifecycle. However, it has been realized that it was often the most ignored part of finishing a project. It also holds true in LHDPO and AAHDPO, there were no documentation regarding the lessons learned. This shows that there was a problem with project managers to record the lessons learned from each milestones for the next project work. Here it is possible to conclude that special attention should be given and a close supervision is needed from the responsible offices.

Practices related to resource management

A reliable procurement system is designed for speed, efficiency and accuracy. Yet despite all precautions, problems ranging from human error to organizational shortcomings can still have a negative effect on a project purchasing and managing ability, no matter how hard it is tried to prevent them. Over all projects follow a central procurement system.

From the result, in this respect it leads to conclude that the extent to which the efficiency and effectiveness of resource management and coordination was found to be problematic. It should be noted that resources specifically financial resource management by the AAHDPO is at a great risk as the researcher founded out from the interview with AAHDPO housing development directorate directors that there is over 50 billion Birr unpaid debt which forced the AAHDPO to be incurred because of the ill resource purchasing, delivery and management system.

Practices related to payments and adequate information

The adequacy and timely withal to solve problems regarding to the payments to contractors and consultants was at medium level which become a bottleneck for projects to be completed on the schedule and leads to project delay, degraded quality, huge amount of extra cost on the project work.

The availability of full and organized information was high. But there is a discrepancy as it was triangulated with other tools of data gathering during observation and document analysis; it was a problem to retrieve organized information.

Practices related to project monitoring and evaluation

The monitory and control system undertaken by the responsible body to defend the project against project creep was at a medium level. Condo house construction needs a very huge amount of resource be it financial, infrastructural, human, time and material. Being medium on monitoring and control on such a huge investment leads to too much wastage, corruption and bankruptcy and become the main cause for project creep.

The practices of the project managers to properly and periodically keep track of the projects progress, proper follow up and solutions for the identified problems related to the client contractor or consultants were at medium level which was beyond the need of the sector to be accelerated

In a nutshell, as to the survey it was confirmed that project performance administered by LHDPO in collaboration with the AAHDPO was tackled by plenty of challenges with the respective responsible bodies. The main causes of the problems were lack of accountability and commitment by the client/AAHDO. The survey also identified challenges like problems related to project planning, problems related to resource provision and management, problems related to payment procedures, problems related to periodic monitoring and evaluation, problems related to recruitment of contractors and SMEs, problems related to contractors, consultants and enterprises/like skill gap, lack of commitment, lack of adequate planning, lack of communication with the client office.

5.2. Conclusions

The following conclusions were made based on the findings of the study and the evidences gained from the survey;

Delivering of housing unit for low and middle income groups is the main objective of the housing and development projects. From this point of view; we can conclude that the following practices were the main challenges on the success of housing projects

- ✓ One of the major challenges was identified as the plan preparation and orientations about the plans to create a shared vision with stakeholders.
- ✓ The main challenging problems of condominium projects were delays in the provision of construction materials and infrastructure like road, electric power, and even the land selection and preparation.
- ✓ Monitoring and evaluation mechanisms of a head office and project office were weak. In turn this affects the timely completion of the projects and cost and qualities of the condominium houses construction process as well.
- ✓ Bureaucratic and lengthy payment mechanisms for the contractor and a centralized resource management policy without giving rights for emergency procurement decision for branch project office were major problems which negatively influence the project work.
- \checkmark At the time of project completion there was no document preparation for lessons learned purpose.

The main strategic approaches that condominium housing development program are reducing time and cost. However, in real ground this strategy were not applied in the project office because of the above major challenges. Though the program has shown some important achievements, the demand for condominium is increasing at an alarming rate from time to time for the reason of peoples migrating from rural areas to urban areas and due to the existing bottlenecks of land management and house construction related problems. But the question is, are these achievements enough? Do condominium project undertakings meet the expected need? Are the time, cost and quality of the house construction projects addressed the program objectives? These and other basic issues need commitment for further study.

5.3. Recommendations

Condominium housing development projects should be continued as one form of housing delivery in the city especially in cities like Addis Ababa. The combination of high population and high urban growth rates coupled with a high prevalence of urban poverty have placed enormous strain on Ethiopian cites. Currently, in Addis Ababa, there is strong housing demand as a result of the mismatch between the expanding urban population and the limited housing supply.

5.3.1. The following recommendations are forwarded to AAHDPO

Realizing the fact to the great mismatch between the demand for and the supply to housing, introducing alternative housing approach is unquestionable. Moreover, the housing policy of the government should consider multi directional approaches. Such as:

- ✓ Participative planning and implementing campaign that builds up understanding and cooperation between the concerned stakeholders is very important.
- ✓ Applying alternative low cost durable local material and technology and encouraging different actors involved in the construction of condo housing is indispensable to address the targets of IHDP.
- ✓ Addis Ababa Housing development project office and other concerned bodies should work on continuous awareness creation campaign through training and conference for the project managers and workers at different levels to bring about collaborative working and managing the project environments within the available constraints.
- ✓ Participate and improve communication with stakeholders.
- ✓ Provide necessary short term trainings for stakeholders specifically the MSEs on construction quality issues and the adoption of modern construction technologies and materials management.
- ✓ Design a short and easiest way of payment mechanism for contractors and delegate a limited amount of power for the purchase and provision of construction materials for branch project offices to solve the urgent needs of construction inputs. Selection and preparation of land should be done early as per the project schedule,
- ✓ Design a new procurement policy by giving some loopholes for the branch project offices to solve the problems related to purchasing and give some procurement rights for the branch project office.
- Maintain a good monitoring and evaluation systems and take as early corrective actions for a variations from the bench mark.
- ✓ Develop lessons learned document in each completing project for future performance improvements.

- Maintain a good monitoring and evaluation systems and take as early a corrective actions for a variation from the bench mark.
- ✓ Develop lessons learned document in each completing project for future performance improvement.
- ✓ Participate and improve the communication barriers among stakeholders.
- ✓ Provide necessary supervision and inspection program and be committed to take any necessary measures on timely basis on those who are negligent on their duty and responsibility.
- ✓ Provide adequate short term trainings for SMEs on construction technologies and materials management.

5.3.3. Recommendation for Further Studies

This study identifies areas requiring further studies. These potential areas of investigating are highlighted as follows;

- ✓ Additional studies should be done more on challenges that hinder stakeholder involvement on planning and execution of condo construction projects.
- Comparative studies of practices and challenges of condo construction projects need to be conducted to integrate best experiences among different regions and to adopt global best practices

REFERENCES

- Bandelloni, M., Tucci, M. and Rinaldi, R.(1994). Optimal Resource leveling using non-serial dynamic programming. European Journal of Operational Research.
- Chan, P., Wong, K and Lam T.(2006). *Assessing Quality Relationships in Public Housing*. International Journal of Quality & Reliability Management.
- Crawford, L. and Pollack, J.(2008). *Developing a Basis for Global Reciprocity:Negotiating Between the Many Standards for Project Management*.International Journal of IT Standards and Standardization Research.
- CSA,(2010). *Statistical Report on the 2010 Urban Employment and Unemployment Survey*. Statistical Bulletin. Addis Ababa.
 - ____(2012). Analytical Report on the 2012 Urban Employment and Unemployment Survey. Statistical Bulletin. Addis Ababa.
- Dai, J., Paul, M. G., and William, F. M. (2009). Construction Craft Workers' Perceptions of the Factors Affecting their Productivity Journal of Construction Engineering and Management.
- Donaldson, T. and Preston, L.E.(1995). *The Stakeholder Theory of the Corporation: Concepts, Evidence* and Implication of Management Review.
- EbisaDeribe. (20140). Impacts of the Grand Housing Program of the Government of Ethiopia on Private Banks. Scholarly journal of Business Adminstration, Vol.4 (1).
- Federal Democratic Republic of Ethiopia Ministry of Urban Development, Housing and Construction. National report on Housing and Sustainable Urban Development.
- Haregewoin, Y.M.(2007). Integrated Housing Development Program for Urban Poverty Alleviation and Sustainable Urbanization: The case of Addis Ababa. ENHR International Conference on Sustainable Urban Areas. Rotterdam: The European Network for Housing Research (ENHR).
- Janka ,D.G.(2007). *The Realization of the Right to Housing in Ethiopia*. University of Pretoria, Faculty of Law, Center for Human Rights, Pretoria.
- Jergeas, G.F., Williammson, E.andSkulmoski, J.L.T. (2002). *Stakeholder management on construction* projects . The Cost Engineer
- Judgev& Muller.(2005). Project Management Practical research. International Journal of Project Management

- Kamete, A.Y.(2001). The Quest for Affordable Urban Housing: A Study of Approaches and Results in Harare, Zimbabwe, Development South Africa, Vol 18(1).
- Kerzner, H.(2001). ProjectManagement: A System to Planning, Scheduling and Controlling. 7th
 ed.John Wiley & Sons. Inc. Sector Study: Final Report: National Urban Planning Institute.
- .(2009). *Project management: A System to Planning, Scheduling and Controlling*. 10th ed.John Wiley & Sons, Inc. Sector Study: Final Report: National Urban Planning Institute.
- Kothari, C.R.(2004). *Research Methodology Methods and techniques 2nded*. New Age International (p) Ltd,New Delhi.
- Leedy, PD &Ormrod, J.E.(2005). *Practical research: Planning and design* 8th ed. Upper Saddle River,NJ:Pearson.
- Mariana C.(2021). Housing programs in Addis Ababa: urban commons as a Bridge between Spatial and Social. Journal of urban History, journals. Sage. pub.
- Matsumoto, T. and Crook, J.(2021). *Sustainable and inclusive housing in Ethiopia: A Policy assessment*. Coalition for Urban Transitions.London, and Washington, DC.
- Meheret, A.(2009). *Access to housing finance in Africa*: Exploring the issues, No 9, Ethiopia, Fin Mark Trust and Habitat for Humanity.
- Ministry of Works and Maloney, W.F.(2002).Construction Product/service and Customer Satisfaction. Journal of Construction Engineering and Management, 128(6).
- Odeh A.M, Battaineh HT.(1999). *Causes of construction delay: traditional contracts*. International Journal of Project Management.
- Odenyinka, H.A.,&Yusif, A.(1997). Journal of Financial Management of Property and Construction, Vol.2(3).

Olander, S.andLandin, A.(2005). Evaluation of stakeholder influence in the implementation of Construction Projects.InternationalJournal of Project Management.

PADCO.(1998). Ethiopia Housing Urban Development, Addis Ababa.

- Proverbs, D.G., Holt, G.D. and Olmolaiye, P.O. (1999). *A method for Estimating Labor Requirements and Costs for International Construction Projects at Inception*. Building and Environment.
- Pasteur, K.(2001). Tools for Sustainable Livelihoods: Policy Analysis. University of Sussex: Institute of Development Studies.

Roberts, A. and Wallace, W.(2004). Project Management. Pearson Education Limited.

Saunders, M. Lewis, P & Thomhil, A.(2009). Research Methods for Business Students, England.

- Robby, S., Proverbs, D.G., and Holt, G.D.(2001). Achieving Quality Construction Projects Based on Harmonius Working Relationships: Clients and architects perceptions of contractor performance of contractor performance. International Journal of Quality & Reliability Management, 18(15). University, Nottingham.
- Tesfaye, A.(2011). *Problems and prospects of housing development in Ethiopia*. Property Management.Vol.25 No.1.
- Toor S.R., Ogunlala O.S.(2008). *Problem causing delays in major construction projects in Thailand*. Construction Management and Economics.
- UN-HABITAT.(2010). *The Ethiopian Case of Condominium Housing:The integrated housing development program*. United Nations Human SettlementProgram:Nairobi.
- Waikiong, C., and Sui Phend, L.(2006). Latent Building Defects: Causes and Strategies to Prevent Them. Journal of Performance of Constructed Facilities.
- Ward, S. and Chapman, C.(2008). Stakeholders and uncertainty management in projects. Construction Management and Economics 26(6).
- Wysocki, R.(2014). Effects Projects Management, Traditional, Agile, Extreme, 7thEd., PhD. John Wiley&Sons, Inc.

ANNEXES

Department of Project management

1. Questions related to plan preparation

		Rating				
No		Very	High	Med	Low	Very
	Items	High		ium		Low
1	The extent to which the availability of appropriate strategic planning					
	regarding to condo house construction					
2	The extent to which the project managers prepare the project scope					
	management plan					
3	The extent to which the project managers prepare the schedule					
	management plan					
4	The extent to which the availability of appropriate strategic planning					
	regarding to condo house construction					
5	The extent to which the project managers prepare the project scope					
	management plan					
6	The extent to which the project managers prepare the schedule					
	management plan					
7	The extent to which the availability of appropriate strategic planning					
	regarding to condo house construction					
8	The extent to which the project managers prepare the project scope					
	management plan					
9	The extent to which the project managers prepare the schedule					
	management plan					

Department of Project management

2. Questions related to practices of the management body on the project work

		Rating				
No		Very	High	Med	Low	Very
	Items	High		ium		Low
1	The responsible body of condo construction with the respective					
	stakeholders prepares the infrastructure on time					
2	There is a relevant coordination between the stakeholders to be					
	involved in the project work					
3	The project managers properly identify the context in which the					
	project is being executed					
4	The project managers record the lessons learned from each					
	milestones for the next project work					
5	The extent to which the efficiency and effectiveness of resource					
	management and coordination					

6. If you have any additional idea about the practices of management body related issue please specify

Department of Project management

3. Questions related to Problems of condo construction projects.

		Rating				
No		Very	High	Med	Low	Very
	Items	High		ium		Low
1	The extent to which the project managers and other					
	responsible bodies work in collaboration with to solve the					
	problems related to land and infrastructure preparation					
2	The extent to which the adequate and timely withal to solve					
	problems regarding to the payments to contractors and					
	consultants.					
3	To what extent is the timely and adequacy of responses given					
	to construction inputs related questions					
4	The degree to which the availability of full and organized					
	information.					
5	The extent to which the accountability of individuals who committed dacoit					

6. If you have any additional idea about the overall condo construction related issue please specify

here_____

Department of Project management

4. Questions related to Monitoring and evaluation practices and related problems

		Rating				
No		Very	High	Med	Low	Very
	Items	High		ium		Low
1	The extent to which the monitory and control undertaken by the					
	project managers defend the project against project creep.					
2	The extent to which the project monitoring and control team					
	recommend preventive and corrective actions to bring the					
	project in line with the planned expectations in the project plan.					
3	The project managers properly and periodically keep track of the					
	projects progress.					
4	The degree of proper follow up and solutions for the identified					
	problems related to the client contractor or consultants					
5	The adequacy of corrective measures taken after supervision					
	and inspection of the project work					
6	There is an improved tracking and reporting of on project status					
7	The extent to which the monitoring and evaluation system					
	undertaken by the responsible body regarding the production and					
	related processes by SMEs is					

8. If you have any additional idea about the monitory and evaluation related issue please specify

Hereunder_____

Department of Project management

5. Semi-structured Interview questions for finance managers, site engineers, procurement managers, contractors and site supervisors

- 1. Do you think there is an adequate strategic as well as other subsidiary planning by the responsible body?
- 2. What is your view on the coordination of staff and other stakeholders?
- 3. Is there any training and orientation given by the AAHDO/respective branch office? What is your view regarding the training and orientations given?
- 4. What is your view regarding the commitment of client/AAHDO/, contractors and consultants?
- 5. What do you think of the performance of condo construction?
- 6. Do you think that there are problems that challenge the project success? What do you think are the major ones?
- 7. Do you think that there is full and well organized information on condo construction project related issue?

Department of Project management

6. Check list for Document Analysis Regarding house construction projects

Lideta sub-city house construction development project office

No		Avail	ability	
	Item	yes	No	Remark
1	There is a house construction project policy that incorporates			
	stakeholder participation.			
2	Based on the integrated housing program, stakeholders like			
	project managers, team members, and resource managers, scaling			
	up team, executives, and company owners sponsors are properly			
	organized.			
3	Each committee has its own guidelines, regulations, annual plans,			
	meeting schedules, minutes and file documents			
4	Documents that show stakeholder participation in			
	✓ stakeholders conference			
	\checkmark Their duties and responsibility assignment			
	✓ Feedback in the progress report of the project work			
	✓ Decision making as owner, client or contractor and			
	other team members with the necessary			
	documentations like			
	✓ Minutes,			
	✓ files,			
	✓ reports,			
	 ✓ Construction site visits documentation 			