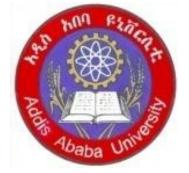
ADDIS ABABA UNIVERSITY School of Commerce



POST GRADUATE PROGRAM IN PROJECT MANAGEMENT

PRACTICES & CHALLENGES OF STAKEHOLDER MANAGEMENT: THE CASE OF ADDIS ABABA HOUSING CONSTRUCTION PROJECT AT "AKAKI-KALITY" PROJECT SITE

By: Aklile Tesfaye Eshete

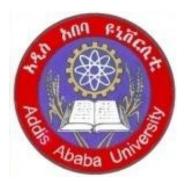
Advisor: Solomon Markos (Dr.)

A Research paper submitted to School of Commerce, Addis Ababa University, in partial fulfillment of the requirements for the degree of Masters of Art (MA) in Project Management

June, 2018

Addis Ababa University

School of Commerce



PRACTICES & CHALLENGES OF STAKEHOLDER MANAGEMENT: CASE **OF ADDIS ABABA HOUSING CONSTRUCTION PROJECT AT "AKAKI-KALITY" PROJECT SITE**

By Aklile Tesfaye Eshete

APPROVED BY THE BOARD OF EXAMINERS

Name	Signature	Date
Dr. Solomon Markos ADVISOR		
<u>Dr. Birhanu Beshah</u> EXAMINER (INTERNAL)		
Dr. Girma Tegene		

D **EXAMINER (EXTERNAL)**

DECLARATION

I declare that this study entitled "PRACTICES & CHALLENGES OF STAKEHOLDER MANAGEMENT: THE CASE OF ADDIS ABABA HOUSING CONSTRUCTION PROJECT AT "AKAKI-KALITY" PROJECT SITE" is my original work. This project has not been presented for any other university and is not concurrently submitted in candidature of any other degree, and that all sources of material used for the thesis have been duly acknowledged.

Candidate:

Name: ______

Signature: _____

STATEMENT OF CERTIFICATION

I certify that I have read the final project in its final form for submission and have found it satisfactory. Thus, the candidate has successfully completed an approved paper of study as required.

Signature

Date

Dr. Solomon Markos ADVISOR

Acknowledgements

First of all, I would like to thank the Almighty God, who gave me the commitment and tolerance to pass various obstacles and come up to the accomplishment of this study.

I would like to express my gratitude to all those who gave me the possibility to complete this study. I am expressing my deepest appreciation to my advisor, Dr. Solomon Markos, for his valuable advice, invaluable suggestions, timely comments, and thorough guidance throughout the work of this study.

I would like to express my appreciation to all organizations and individuals who contributed directly or indirectly to this study and provided the necessary materials and support for realization of this study. Especial thanks are forwarded to contractors, consultants and HDPO managing team at "Akaki-kality" project site who sacrificed their time in filling the questionnaires.

I would also like to use this opportunity to convey my gratitude to my friends. Without their support and encouragement, I couldn't have this opportunity to complete my study. I also gratefully acknowledge the contributions of all those individuals who had contributed in one way or the other in the realization of this paper.

Finally, I would like to give my special thanks for my wife whose patience and love enabled me to complete this work.

Table of Contents

Acknowledgements	iii
Acronyms	vii
List of Figures	viii
List of Tables	viii
Abstract	ix
Chapter 1: INTRODUCTION	1
1.1. Background of the study	1
1.2. Background of the organization	2
1.3. Statement of the problem	3
1.4. Research questions	4
1.5. Objectives of the study	4
1.5.1. General Objective:	4
1.5.2. Specific Objectives:	4
1.6. Significance of the study	4
1.7. Scope and Limitation of the study	5
1.8. Organization of the study	6
Chapter 2: LITERATURE REVIEW	7
2.1. Stakeholder definitions	7
2.2. Stakeholders in construction	7
2.3. Types of stakeholders	8
2.4. Stakeholder management	9
2.5. Stakeholder management processes in construction	
2.6. Methods for Managing Stakeholders	11
2.7. Effectiveness of Stakeholder Management	
2.8. Critical success factors (CSFs) for stakeholder management	
2.8.1. Management Support Group	13
2.8.1.1. Managing stakeholder with corporate social responsibilities	14
2.8.1.2. Flexible project organization	14
2.8.1.3. Project manager competences	
2.8.2. Information Group	14
2.8.2.1. Setting common goals	15
2.8.2.2. Stakeholder identification	15
2.8.2.3. Stakeholder needs and expectations	15
2.8.3. Stakeholder Assessment Group	16
2.8.3.1. Stakeholders' attitude	16

2.8.3.2	Stakeholders' interests	. 16
2.8.3.3	. Stakeholders' influence	. 17
2.8.3.4	. Stakeholders' conflicts and coalitions	. 17
2.8.3.5	5. Stakeholders' power	. 17
2.8.3.6	5. Stakeholders' legitimacy	. 18
2.8.3.7	'. Stakeholders' urgency	. 18
2.8.3.8	3. Stakeholders' proximity	. 18
2.8.3.9	9. Stakeholder' knowledge	. 19
2.8.4.	Decision making factor group	. 19
2.8.4.1	. Evaluation of alternative solutions	. 19
2.8.4.2	Ensuring effective communication	. 19
2.8.4.3	. Formulating appropriate strategies	. 20
2.8.5.	Action and evaluation factors group	. 20
2.8.5.1	. Implementing the strategies	. 20
2.8.5.2	Predicting stakeholders' reactions	. 20
2.8.5.3	Evaluating stakeholder' satisfaction	. 20
2.8.6.	Continuous Support Factors Group	.21
2.8.6.1	. Frequently communicating with stakeholders	.21
2.8.6.2	. Stakeholder involvement in decision-making	.21
2.8.6.3	Promoting relationship with stakeholders	. 22
2.8.6.4	. Realizing changes of stakeholder	. 22
2.8.6.5	. Mutual trust and respect amongst the stakeholder	. 22
2.8.6.6	. Reduce uncertainty	. 22
2.8.6.7	. Maintain alignment between or among the stakeholder	. 23
2.8.6.8	Access to resources and knowledge	. 23
2.8.6.9	. Higher authorities support	. 23
2.9.	Conceptual framework	. 23
Chapter	3: RESEARCH METHODOLOGY	. 25
3.1.	Research design and approach	. 25
3.2.	Data types, sources and data collection method	. 25
3.3.	Target population and sample design	. 25
3.4.	Data analysis and presentation	. 26
3.5.	Validity and Reliability	. 27
Chapter	4: RESULTS AND DISCUSSIONS	. 28
4.1.	Respondents	. 28
4.1.	1. Description of project stakeholders	. 29

4.1.2.	Organizational structure, Work relationships and Role of Stakeholders	32
4.2. Fa	ctors affecting the stakeholder management process	34
4.2.1.	Factors affect the management support	35
4.2.2.	Factors influencing the Information input	
4.2.3.	Factors influence the stakeholder' assessment	37
4.2.4.	Factors affect the decision making	39
4.2.5.	Factors affect the action and evaluation	40
4.2.6.	Factors affecting continuous support	41
4.2.7.	The important factors affecting the stakeholder management process on overall	43
4.3. Sta	keholder assessment	44
4.3.1.	Assessing the stakeholder attributes	44
4.4. Pr a	actical approaches for effectiveness of analyzing stakeholders	52
4.4.1.	Approaches of analyzing stakeholders' concern and need	52
4.4.2.	Approaches of effective stakeholder management	54
Chapter 5: C	CONCLUSION AND RECOMMENDATION	56
5.1. Co	nclusion	56
5.2. Re	commendation	57
5.3. Re	commendations for further study	58
REFERENC	CE	59
Annex: Que	stionnaire	61

Acronyms

AACA	Addis Ababa City Administration
AAHA	Addis Ababa Housing Agency
AAHDPO	Addis Ababa Housing Development Project Office
AAIHDP	Addis Ababa Integrated Housing Development Program
CBE	Commercial Bank of Ethiopia
CIB	Construction Industry Board
CSFs	Critical Success Factors
DEG	Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, Germany
	(Promoter of entrepreneurial development cooperation)
DFID	Department for International Development
DWCP	Decent Work Country Program
FIDIC	"Federation Internationale des Ingenieurs Conseils" (International Federation of
	Consulting Engineers)
GDP	Gross Domestic Product
GTZ-IS	Deutsche Gesellschaft für Internationale Zusammenarbeit
HDPO	Housing Development Poject Office
ILO	International Labour Organization
KFW	Kreditanstalt für Wiederaufbau, (German Reconstruction Credit Institute)
MDGs	Millennium Development Goals
MFIs	Micro Finance Institutions
SMEs/MSEs	Small and Micro Scale Enterprises/Micor and Small Scale Enterprises
SPSS	Statistical Package for the Social Sciences
TVET	Technical Vocational Education Training
UN	United Nations
UNDP	United Nations Development Program

List of Figures

Figure 2.1: Different project stakeholders
Figure 2.2: Conceptual Framework of the study
Figure 4.1 Organizational Structure of the project
Figure 4.2 Contractual relationship between each stakeholders
Figure 4.3: Summary of stakeholder power
Figure 4.4: Summary of stakeholder legitimacy
Figure 4.5: Summary of stakeholder urgency
Figure 4.6: Summary of stakeholder Proximity 49
Figure 4.7: Summary of stakeholder knowledge 50
Figure 4.8: Summary of stakeholder vested-interest
Figure 4.9: Summary of stakeholder attitude

List of Tables

Table 2.1: Stakeholder Management Process. 11
Table 3.1: Framework for sampling and data collection 26
Table 4.1 Respondents' profile. 29
Table 4.2 Main duties and responsibilities of each stakeholder. 29
Table 4.3: Mean values for groups affecting the stakeholder management process 35
Table 4.4: Mean and RII Values of factors affecting the "management support" 36
Table 4.5: Mean and RII Value of factors influencing the "information input"
Table 4.6: RII and Mean value of factors influence the "stakeholder' assessment"
Table 4.7: RII and Mean value for factors affect the "decision making"
Table 4.8: RII and Mean value of factors affect the "action and evaluation"
Table 4.9: RII and Mean value for factors affecting "continuous support" 43
Table 4.10: The overall important factors affecting stakeholder management process. 43
Table 4.11: Effective approaches to analyze stakeholders' concern and need 53
Table 4.12: Effective communication approaches to manage the stakeholders 54

Abstract

This study aims to identify roles of stakeholders who have definable influence on the delivery of Housing construction project at "Akaki-kality" project site. Four specific objectives were set accordingly: to identify the types, responsibilities and interests of different stakeholders' during construction of Addis Ababa Housing construction project; to identify the most common factors affecting the stakeholder management process in the construction project; to investigate the challenges associated with managing various stakeholder expectations and influences; and to assess the effectiveness of stakeholder management. A literature reviews on the topic related to the stakeholder management was conducted. The research used descriptive research design and a mixed method of qualitative and quantitative approaches. The study also used both primary and secondary data sources. A questionnaire survey was carried out among selected project participants in the construction project site. Thirty-two questionnaires were distributed to HDPO, contractors, consultants and MSE's, all the questionnaires were received with a 100% response rate. Project participants who have role identified and described their roles and responsibilities. The main factors affecting the stakeholder management process are hiring a project management team with high competency, transparent evaluation of the alternative solution, ensuring effective communication between the project and its stakeholder, setting common goal and objective of the project, and exploring the stakeholder need and expectation. The client/HDPO/ and Finance institute are the main key stakeholders, who have the most influence in the construction project at 'Akaki-Kality' housing construction of Addis Ababa. Also assessed the effectiveness of stakeholder management in the construction project. One of the main recommendations of this study is the HDPO has to recruit the project managing team based on their competencies and to delegate them a suitable degree of authority to lead the management process of the stakeholder successfully. The study also recommended HDPO in collaboration with "Akaki-kality" sub-city should provide training courses to the project management team in the area of communication and negotiation with stakeholders in order to increase their awareness regarding this issue.

Keywords: HDPO, Challenges and Practices, Project Stakeholder Management.

Chapter 1: INTRODUCTION

1.1. Background of the study

Running a successful project/program in the Governmental and Private Organization setup requires a high degree of stakeholder management; stakeholders are the people and or institutions who affect and are affected by the outputs or inputs of a project. Stakeholders in programs and projects will need to be managed through every phase of the program/project. Stakeholder management involves process and control that must be planned and guided by underlying principles (Neil, 2011).

Different stakeholders have different levels and types of investments and interests in the projects they are involved in (Atkin and Skitmore, 2008). Stakeholders need to be managed and their power and influence mapped so that their potential impact on projects can be better understood. Stakeholders can be a key riskmanagement issue for project managers in construction organization and it is important to include them in the project plan. Various researchers have viewed importance of Stakeholder Management in large construction projects and studies have been carried out on this topic. However, despite of much study in this area, construction projects have little record of how Stakeholder are managed in their organisations (Newcombe, 2003, Olander and Landin, 2005) and El-Gohary et al (2006). Thus, only a few construction project organisations include stakeholders as an element in their project plan. Scholars have raised a number of reasons as the cause of problems and these include: lack of engagement in Stakeholder Management and the complexity and uncertainly of projects. They find that as each project is a unique undertaking with different stakeholders of different interests and powers (Loosemore, 2006). Other causes include 1) inadequate engagement of stakeholders 2) project managers having unclear objectives of stakeholder management 3) difficulty in identifying the invisible stakeholders and 4) inadequate communication with stakeholders (Loosemore, 2006, Rowlinson, Bourne and Walker, 2006 and Cheung, 2008). It is therefore crucial to understand the methods and the critical success factors essential for the successful stakeholder management. Poor stakeholder management can lead to many serious problems in construction projects, such as: poor scope and work definition, inadequate resources assigned to the project (both in terms of quantity and quality), poor communication, changes in the scope of work and unforeseen regulatory changes, all of which may be the major source of delays and cost overruns (Yang et al., 2009). Stakeholder incorporation within quality management planning and proceeding will facilitate greatly in solving large numbers of quality problems in building projects (Heravitorbati et al., 2009). The purpose of this study was to identify roles of stakeholders who have definable influence on the delivery of selected project organization, Addis Ababa Housing Development Project at "Akaki-kality" project *site.* This organization was chosen because it is a major construction project with many stakeholders. It is a good example of a construction project organization which has stakeholders with different interests and stake in the project and which has unique type of project procurement and contract administration process. The aim is to encourage construction project organisations to proactively manage their stakeholders to avoid the negative impact of their actions on projects.

1.2. Background of the organization

Ethiopia as a developing country continue to undertake construction projects as a development intervention for improved physical infrastructure provision and socio-economic growth. The success of construction projects undertaken is critical as it impacts on the economy and output of the construction industry and the vice versa. Notably are the construction industry's contribution towards the GDP, socio-economic development, direction of the economy due to the huge investment, effect on other sectors as a result of linkages and employment due to the labour intensive nature (GTZ-IS/ Ethiopia 2005).

To tackle housing and poverty problems AACA launched a program called Addis Ababa Integrated Housing Development Program (AAIHDP). It is an integrated approach on one hand to ease housing shortage and on the other hand to alleviate poverty through provision of low cost housing and creating employment opportunity for the urban youths. The next sub-section will present a brief description of the program followed by explanation of technical manual (guideline for the construction process) and the stakeholders who are involved in the project.

Addis Ababa Integrated Housing Development Program was inaugurated after successful completion of "Bole Gerji" pilot apartment's construction conducted in the years 1999-2002. Low cost housing project was established based on bilateral agreement between Ethiopian and German governments to provide technical, managerial and financial support. German Agency for Technical Cooperation- International Services (GTZ- IS) was delegated to support the program in technical and managerial aspects whereas KfW and DEG provided financial support (GTZ-IS 2005). By using low cost technology, GTZ- IS in collaboration with the Ethiopian Ministry of Federal Affairs carried out the first pilot project in Addis Ababa. In this project, viable and technically sound construction solutions on the basis of pre-fabricated building elements were introduced. Following low cost housing development program, the City Government in 2004 launched a strategic plan, AAIHDP with multi-sector goals of providing integrated, affordable and low cost housing, empowering urban residents through property ownership, job creation and income generation, improvement of the quality of the urban environment, infrastructure development, and urban renewal (Hiwot Bahru Gemeda, September 2012). The program received recognition by the federal government immediately after its inception. According to UN-HABITAT (2011a), the reason is that the approach was large scale, pro-poor, advocating slum prevention and access to home ownership. The approach also had integrated housing and economic development. The program has different phases of implementation and provides a window for review every five years. After intervention by the federal government, the project was duplicated in every sub city of Addis Ababa with a total more than 100 construction sites.

1.3. Statement of the problem

Many researches have been undertaken to assess and evaluate the implementation of the AAIHDP, mainly focused on its contribution towards employment opportunity, on addressing housing shortages and slum reduction. The AACA has implemented a strategic plan with multi-sector goals of providing integrated, affordable and low cost housing, empowering urban residents through property ownership, job creation and income generation, improvement of the quality of the urban environment, infrastructure development, and urban renewal (GTZ-IS 2005).

The negative effect of stakeholders' actions is one of the major problems experienced by construction projects and this, if left unmanaged, becomes a risk issue. There are concerns over quality and life span of the buildings; in particular, the quality of structures, construction finishing and infrastructure. UN-HABITAT in its 2011 report pointed out that management of specific issues like location, built environment, and construction quality are unanticipated challenges of the project. The main stakeholders who are involved during the construction phase are consultants, contractors and MSEs. The consultants give advisory services and supervise the whole of the work and the small-scale contractors are the general contractors who are responsible for major construction activities. MSEs are the other stakeholders, who manufacture and provide prefabricated building components, install electrical and sanitary works, and manufactures metal window and door frames.

Disagreement among participating parties rose during the implementation of projects which adversely impacted the ability of the management teams to deliver the construction project within the time and allocated budget and expected degree of project success (Hiwot Bahru Gemeda, September 2012). So, there was a need to study and identify, analyze stakeholders' needs and expectations, and their impact.

1.4. Research questions

- Who are the most important project stakeholders, their needs and interests of construction projects at "Akaki-kalty" project site?
- 2) Which critical success factors are considered effective in the current practice of project stakeholder management?
- 3) What main challenges observed in terms of stakeholder management practice in construction project?
- 4) What are dimensions which need to be improved for successful stakeholder management?

1.5. Objectives of the study

1.5.1. General Objective:

The main objective of the research was to identify roles of stakeholders who have definable influence on the delivery of selected affordable housing project and to evaluate the impact of such stakeholders' involvement on the delivery of the housing construction project at "Akaki-kality" project site.

1.5.2. Specific Objectives:

- 1) To identify the types, responsibilities and interests of different stakeholders' during construction of housing construction project at "Akaki-kality" project site.
- 2) To identify the most common factors affecting the stakeholder management process in the construction project.
- 3) To investigate the challenges associated with managing various stakeholder expectations and influences.
- 4) To assess the effectiveness of stakeholder management.

1.6. Significance of the study

This study is identifying causes that lead to poor performance of stakeholders will help the project to identify its weak sides, which hinder achievement of its goal on supplying quality houses. Moreover, as construction industry has an enormous impact on economic development, improving performance of the project parties will have an impact on improving the sector, which in turn affects the economy of the country positively. As AAIHDP is a continual program designed to provide housing at large scale, exploring its limitation at an early stage will prevent the program from delivering less quality houses in

the future. This will further help the project to meet its goal of delivering affordable and quality houses at the same time improving the capacity and competency of stakeholders.

The outcomes of this study are crucial to gaining a better understanding of how stakeholder management concepts can be more successfully implemented in this construction projects and how it can improve the success of project completion. This understanding is based on the views of stakeholders about the practical approaches which can maximize the effectiveness of their involvement which will help to accomplish targeted outcome and best practice processes to be applied to these projects.

It is hoped that this study will increase awareness of the inefficient project stakeholder management practices. Then if corrective measures are taken, it will ensure sustainability of the project in delivering quality low cost houses in Addis Ababa. Moreover, this study could also contribute solutions to similar undergoing projects in the country as a whole. The result of the study also anticipated to be positive, but if not then, another study will be necessary to explore possible sources of defects in construction of condominium houses.

1.7. Scope and Limitation of the study

The study was analyzed the Critical Success factors (CSFs) as a means to improve the performance of the stakeholder management process. CSFs can be defined as "areas, in which results, if they are satisfactory, will ensure successful competitive performance for the organization" (Yang *et al*, 2009 cited in Rockart, 1979). This involves exploring the methods and critical success factors essential for successful stakeholder management. The study focuses on the key stakeholders who can affect the project success include the Client/HDPO/, Consultants, Contractors, SMEs and Occupants/end-users.

There are several limitations to the study. Firstly, the population is too large to cover in the limited time given thus sampling is required which might have an impact on the general output of the study. Secondly, since the project has political implications, the issue of stakeholder issues might not be sound for the HDPO officials thus they might be reserved for the actual problem to cooperate with this study. The last but important limitation was a language problem. Since most of the survey made using local language translations of the entire questionnaire was necessary. While doing so sometimes it was too difficult to get the appropriate word in the local language. To transcribe the data collected, it again needed to translate back the interview results to English.

1.8. Organization of the study

The study consists of five chapters as follows:

- Chapter 1: **Introduction**, this chapter deals with introductory part consisting of background of the study, Addis Ababa housing construction project history, statement of the problem, objectives of the study, definition of terms, significance of the study and scope of the study.
- Chapter 2: Literature review, this chapter discusses the definition of stakeholder, stakeholder management, type of stakeholder, stakeholder management process and critical success factor for stakeholder management in construction projects.
- Chapter 3: **Methodology**, this chapter defines the process of the methodology part consisting of the research design and approach, data types, sources and data collection method, target population and sample design, and finally data analysis and presentation in acquiring the necessary information to answer the research questions.
- Chapter 4: **Results and Discussion**, this chapter presents the results of the study and discusses them in details.
- Chapter 5: Conclusions and Recommendations, this chapter states the conclusions and recommendations.

Chapter 2: LITERATURE REVIEW

This chapter focused on the definition of stakeholder, stakeholder management, type of stakeholder, stakeholder management process, critical success factor for stakeholder management in construction projects, stakeholder analysis, levels of stakeholder management, and formulating stakeholder management strategies.

2.1. Stakeholder definitions

The term "stakeholder" is defined as "any group or individual who can affect or is affected by the achievement of the project's objectives". This definition is often cited by most researchers from Freeman (1984) as the foundation of stakeholder management, and it is characterized as being one of the broadest, in that it can include virtually anyone (Mitchell et al., 1997). El-Gohary et al. (2006) described stakeholders as "individuals or organizations that are either affected by or affect the deliverables or outputs of a specific organization", other defined stakeholders as "those who can influence the project process and/or final results, whose living environments are positively or negatively affected by the project, and who receive associated direct and indirect benefits and/or losses" (Li et al., 2011), and Takim (2009) defined the stakeholder "as being those who can influence the activities/final results of the project, whose lives or environment are positively or negatively affected by the project, and indirect benefit from it".

Newcombe (2003) studies the concept of the project stakeholders as multiple 'clients' for construction projects and thought it was necessary to distinguish "stakeholder" from the term "client", which referred to the financial sponsoring organization who is directly responsible for the production and development of a project. Several organizations and scholars have also proposed the definition of "project stakeholders".

PMI (2008) defined project stakeholders as "individuals and organizations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion". Newcombe (2003) argued that project stakeholders are groups or individuals who have a stake in, or expectation of, the project's performance.

2.2. Stakeholders in construction

There are stakeholders in construction undertakings, just as there are stakeholders in other endeavors. The checklist of stakeholders in a construction project is often large and would include the owners and users

of facilities, project managers, facilities managers, designers, shareholders, legal authorities, employees, subcontractors, suppliers, process and service providers, competitors, banks, insurance companies, media, community representatives, neighbors, general public, government establishments, visitors, customers, regional development agencies, the natural environment, the press, pressure groups, civic institutions, etc. (Newcombe, 2003).

The number of stakeholders involved or interested in the project can dramatically increase the complexity and uncertainty of the situation. Each stakeholder usually has different interests and priorities that can place them in conflict or disagreements with the project (Karlsen, 2008). Each of these would influence the course of a project at some stage. Some bring their influence to bear more often than others. If diverse stakeholders are present in construction undertakings, then the construction industry should be able to manage its stakeholders.

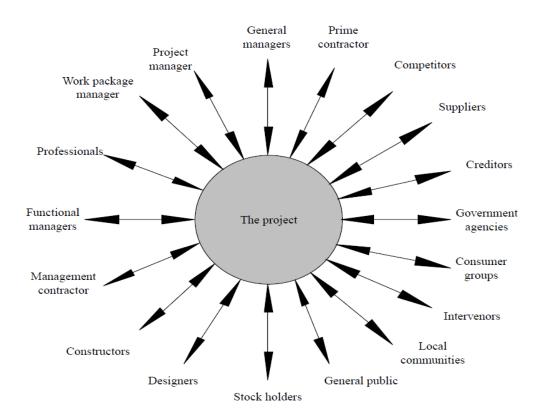


Figure 2.1: Different project stakeholders (Yang et al., 2009a)

2.3. Types of stakeholders

Stakeholders can be divided into internal and external, internal stakeholders being those directly involved in an organization's decision-making process (e.g. Owners, customers, suppliers, employees) and external stakeholders being those affected by the organization's activities in a significant way (e.g. Neighbors, local community, general public, local authorities). In construction, there has traditionally been a strong emphasis on the internal stakeholder relationship such as procurement and site management, while the external stakeholder relationships to some extent have been considered a task for public officials via the rules and legislation that concern facility development (Atkin and Skitmore, 2008).

Similar classifications are inside and outside stakeholders (Newcombe, 2003), and direct and indirect stakeholders (Smith and Love, 2004). Another delineation considers primary versus secondary stakeholders (Carroll and Buchholtz, 2006). A primary stakeholder group is one without whose continuing participation the corporation cannot survive as a going concern, whereas secondary stakeholders are those who influence or are influenced by the firm, Stakeholders could also be contested between those that are contracted to provide services (e.g. Contractors, subcontractors, consultants) that is in a primary or direct relationship with an organization; in contrast to those that have no contracted responsibility or formal redress, but are in an indirect or secondary relationship with an organization (Smith and Love, 2004; Carroll and Buchholtz, 2006).

2.4. Stakeholder management

Project Management Guidelines (2011) provide an overview of the essential components of project management methodology and identify eleven key elements that should be applied throughout the project Lifecycle, and the stakeholder management is one of the key elements in the project management process, in order to ensure the success of the project throughout the life of the project.

Project managers need to identify and interact with key institutions and individuals in the project systems environment. An important part of the management of the project systems environment is an organized process to identify and manage the probable stakeholders in that environment, and determine how they will react to the project decisions (Cleland and Ireland, 2002). On the other hand, Jepsen and Eskerod (2009) clarified the premises underlying project stakeholder management, which includes making deliberate efforts to exert influence on project stakeholders in order to gain their contributions to the project, allocating limited resources in such a way that they achieve the best possible results, and expanding efforts spread across a range of stakeholders than concentrated on a few. Therefore, project stakeholder management is indispensable to control the negative impacts of stakeholders, maximize the perceived benefits, and achieves the preset mission (El-Gohary et al., 2006; Olander and Landin, 2005).

According to Bourne and Walker (2006) Project-stakeholder advantage of management is designed to encourage the use of proactive project management for limiting stakeholder activities that might affect the project negatively, and to assist the project team's ability to take opportunities which encourage

stakeholder support of project objectives. Since the purpose of stakeholder management is to address the diverse views of various participants, improve communication among stakeholders, and clarify their needs (Yang et al. 2009).

Lim et al. (2005) defined the stakeholder management as "Effective management of relationships with stakeholders". In terms of 'stakeholder management', while the scholars Karlsen (2002) and Bourne and Walker (2006) used different statements, they all focused on the management activities related to stakeholders. These activities include, but are not limited to: identifying stakeholders, gathering information on stakeholders, analyzing the influence of stakeholders, communicating with stakeholders and developing strategies. The definition of 'stakeholder management' can be synthesized as: the process of identification, analysis, communication, decision making and all other kinds of activities in terms of managing stakeholders (Yang et al., 2011).

2.5. Stakeholder management processes in construction

A number of studies have been conducted to explore how to apply stakeholder management in the construction industry. Olander (2006) adopted Cleland and Ireland, (2002) in describing a project stakeholder management process in the following basic premises that could be served as a guide for the development of a stakeholder management process. The process consists of executing the management functions of planning, organizing, motivating, directing and controlling the resources used to cope with strategies from stakeholders with the following steps: Identification of stakeholders, gathering information, identification of mission, determining strengths and weaknesses, identification of stakeholder strategy. Frediction of stakeholder behavior, and implementing stakeholder management, including initial planning, identification, analysis, communication, action, and follow-up. Elias et al. (2002) proposed eight steps for managing the stakeholder process started by: Developing a stakeholder map of the project; preparing a Figure of specific stakeholders; identifying the stakes of stakeholders; preparing a power versus stake grid; conducting a process level stakeholder analysis; conducting a transaction level stakeholder analysis; determining the stakeholder management capability of the R&D projects; analyzing the dynamics of stakeholder interactions.

Young (2006) puts forward similar process model centering on Identifying stakeholders; gathering information about stakeholders; analyzing the influence of stakeholders. But from Bourne and Walker (2006) point view, the process could be managed in the following three steps identifying stakeholders; prioritizing stakeholders; developing a stakeholder engagement strategy. Walker et al. (2008) considers

identifying stakeholder; prioritizing stakeholders, visualizing stakeholders; engaging stakeholders, and monitoring effectiveness of communication as the basic steps for stakeholder management. Jepsen and Eskerod (2009) clarified the premises underlying project stakeholder management, which includes making deliberate efforts to exert influence on project stakeholders in order to gain their contributions to the project, allocating limited resources in such a way that they achieve the best possible results, and expanding efforts spread across a range of stakeholders than concentrated on a few.

The PMI identifies four key processes that are associated with the stakeholder management knowledge area in initiating, planning, executing, and monitoring and controlling process groups:

Processes	Process	Detail	Key outputs
1. Identify stakeholders	groups Initiating	This is the process of identifying all people or organizations impacted by the project and documenting relevant information regarding their interests, expectations, involvement, and influence on project	Stakeholder register
2. Plan stakeholder management	Planning	success This is the process of defining an approach to managing stakeholders throughout the entire project life cycle as per their interest, importance, impact, and influence over the project	Stakeholder management plan
3. Manage stakeholder engagement	Executing	This is the process of meeting and exceeding the Stakeholder stakeholders' expectations by continuously communicating with them, clarifying and resolving their issues, addressing their concerns, and improving project performance by implementing their change requests	Issue log Change requests
4. Control stakeholder engagement	Monitoring and controlling	This is the process of evaluating and monitoring overall stakeholder relationships and ensuring stakeholders' appropriate engagement in the project by adjusting plans and strategies as required	Work performance information, Change requests

Table 2.1: Stakeholder Management Process (PMI, 2008)

2.6. Methods for Managing Stakeholders

According to Landing (2000), assessment of the different groups of Stakeholders is important in understanding the attributes of each group in order to choose methods for managing them. Stakeholders with "Low Stake" and "High Interest" can be helpful in decisions making and living insightful opinions. The second group is those with "High Stake" and "High Interest" This group is important and are critical stakeholders who must be managed closely. A third group is the minor group with "Low Stake" and "Low Interest". This group requires minimal effort to manage and are least in priority and requires monitoring.

The fourth group with "High Stake" and "Low are those who need to be either kept engaged in the project or kept informed or both. Elias et al. (2002) state that mapping is normally used for identifying the groupings of stakeholders in order to ascertain their levels of influence, predictability and interest. The assessment can be done to show their behavior and predict their influence in the project.

2.7. Effectiveness of Stakeholder Management

Yang et al., (2011a) placed an emphasis on the recognition of the fact that there are several stakeholders whose expectations and influences must be included in the project management process. And it has been emphasized that if a project's key stakeholders are not satisfied with the ongoing project outcomes, the project team will as a result be required to adjust scope, time, cost and quality in order to meet the stakeholders' requirements and expectations. In terms of the construction industry, stakeholder satisfaction can be defined as the achievement of stakeholders' pre-project expectations in the actual performance of each project stage. This concept of construction stakeholder satisfaction has gradually become more important (especially with the growing tendency of stakeholder groups to try to influence the implementation of construction projects according to their individual concerns and needs (Li *et al.*, 2013).

Olander and landin (2008) found that the level of stakeholder satisfaction depends on two basic considerations:

- The concerns and needs of stakeholders,
- The stakeholder management process, e.g. how they are treated.

Effective Stakeholder Management creates positive relationships with stakeholders through the appropriate management of their expectations and agreed objectives. Stakeholder management is a process and control that must be planned and guided by underlying principles. The stakeholders assess organizations effectiveness when their goals, needs and interest are being respected and considered. Initially, when the relationship is established there are specific goals and objectives that stakeholders feel is important to them in being affiliated with an organization. Yang et al. (2011a) states stakeholders want to have their demands and interest valued and the way an organization meets those goals will greatly determine the success or failure of the organization. It is important to establish a positive, mutually respected relationship that is ongoing.

In terms of 'stakeholder management', while the scholars Karlsen (2002) and Bourne and Walker (2006) used different statements, they all focused on the management activities related to stakeholders. These activities include, but are not limited to: identifying stakeholders, gathering information on stakeholders,

analyzing the influence of stakeholders, communicating with stakeholders and developing strategies. The definition of 'stakeholder management' can be synthesized as: the process of identification, analysis, communication, decision making and all other kinds of activities in terms of managing stakeholders (Yang *et al.*, 2011).

2.8. Critical success factors (CSFs) for stakeholder management

Many researchers (Jefferies, 2002; Yu, 2007; Yang et al., 2009b) have used the critical success factors (CSFs) as a means to improve the performance of the management process. CSFs can be defined as "areas, in which results, if they are satisfactory, will ensure successful competitive performance for the organization" (Yang et al, 2009 cited in Rockart, 1979). Saraph et al. (1989), viewed them as "those critical areas of managerial planning and action that must be practiced in order to achieve effectiveness". Cleland and Ireland (2002) consider important that the project team should know whether or not it is successful "managing" the project stakeholders.

CSFs are viewed as those activities and practices that should be addressed in order to ensure effective management of stakeholders in a construction project. All the aspect of critical success factors of stakeholder is introduced, so 30 factors contributing to the success of stakeholder management are grouping to six main groups (include management support, identification of stakeholder information, stakeholder assessment, decision making, action & evaluation, and a continuous support group), and will be examined that are significantly important for stakeholder management in Addis Ababa Housing Development construction project, the six group CSFs and perceptions of successful stakeholder management are identified as follows:

2.8.1. Management Support Group

Top level or management support from the implementing agencies, is essential for effective stakeholder engagement (Yang et al. 2009b). In some projects, certain individuals at director level are tasked with the responsibility of overseeing their stakeholder management activities. Top management must endorse the principle of stakeholder consistently and wholeheartedly to guarantee successful stakeholder participants. Willingness to share power and resource that would benefit overall organization's goal is necessary (Brooke and Litwing, 1997).

2.8.1.1. Managing stakeholder with corporate social responsibilities

Othman and Abdellatif (2011) mentioned that the construction industry plays a significant role in the social and economic development in both developed and developing countries through constructing buildings and infrastructure projects that meet the needs of the community in the short and long terms. So according to Yang *et al.* (2011a) The project managers should manage stakeholders taking into consideration of all kinds of these social responsibilities to make sure the project objectives are achieved.

2.8.1.2. Flexible project organization

Li *et al.* (2011) suggested that a flexible project organization is needed to cope with the complexity and uncertainties of construction in China, which is echoed with the Olander and Landin (2008), whom come to the importance of the flexibility administration of project to recruit personnel to achieve the objectives for the project.

2.8.1.3. Project manager competences

The role of the project manager should involve not simply an understanding of the technical realities at hand, but also of the links between technology, the environment, the community and the people in it. For example, a given community possesses unique information about local conditions and circumstances. The project manager should acquire knowledge about the place where the project is located and engage the local community in the planning of the construction project. Thus, an external stakeholder management process should, if conducted properly, be seen as representing an opportunity for improving the project (Oalnder, 2006).

2.8.2. Information Group

Freeman et al. (2007) believe that identifying stakeholder information is an important task for assessing stakeholders as this is the backbone of project success. Before undertaking any management activities, information about the project and its stakeholders, extensive research and analysis is required. The information includes project missions, full list of stakeholder, area of stakeholders' interests, and their needs and constraints to the project (Yang et al. 2009b). The stakeholders' commitments, interest and power should be fully assessed so that the project manager can tackle the key problems in the stakeholder management process and the potential impact on success in the project. This information includes:

2.8.2.1. Setting common goals

The identification of a clear mission for a project at different stages is widely considered to be essential for the effective management of stakeholders (Winch, 2002). Before every stakeholder management activity, project management team should have a better understanding of the tasks and objectives of the particular stage of the project Lifecycle, including the issues of such as cost, schedule, budget (Yang *et al.*, 2009b). Jergeas *et al.* (2000) further proved that "setting common goals, objectives and project priorities" is significant for improving stakeholder management, and he also suggested that the purpose of the project should be understood, and feedback from stakeholder be solicited in order to achieve alignment between stakeholder and project team, since this the way that expectations could be managed, and hidden agendas could be brought to the surface and project priorities could be established.

2.8.2.2. Stakeholder identification

Project managers need to identify and interact with key stakeholder in the project system's environment. An important part of the management of the project system's environment is to organize the process in order to be able to identify and to manage the probable stakeholders in that environment and determine how they will react to project decisions (Olander, 2006). Identification of stakeholders includes both stakeholders that are involved in the project and potential stakeholders who will also improve the support and ownership to the stakeholder management process (Karlsen, 2002). Jepsen and Eskerod (2009) point out to the identification of the (important) stakeholders and their necessary contributions, and expectations concerning rewards for contributions, As a prerequisite requirement for stakeholder analysis in projects for management the stakeholder in the construction project.

2.8.2.3. Stakeholder needs and expectations

Numerous different and sometimes discrepant interests can be affected, both positively and negatively, throughout the course of a major infrastructure and construction project. Failing to address and meet the concerns and expectations of the stakeholders involved has resulted in many project failures (Li *et al.*, 2013). During the project process, all stakeholders' needs should be assessed "so that a satisfactory and realistic solution to the problem being addressed is obtained" (Love *et al.*, 2004). Li *et al.* (2012) clarifies that stakeholders' needs can provide an indication of the stakeholder groups' concerns, the problems the project team faces, and stakeholders' requirements of the projects. Furthermore, Olander and Landin (2008) also proved the importance of "analysis of stakeholder concerns and needs" by case studies in

Sweden, and Olander and Landin (2005) considered that project managers should identify all types of stakeholder and accommodate their conflict and needs.

2.8.3. Stakeholder Assessment Group

In real world, stakeholders have influenced projects in a variety of complex ways. In order to analyze the impact of stakeholders upon projects, it is necessary to identify and include the factors by which they do so. To enhance the understanding of project managers on stakeholders, their attributes, behavior, and potential influence need to be assessed and estimated. The conflicts and coalitions among stakeholders also could be analyzed based on information about stakeholders (Yang et al. 2009b). Once the information about the stakeholder is prioritized, the assessment of stakeholder on the basis of their impact and vested interested in the project could be done. This requires an accurate understanding of the stakeholder attributes in order to categorize them according to their attribute classification.

2.8.3.1. Stakeholders' attitude

The capacity and willingness of stakeholders to threaten or cooperate with project teams should be measured (Savage et al., 1991) during stakeholder management process. Because stakeholders may have negative or positive impacts on projects, there is a need to determine objectors and supporters. Stakeholder attitude refers to whether the stakeholder supports or opposes the project. Freeman *et al.* (2007) state that stakeholders' attitude can be sorted into 3 categories: observed behavior, cooperative potential and competitive threat, a project manager need to clearly understand the range of stakeholder reactions and behaviors.

2.8.3.2. Stakeholders' interests

Stakeholders are characterized as having a 'stake' in the proposed project and trying to influence its implementation so as to guard their individual interests (Olander and Landin, 2008). There are various stakeholders' interests due to the complex nature of construction projects (Yang *et al.*, 2009b), and Freeman *et al.* (2007) believe that identifying stakeholder interests is an important task to assess stakeholders, these interests including product safety, integrity of financial reporting new product services, and financial returns.

2.8.3.3. Stakeholders' influence

Project management procedure is affected by project stakeholders (Olander, 2007). Therefore, recognizing the stakeholders' influence is important to "plan and execute a sufficiently rigorous stakeholder management process" (Olander and Landin, 2005). Olander (2007) developed the "stakeholder impact index", and he considers that analyzing the potential impact of stakeholders indicates to determine the nature and impact of stakeholder influence, the probability of stakeholders exercising their influence and each stakeholder's position in relation to the project. Therefore; recognizing the stakeholder' influence is an important factor to "plan and execute a sufficiently rigorous stakeholder management process" (Olander and Landin, 2005).

2.8.3.4. Stakeholders' conflicts and coalitions

Conflicts in construction project may involve stakeholders external or internal to the project or a combination of those. Conflicts between external stakeholders may be the most difficult to resolve because of their diversity and because of the lack of established procedures for tackling most of them. For example, in developed societies, public opinion tends to be more opposed than supporter of a construction project encompassing some environmental impact, although it may respond to a specified public need; on the contrary, in less developed or poorer countries, the public may be more keen to accept the project if it aims at solving important infrastructure needs (transportation, sewage, pipelines, water treatment, etc..). Analyzing the conflicts and coalitions among stakeholders is an important step for stakeholder management (Freeman *et al.*, 2007). In fact, conflicting parties seek mutually satisfactory solutions, which can be achieved by joint problem solving to seek alternative solutions. A high level of communication among parties can help in achieving a mutually acceptable solution (Chen and Chen, 2007). On the other hand, ElGohary *et al.* (2006) proposed a set of steps in order to resolve differences between stakeholder, to deal with conflict by resolving a difference before and after it reach the stage of a dispute. It includes facilitation, negotiation, mediation and arbitration.

2.8.3.5. Stakeholders' power

Brourne (2010) defied the power as an individual or group that may have to permanently change or stop the project or other work. The power as a factor is considered to be a key driver of stakeholder-manager relations for several reasons, since the definitions of stakeholders undoubtedly imply that relationships between stakeholders and the project reflect social-business exchanges, and power means the ability to "control resources, create dependencies, and support the interests of some organization members or groups over others" (Mitchell *et al.*, 1997). Bourne and Walker (2005) believe that successful project managers should have the ability to understand the "invisible power" among stakeholders.

2.8.3.6. Stakeholders' legitimacy

The legitimacy of a stakeholder is a prerequisite for the success of transactions with stakeholders (Freeman *et al*, 2007). Mitchell *et al*. (1997) indicate that many scholars define stakeholders as those who have such legitimate relationships with the project (including contracts, moral, and legal rights). Mitchell et al. (1997) conclude that legitimacy is a social good something larger and more shared than mere self-perception that may be defined and negotiated differently at various levels of social organization. The legitimacy of a stakeholder gives a sense that legitimacy reflects the contractual relations, legal and moral rights in relationships between stakeholders and a project (Nguyen, 2009).

2.8.3.7. Stakeholders' urgency

Urgency is described by Mitchell *et al.* (1997) as the "degree to which stakeholder claims call for immediate attention." They argue that urgency only exists when two conditions are met:

- 1) When a relationship or a claim is of a time-sensitive nature.
- 2) Why that relationship or claim is important or critical to the stakeholder.

They also state that urgency has two attributes: time-sensitive and critical. The urgency attributes of stakeholders decide the extent to which they exert pressure on a project manager by calling for emergency action.

2.8.3.8. Stakeholders' proximity

Proximity, according to Bourne (2005) implies the extent to which a stakeholder is involved in the project. She uses proximity as a criterion to prioritize project stakeholders by rating them on a scale of 1-4 where 1 is relatively remote from the project (does not have direct involvement with the processes) and 4 been directly working on the project (most of the time). Bourne and Walker (2005) argue the need to take proximity into account stakeholder analysis by stating that stakeholders who may have strong power and influence but are relatively far from the project core may seem transparent / invisible. Therefore; their potential impact may be underestimated.

2.8.3.9. Stakeholder' knowledge

Yang *et al.* (2007) found in their research that automation and integration technology may contribute significantly to project performance in terms of stakeholder success. They argue that due to technological development, stakeholders can seek a variety of information from numerous sources. Undoubtedly, the more knowledge a stakeholder has about the project, the more he/she is able to influence it observe that today, Walker *et al.* (2008) pointed out to the importance of the receptiveness of each stakeholder to gain a knowledge about the project.

2.8.4. Decision making factor group

Based on the outcomes in 'information input', and the outcomes in 'stakeholder assessment', the project management team has the responsibility to compromise conflicts among stakeholders by choosing the transparent evaluation of the alternative solution based on stakeholders' concern, and to decide on the levels of stakeholders' engagement in order to ensure effective communication, and formulate appropriate strategies to deal with the issues raised at this stage (Yang et al. 2009b).

2.8.4.1. Evaluation of alternative solutions

Olander and Landin (2008) argue that the clear and transparent evaluation of alternative solutions for the development of a construction project based on the concerns of stakeholders would help project managers to establish the basis of trust needed for an adequate stakeholder management process.

2.8.4.2. Ensuring effective communication

To ensure the success of a project much information, including expectations, goals, needs, resources, status reports, budgets and purchase requests, need to be communicated on a regular basis to all major stakeholders. Communications includes the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. Effective project managers spend about 90% of their time communicating with team members and other project stakeholders, whether they are internal (at all organizational levels) or external to the organization. Effective communication creates a bridge between diverse stakeholders involved in a project, connecting various cultural and organizational backgrounds, different levels of expertise, and various perspectives and interests in the project execution or outcome (Walker *et al*, 2008).

2.8.4.3. Formulating appropriate strategies

The central question of stakeholder management was "what are the strategies that organizations use to address stakeholders?" A similar result is obtained by Karlsen (2002) from a survey; he stated that there are different types of the strategies, but basically the stakeholder management strategy is the attitude how the project management team treats different stakeholders.

2.8.5. Action and evaluation factors group

The action and evaluation group is the final management activity group in the process of stakeholder management. The inputs required are the formulated strategies, and the level of stakeholder engagement to ensure effective communication. This group includes three management activities.

2.8.5.1. Implementing the strategies

Developing policy implementation strategy development grid can help planners and decision makers gain a clearer picture of what will be required for implementation and help them develop action plans that will tap stakeholder interests and resources (Bryson, 2004). This activity is self-explanatory. The formulated strategies should be implemented accordingly. The outcome of this activity is to keep the project moving forward.

2.8.5.2. Predicting stakeholders' reactions

After the strategies being implemented, the evaluation the stakeholders' reactions to the strategies should be used to improve the objectives in the succeeding stakeholder management process. Predicting stakeholders' reactions is an important factor when project managers make decisions about strategies to deal with stakeholders (Freeman *et al.*, 2007).

2.8.5.3. Evaluating stakeholder' satisfaction

Yang et al., (2011a) placed an emphasis on the recognition of the fact that there are several stakeholders whose expectations and influences must be included in the project management process. And it has been emphasized that if a project's key stakeholders are not satisfied with the ongoing project outcomes, the project team will as a result be required to adjust scope, time, cost and quality in order to meet the stakeholders' requirements and expectations. In terms of the construction industry, stakeholder satisfaction can be defined as the achievement of stakeholders' pre-project expectations in the actual performance of each project stage. This concept of construction stakeholder satisfaction has gradually

become more important (especially with the growing tendency of stakeholder groups to try to influence the implementation of construction projects according to their individual concerns and needs (Li *et al.*, 2013).

Olander and landin (2008) found that the level of stakeholder satisfaction depends on two basic considerations:

- The concerns and needs of stakeholders,
- The stakeholder management process, e.g. how they are treated.

2.8.6. Continuous Support Factors Group

Construction projects are transient (Bourne, 2005), and organizations are correspondingly permanent. Since many stakeholders, such as government, local communities and media, would be involved in the project at a later stage of the process or in future projects, the change of their influence needs to be realized in order to promote a steady relationship with them in order to continuously communicate with them properly and frequently (Yang et al., 2009a). Continuous support group also includes the activities which should be carried out to support the management activities. Continuous support comes from the activities within, and can be used for accumulating the experiences and knowledge of the project management team in the long term.

2.8.6.1. Frequently communicating with stakeholders

Project success is tied to effectively communicate and managing relationships with the various stakeholders of the project. This makes stakeholder management an important issue in project management. Researchers pointed out that formal and clear communication channels/networks are needed to warrant an efficient information transfer. Therefore, increasing the degree of communication amongst the project participants, the higher the participant satisfaction (Takim, 2009; Leung, 2004). Project managers should be highly skilled negotiators and communicators who are capable of managing individual stakeholder expectations and creating a positive culture change within the overall project (Olander and Landin, 2005).

2.8.6.2. Stakeholder involvement in decision-making

Participation of project stakeholders in different stages of construction project (e.g. the planning and development phases) can be beneficial in several ways (Li, & Skitmore, 2012). Identifying and analyzing

stakeholder concerns in construction projects are indispensable tasks during the participation process in order to arrive at a consensus and avoid project failures (Atkin & Skitmore, 2008).

2.8.6.3. Promoting relationship with stakeholders

Successful relationships between the project management team and its stakeholders are vital for successful delivery of projects and meeting stakeholder expectations (Savage *et al.*, 1991; Jergeas *et al.*, 2000). Karlsen (2008) argues that it is wrong to ignore the stakeholders or attempt to impose a rigid detailed control on the project-stakeholder relationship.

2.8.6.4. Realizing changes of stakeholder

The concepts of the change and dynamics of stakeholders were acknowledged by Freeman (1984). According to him, in reality stakeholders and their influence change over time, and this depends on the strategic issue under consideration. Dynamics of stakeholder is a very interesting and important aspect of the stakeholder concept (Elias et al., 2002). The work of managing stakeholder does not stop according to plan activities. Since the nature and membership of the project stakeholder change according to the project lifecycle stage, so the team needs to continuously scan their project stakeholder for unplanned occurrences that may trigger a review when the activity moves from one stage of its implementation to other stages (Bourne, 2010). As a result of that the evaluation of stakeholder demands and influence should be considered as a necessary and important step in the planning, implementation, and completion of any construction project (Olander and Landin, 2005).

2.8.6.5. Mutual trust and respect amongst the stakeholder

Pinto *el al.* (2009) have pointed to the importance of trust as a facilitator of positive relationships among project stakeholders. Trust is argued to enhance a variety of intra-organizational relationships, including project team dynamics, top management support and coordination across functional departments. Likewise, trust is argued to improve the inter-organizational relationships among the principal actors in project development, such as contractors, owners, and suppliers.

2.8.6.6. Reduce uncertainty

Turner and Müller, (2003) whom argue that most projects are subject to uncertainty and these inherent uncertainties need to be integration in order to deliver beneficial objectives of change. They underlined

that an important way to reduce this uncertainty was to choose a partnering relationship where the risk was shared between the operator and the contractors.

2.8.6.7. Maintain alignment between or among the stakeholder

Goal congruence means that there are aligned goals, and therefore it is easier to trust the partner doing the job. In addition, Karlsen et al., (2008) argue that the willingness to take risks may be an indicator of aligned goals. This may be the reason why we found goal congruence to be more crucial for trust building between the project management and the stakeholders.

2.8.6.8. Access to resources and knowledge

Access to resources and knowledge was seen as an important factor in the formation of relationships. (Karlsen, 2008) argue that alliances between organizations can provide a 'means for survival'. The key is learning relationships and knowledge transfer. Acquiring knowledge from other organizations is not a deceitful act, but rather represents a commitment to utilize each other's skill. This is supported by case studies done by Karlesen (2008) whom finds that the project event was an opportunity to acquire knowledge about the main supplier's new technology and for this learning purpose a close relationship was necessary.

2.8.6.9. Higher authorities support

As one of the findings from Yang et al. (2011a) that the top-level support is important for management activities, in an organization with a mature stakeholder management environment, the higher authorities always monitor the management process, help figuring out problems, and used the effects of stakeholder management as an indicator for performance measurement of the management team.

2.9. Conceptual framework

The review of the literature suggested that there are numerous CSFs that can be identified as being crucial to the successful implementation of stakeholder management. Jergeas et al. (2000) identified 2 aspects of improvements for managing stakeholders, which are: "communication with stakeholders and setting common goals, objectives and project priorities". Landin (2000) considers "the long-term performance of any construction and its ability to satisfy stakeholders" depends on decisions made and the care taken by decision-makers in stakeholder communication.

Cleland and Ireland (2002) state that the key issue in project stakeholder management is managing the relationship between the project and its stakeholders. These proposed factors may be the critical successful factors for stakeholder management in construction projects, but most of these studies are descriptive reviews, lack detailed quantitative analysis and fail to prioritize the relative importance of those success factors.

In this regard, it is crucial to explore the relative importance and groupings of factors that are significantly important for stakeholder management in construction projects. Therefore, this paper aims to identify and quantitatively prioritize CSFs associated with stakeholder management in construction projects of AAHDP, and group the factors into lesser dimensions by using factor analysis.

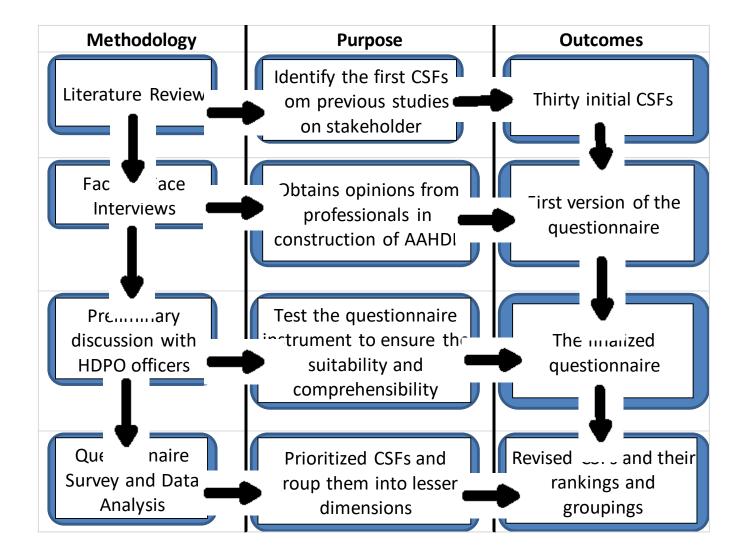


Figure 2.2: Conceptual Framework of the study

Chapter 3: RESEARCH METHODOLOGY

3.1. Research design and approach

The researcher used descriptive research design. The questions of the research questionnaire constructed based on literature review of critical success factors of stakeholder management for construction projects. The study used both qualitative and quantitative data with the aim to identify the types, responsibilities and interests of stakeholders, and assess the stakeholder management practices and challenges of stakeholder management in AAIHDP.

3.2. Data types, sources and data collection method

The Study used both primary and secondary data collection methods as a tool to gather the necessary information. The primary data collected using two methods and mainly through a survey by administering questionnaires to key stakeholders like HDPO, contractors, consultants, MSEs and Occupants, and in depth interview of some of the respondents. Secondary data obtained from contract agreement, site reports, policy document, and organizational records of the project.

A mixed methods research strategy involving a combination of quantitative and qualitative approaches for data collection and analysis. To gather quantitative data administered to selected respondents mentioned above. For qualitative approach, in-depth interviews carried out to purposefully selected respondents. Finally, the data related to stakeholder management analyzed, discussed and conclusions and recommendations drawn to ensure completeness, consistency and readability.

3.3. Target population and sample design

The target population for the data collection using the survey questionnaires and interview guide comprised contractors and MSEs who engage in construction work, the consultants who are responsible for supervision of the whole of the work, HDPO officials who are responsible for management, training and capacity building and at last the occupants who are living in the constructed houses. Drawing a sample from the AAHDP was not an easy task because of its big size of population. The AAHDP has branch project offices in each sub-city. These offices are responsible to provide land for construction, recruit and provide contractors and MSEs and provide supporting scheme for MSEs. The head office on the other hand is responsible for regulating and administering all projects. Target population for this study included **102 respondents** from one of the branch project office in AAHDPO. The selected project site for this

study was Akaki Kality sub-city project site located 20Km to south from the city center. Sample respondents would be taken from every enterprise to make the selected sample more representative of the population. Accordingly, 4 contractors randomly selected as primary respondent from 37. On the other hand, 5 MSEs respondents purposely selected from 45 MSEs participating in production, installation and finishing works. It was purposive sampling because careful consideration would be needed to include different types of MSEs from different areas of expertise. And also 3 from 17 HDPO staffs and 3 consultant's staff purposely selected as primary respondent. Yet, a total large size sampling 32 respondents selected to ensure representativeness of the sample. Purposive sampling should be employed to selected respondent from the whole population for in-depth interviews to avoid translation of survey questionnaires to local language (Amharic) especially for occupants and MSEs.

ltem No.	Type of respondents	Sample size	Sampling technique	Data type	Data collection method	Research instrument
1	Contractors(37)	5	Purposive	Primary	Survey	Questionnaire
2	MSEs(45)	6	Purposive	Primary	Survey	Questionnaire
3	Consultant(3)	3	Purposive	Primary	Survey	Questionnaire
		3	Purposive	Primary	In-depth interview	Questionnaire
4	HDPO(3)		Purposive	Secondary	Document Analysis	Review Checklist
5	Occupants	15	Purposive	Primary	Survey	Questionnaire

Table 3.1: Framework for sampling and data collection

3.4. Data analysis and presentation

The questionnaire was adopted based on two previous studies of stakeholder management in construction such as Hammad Salah (2013) and *Yang et al. 2009b*. The draft questionnaire was discussed with advisor to obtain the valuable advices and comments. After modifying the preliminary draft questionnaire, it was submitted to advisor to have preliminary approval. At the end of this process, some minor changes, modifications and additions were introduced to the questions and the final questionnaire was constructed based on Ethiopian construction projects context.

The collected data analysed using Software for qualitative and quantitative data respectively. Descriptive analysis performed to extract the impacts to identify the stakeholders' influence in the construction project and the engagement level to deal with them. Seven attributes of stakeholder were put in the designed questionnaire, in order to achieve this objective. Power, proximity, legitimacy, urgency, knowledge, vested interest, and attitude were evaluated by respondents in Likert scale, and the obtained results will

be used in calculating the following indicators: (i) stakeholder impact, (ii) stakeholder vested interestimpact index, and (iii) stakeholder influence index. These indicators also demonstrate the level of stakeholders' influence on the project according to Nguyen et al. (2009), the statistical tool (relative importance index, RII) were used. Likert scaling was used for ranking questions that have an agreed level. Then, the Relative Importance Index was computed using the following equation:

Relative Importance Index :
$$\frac{\sum w}{AN} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{5N}$$

Where W is the weighting given to each factor by the respondent, ranging from 1 to 5, (n_1 = number of respondents for Strongly disagree, n_2 = number of respondents for Disagree, n_3 = number of respondents for Neutral, n_4 = number of respondents for Agree, n_5 = number of respondents for Strongly agree). "A" is the highest weight (i.e. 5 in the study) and N is the total number of samples. The relative importance index ranges from 0 to 1 and suitable to demonstrate the level of stakeholders' influence on the project to achieve the objectives of this study according to Tam and Le, (2006).

3.5. Validity and Reliability

To ensure validity and reliability of the study, variables are comprehensively defined. This also helped to reduce misunderstandings thus increase the reliability of the measuring instruments. Moreover, triangulation of results employed to ensure reliability of the data collected. Thus, all the data acquired from different project participants compared and cross checked.

Cronbach's Alpha:

This method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient *alpha* (α) value between 0.0 and + 1.0, and the higher values reflects a higher degree of internal consistency (George and Mallery, 2003).

$$\propto = \frac{\mathrm{Kr}}{1 + (\mathrm{K} - 1)\mathrm{r}}$$

The closer the Alpha (α) is to 1, the greater the internal consistency of items in the instrument being assumed. The formula that determines alpha is fairly simple and makes use of the items (variables), **k**, in the scale and the average of the inter-item correlations, **r**. Cronbach Alpha for CSFs is .904 which is above the cutoff point thus showing the internal consistency.

Chapter 4: RESULTS AND DISCUSSIONS

This chapter comprised of research analysis, findings and discussions. The findings here are an analysis of collective fieldwork data presented based on the research objectives and research questions. A short description of the study followed by introduction of general characteristics of research respondents is presented at the beginning for clear understanding of these findings and analysis. Then the next section provides a presentation and analysis of the data regarding the research questions.

4.1. Respondents

This section mainly designed to provide general information about the respondents in terms of the type of institutions, position and experience of the respondent.

Table 4.1 shows that, 34.4 % (11 out of 32) of the respondents are governmental, 15.6 % (5 out 32) were general manager, 6.3% (2 out of 32) of respondents were project managers, and 18.8% (6 out of 32) of respondents were supervisor engineer where it can be seen that almost 40.7% of the respondents have key positions that support the quality of gained information. The others are from different enterprises and occupants.

Table 4.1 shows that, 37.5% (12 out of 32) of the respondents have years of experience between 5 - less than 10 years. 25% (8 out of 32) of the respondents from the total sample have years of experience between 10 - Less than 15 years. 18.8% (6 out of 32) of respondents from the total sample have years of experience 15 and more, where it can be seen that more than 81.2% of the respondents have an experience more than 5 years, which is cross checked with the obtained results in the job title of the respondent (40.7% of the respondents have key positions). This gives a good indicator that the respondents have good level of experience with the stakeholder management issue. Moreover, the variety of experiences between each group will enrich the study with different knowledge and information.

Another set of respondents was taken from occupants who own condominium houses or who are currently living in the condominium houses in the selected site. These respondents were helpful to get overall information on how stakeholders are engaged in the project and what supporting schemes are provided for them. In addition to this, other respondents from consultants were added to supplement the primary respondents.

General information	Frequency	RII (%)
Nature of Institution		
Governmental	11	34.4
Private	8	25.0
SME	6	18.8
Others	7	21.9
Job title for respondent	11	
General Manager	5	15.6
Project Manager	2	6.3
Supervisor Engineer	6	18.8
Others	19	59.4
Years of respondent experience	1 1	
Less than 5 years	6	18.8
5 – less than 10 years	12	37.5
10 – less than 15 years	8	25.0
More than 15 years	6	18.8

Table 4.1 Respondents' profile

4.1.1. Description of project stakeholders

This part consists of results and discussion of current stakeholder involvement that describes their duties and responsibilities. The project stakeholders who are participating in the construction project with summarized duties and responsibility of each stakeholder are described in Table below:

Stakeholders	Duties and responsibility	
AAHDPO (Head Office)	• Select and send lists of contractors	
	• Prepare the contract document	
	• Prepare specification	
	 Fix unit rate 	

⁽Source: own survey data, 2018)

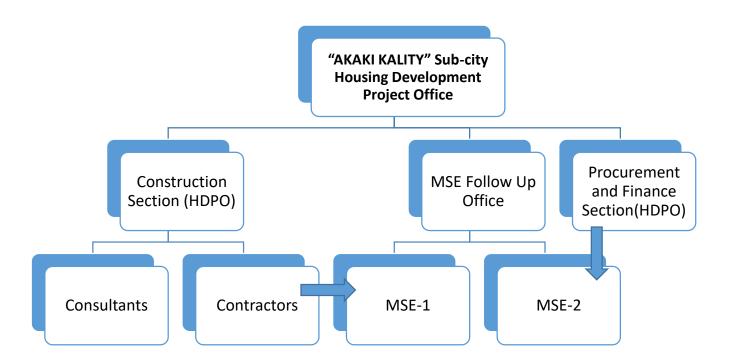
AAHDPO (MSE Development	0	Recruit MSEs				
Office, "Akaki Kality" sub-city)	0	Provide support to MSEs (loan, equipment, working				
	C	place, training)				
Addis Ababa "Akaki Kality" sub-	0	Perform contractual agreement and contract				
city Housing Development Project		administration				
Office - Construction follow up office	0	Assigning of contractors				
	0	Supervision of works (responsibility for quality of work)				
	0	Check and approve payments (contractors, consultant and MSEs-1)				
	0	submitted by consultant				
	0	Request demand for MSEs (type and quantity)				
	0	Control and manage distribution of productions (construction material)				
MSEs follow up office	0	Facilitate working atmosphere for MSEs				
	0	Give information and advisory service				
	0	Sometimes gives MSEs on-site training or guidance				
Construction material procurement	0	Responsible for procurement of the prefabricated				
and finance office		material from MSEs				
Consultant	0	Work inspection				
	0	Payment (contractors and MSEs-1) approval				
	0	Construction material approval				
	0	Responsible for quality of work				
Contractors	0	Substructure construction- site preparation and foundation				

	0	Super structure construction- columns, beams, slabs,
	-	HCB walls
		Finishing made (alectoring of 1 1
	0	Finishing works (plastering, cement screed and
		terrazzo)
MSEs-1 (labour)	0	Electrical installation
	0	Sanitary installation
	0	Roof fixing
	0	Metal door and window production
	0	Handrails for stairs
	0	Painting
MSEs-2 (production)	0	HCB production
	0	Pre-cast concrete
	0	Concrete walls
	0	Partition wall (agro-stone)
Occupants/Beneficiaries/End-users	0	Settling their payment according to the payment
		condition and government revenue for the house.
Financial institution	0	financial source of AA housing project
(Bank loan/CBE/, AA Finance office/)		
Landowners (Farmers)	0	with sort of compensation, allowing their land to be
		owned by the government as public property for the
		housing construction project purpose.
Governmental Authorities (EEPCO,	0	Provider of the necessary services to the project
Ethio-telecom, water & sewerage		include: electricity, water, telecom, access road, etc.
Authority, AACRA, etc.)		
Communities/General Public	0	The people who have direct or indirect interaction
		with the project and affected by the project.
(Source: own survey data, 2018)		

4.1.2. Organizational structure, Work relationships and Role of Stakeholders

According to the organizational structure, "Akaki-Kality" Sub-City Housing Development Project office leads the project at the site level. The office has two main sections one is a construction section that is responsible for construction works and the other is procurement and finance office that is responsible for material delivery (raw materials and prefabricated materials). The consultant and contractors are under the management of the construction section. The other important office is MSEs work progress follow up office, it manages and assist all MSEs in the project site. MSE-1 is MSEs who act as subcontractors responsible for installation works in the project and they are under supervision of the main contractors. The others are MSE-2 who is responsible for production works are under the management of procurement and finance section. The project organizational Figure illustrates the organizational structure of enterprises in the project.

Figure 4.1 Organizational Structure of the project



(Source: "Akaki-Kality" Sub-City Housing Development Office, 2008)

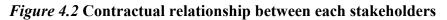
Each stakeholder has a contractual relationship with the client (Addis Ababa "Kality" Sub-City Housing Development Office). For the supervision of the work, it is a simple service contract between the client and the consultant. However, for works contract it is somehow different from the practical works contract

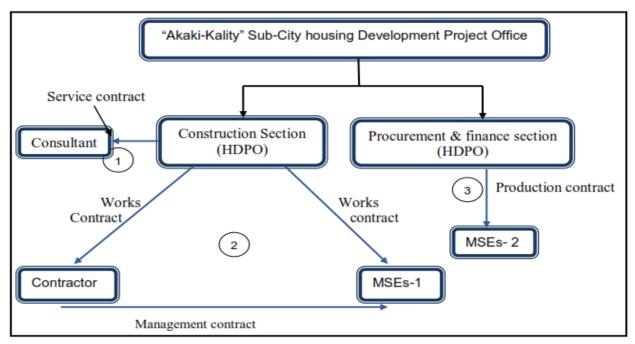
widely used in the construction industry in Ethiopia. There are three types of subcontracting: domestic subcontract, nominated subcontract and selected subcontract. It is customary that a contract is awarded to a giant contractor and the contractor execute the main work and give some parts of the works to any entities or a group of individuals which is called subcontractors:

- Domestic subcontractor is a subcontractor appointed by the main contractor at his discretion.
- Nominated subcontractor is a subcontractor nominated by the employer, which the contractor is obliged to appoint as a subcontractor.
- Selected subcontractor is the subcontractor selected by the main contractor in consultation with the employer as regards to the requirements of the contract.

Among the above stated subcontracting options usually whether it is a public or private building construction contract, domestic subcontracting is common in Ethiopia. As stated in Sub-clause 4.3 of the FIDIC Conditions of Subcontract, the main contractor is the sole responsible entity for the subcontractor he has hired, the contractor himself will make sure the works executed by the subcontractor is in accordance with the contract requirement and the best engineering practice. However, in case of condominium housing projects the employer breaks down the work and gives it to different subcontractors ((MSE-1)), with the capacity of the housing development project office to supervise the works. The number of MSEs and their capacity make supervision difficult and produce less quality work.

To name some of the unique characteristics of this contract; the sub-contractors in this case MSE-1 are assigned by the client, the main works contract is signed by three parties, the contract is a labour contract because the material is supplied by the client, and the contractual agreement is based on a fixed unit price. Thus, the works contract is cooperated contracts signed between the client, the contractor and MSEs-1. The contractor's main responsibility is to construct structures that are listed under table 4.1 above. The main duties of MSE-1 are installation of building fixtures and utilities and painting works. The three parties (HDPO, Contractors and MSEs) sign an agreement on the same contract. The contractor is entitled to 5% of management fee for managing the subcontractor (MSE-1) under his supervision. The other set of contract is a production agreement between Addis Ababa "Kality" sub-city Housing Development Project Office- procurement section and MSEs production workers (MSE-2). This contractual agreement is signed for MSEs to manufacture and supply building components for the project. The different set of contractual agreement between HDPO and each stakeholders is illustrated in the figure in below.





(Source: "Kality" Sub-City Housing Development Office, 2008)

According to their contractual obligation, each stakeholder has specific roles in the project. All stakeholders are aware of their responsibility starting from the commencement of the project.

4.2. Factors affecting the stakeholder management process

This part consists of results and discussion of factors that influence the stakeholder management process. These factors were grouped into six groups. The first group is related to factors affect the management support in stakeholder management process. The second group is related to factors influencing the information input for stakeholder management. The third group is related to factors influence the stakeholder assessment. The fourth group is related to factors affect the decision making in the stakeholder management. The fifth group is related to factors that can make the action and evolution efficiently. The last group is related to the factors of continuous support of the stakeholder management process.

From *Table 4.3*, it is shown the *Relative Importance Index*, and the ranks of each group affecting the stakeholder management process. Thirty factors have been identified through the literature review. The critical success factors will be discussed based on the following assumption: All the factors with mean score 4 and above will be discussed in each group related to the research objectives and research questionnaire.

Table 4.3: Mean values for groups affecting the stakeholder management process

Group	Mean	RII (%)	Rank
Decision making	4.45	88.96	1
Information input	4.45	88.96	1
Management Support	4.31	86.27	3
Action and evaluation	4.15	83.08	4
Continuous support	4.09	81.82	5
Stakeholder assessment	4.05	81.06	6

(Source: own survey data, 2018)

4.2.1. Factors affect the management support

From Table 4.4, it is shown that the "*project manager competences*" was ranked in the first position by the respondents under this group as a critical factor influencing the management support in the stakeholder management process with *Relative Importance Index equals* (94.33%), and the mean of this factor is significantly greater than the group value. This result reflects the satisfaction of respondents regarding the importance of the project manager competencies.

"Managing stakeholder with corporate social responsibilities" was ranked in the second position by the respondents under this group as a critical factor influencing the management support in the stakeholder management process, with *Relative Importance Index* equals (90.62%), and the mean of this factor is significantly greater. This result reflects the satisfaction of respondents regarding the importance of the managing stakeholder with corporate social responsibilities.

"Flexible project organization." was ranked in the last position the respondents under this group with *Relative Importance Index* equals (80.60%), and the mean equals 4.03. The respondents' perceptions showed that there is a need for the flexibility in administering the project to recruit personnel to achieve the objectives for the project, since one objective of stakeholder management was to gain an acceptance from stakeholders on the implementation of the project, so project manager needs delegation and authority from his top management (AAHDPO) in order to able to reach the objective of the project. It sounds that they can't decide autonomously at project site.

Regarding the whole group of "*management support*" it was ranked in the third position among the six groups, with *Relative Importance Index* equals (86.27%), and the mean value of 4.31. The respondents totally agree that this group "*management support*" affect the stakeholder management process. Top level

management support of the implementing agencies, was essential for effective stakeholder engagement (Yang et al., 2009b).

Statement	Mean	RII (%)	Rank
Project manager competencies	4.72	94.33	1
Managing stakeholder with social			
responsibilities	4.19	83.88	2
Flexible project organization	4.03	80.60	3
All factors of the group	4.31	86.27	

Table 4.4: Mean and RII Values of factors affecting the "management support"

(Source: own survey data, 2018)

4.2.2. Factors influencing the Information input

From Table 4.4, it is shown that "*setting common goal and objective of the project*" was ranked in the first position by the respondents under this group as a critical factor influencing the stakeholder management with *Relative Importance Index* equals (89.55%), and the mean value of 4.48. This result illustrates clearly the influence of setting common goal and objective of the project in the stakeholder management process. Since the project managing team (HDPO) should have a good understanding of the tasks and objectives at each particular stage of the project Lifecycle, including such as the issues about cost, schedule, and budget in project level. The obtained results are in line with the findings of Yang et al. (2009b).

"Exploring the stakeholder need and expectation" it was ranked in the second position by the respondents under this group as a critical factor influencing the Information input in stakeholder management with *Relative Importance Index* equals (88.96%), and the mean value of 4.45. This result reflects the satisfaction of respondents regarding the effectiveness of exploring the stakeholder need and expectation during the project process; all stakeholders' needs should be assessed so that a satisfactory and realistic solution to the problem being addressed is obtained. Failing to address and meet the concerns and expectations of the stakeholders involved has resulted in many project failures. The obtained results are in line with the findings of Olander and Landin (2008) and Li et al. (2013).

"Identifying stakeholders" was ranked in the last position by the respondents under this group as a critical factor influencing the information input group in stakeholder management with *Relative Importance Index* equals (88.36%), and the mean value of 4.42. This result reflects 88.36% of respondents regarding the effectiveness of the identification of the stakeholders and their necessary contributions, and expectations concerning rewards for contributions, as a prerequisite requirement for stakeholder assessment in projects for management the stakeholder in the construction project.

Statement	Mean	RII(%)	Rank
Setting common goal and objective of the project	4.48	89.55	1
Exploring the stakeholder need and expectation	4.45	88.96	2
Identifying stakeholders	4.42	88.36	3
All factors of the group	4.45	88.96	

Table 4.5: Mean and RII Value of factors influencing the "information input"

Regarding the whole group of *factors influencing the "information input"* it was ranked in the first position among the six groups, with *Relative Importance Index* equals (88.96%), and the mean value of 4.45. this implies that the *factors influencing the "Information input"* affect the stakeholder management process. As described in the literature part that believe identifying stakeholder information is an effective task for assessing stakeholders, and it is the backbone in the project success.

4.2.3. Factors influence the stakeholder' assessment

As shown in Table 4.6 the "assessing stakeholders' attitude" was ranked in the first position by the respondents under this group as a critical factor influencing the stakeholder' assessment with *Relative Importance Index* equals (83.88%), and the mean value of 4.19. Stakeholder attitude refers to whether the stakeholder supports or opposes the project. This result illustrates clearly that the respondents agreed to this factor and have a strong conformity at this factor to be in the first position. Because stakeholders may have negative or positive impacts on projects, there is a need to determine objectors and supporters. The result indicates that attitude is the main attribute that affect the project's decision-making process in the AAHDP.

"Evaluating the stakeholder legitimacy" was ranked in the second position by the respondents under this group as a critical factor influencing the factors affecting the stakeholder' assessment in stakeholder management process with *Relative Importance Index* equals (83.58%), and the mean value of 4.18. This result reflects the full agreement of respondents regarding the importance of evaluating the stakeholder legitimacy. The legitimacy of a stakeholder gives a sense that legitimacy reflects the contractual relations, legal and moral rights in relationships between stakeholders and a project. Nguyen et al. (2009), Mitchell et al. (1997), and Freeman et al. (2007) are in line with our result as this factor is an important for stakeholder assessment.

"Predicting the influence of stakeholders" was ranked in the third position the respondents under this group with *Relative Importance Index* equals (82.99%), and the mean value of 4.15. This factor plays a significant role in influencing stakeholder' assessment, therefore recognizing the stakeholders' influence

is important to plan and execute a sufficiently rigorous stakeholder management process. A similar result was found by Olander and Landin, (2005), and Olander (2007).

"Understanding area of stakeholders' interests." was ranked in the fourth position by the respondents under this group with *Relative Importance Index* equals (82.69%), and so the mean value of 4.13. The respondents' perceptions showed that, this factor plays a significant role in influencing stakeholder' assessment, identifying stakeholder interests is an important task to assess stakeholders, these interests including Health and safety, work place security and the like.

"Understand the stakeholder urgency" was ranked in the fifth position by the respondents under this group with *Relative Importance Index* equals (82.09%), and the mean value of 4.10. The respondents' perceptions showed that, this factor plays a significant role in influencing stakeholder' assessment. Urgency is described as the degree to which stakeholder claims call for immediate attention, and it decides the extent to which they exert pressure on a project manager by calling for emergency action.

"Evaluate the stakeholder power" was ranked in the sixth position by the respondents under this group with *Relative Importance Index* equals (80.60%), and so the mean value of 4.03. The respondents' perceptions showed that, this factor play a significant role in influencing stakeholder' assessment, the stakeholder power level in the questionnaire is understood as a stakeholder's capacity to make a change in the project, the power as a factor is considered to be a key driver of stakeholder-manager relations, regarding the rank of this factor in sixth position, since most the implemented contracts in Addis Ababa Housing Development Projects are unique type of contract and project managers are protected under this type of contract formulated by the policy makers.

Regarding the whole group of factors influence the "stakeholder' assessment" it was ranked in the sixth position among the six groups with *Relative Importance Index equals* (81.06%), and the mean value of 4.05. The respondents totally agree that the group "stakeholder' assessment" affect the stakeholder management process. To enhance the understanding of project managers on stakeholders, their attributes, behavior, and potential influence need to be assessed and estimated. The ambiguities, conflicts and coalitions among stakeholders also could be analyzed based on the information about stakeholders (Yang et al. 2009).

Statement	Mean	RII (%)	Rank
Assessing stakeholders' attitude	4.19	83.88	1
Evaluating the stakeholder legitimacy	4.18	83.58	2
Predicting the influence of stakeholders	4.15	82.99	3
Understanding area of stakeholders' interests	4.13	82.69	4
Understand the stakeholder urgency	4.10	82.09	5
Evaluate the stakeholder power	4.03	80.60	6
Determine the stakeholder Knowledge	3.94	78.81	7
Analyzing conflicts among stakeholders	3.88	77.61	8
Determine the stakeholder proximity	3.87	77.31	9
All factors of the group	4.05	81.06	

Table 4.6: RII and Mean value of factors influence the "stakeholder' assessment"

4.2.4. Factors affect the decision making

From Table 4.6, it is shown that, "*transparent evaluation of the alternative solution based on stakeholder concern.*" was ranked in the first position by the respondents under this group as a critical factor influencing decision making with *Relative Importance Index* equals (91.64%), and the mean of 4.58. This result reflects 91.64% of respondents regarding the importance of transparent evaluation of the alternative solution based on stakeholder concern, since this factor reflects the style of management of the construction management that leading the success of construction projects in the AAHDP.

"Ensuring effective communication between the project and its stakeholder" was ranked in the second position by the respondents under this group as a critical factor influencing decision making with *Relative Importance Index* equals (90.15%), and the mean value of 4.51. This result reflects 90.15% of respondents regarding the significance of the ensuring effective communication between the project and its stakeholder.

"Formulate appreciate strategy to deal with stakeholder" was ranked in the last position by the respondents under this group with *Relative Importance Index* equals (85.07%), and the mean value of 4.25. The respondents' perceptions showed that, this factor plays a significant role in influencing stakeholder management. The significant effort for the project office in this field is a perquisite since within the management of construction project in the AAHDPO, most of the project's finance are funded by beneficiaries saving and loans from CBE connecting by the implementing AAHDPO and its role mainly as the mediator of the funding body, and there are many stakeholders with different attributes look for achieving the need from the project, so HDPO has to formulate appreciate strategy to deal with those construction stakeholder.

Statement	Mean	RII (%)	Rank
Transparent evaluation of the alternative solution based on stakeholder concern	4.58	91.64	1
Ensuring effective communication between the project and its stakeholder	4.51	90.15	2
Formulate appreciate strategy to deal with stakeholder	4.25	85.07	3
All factors of the group	4.45	88.96	

Table 4.7: RII and Mean value for factors affect the "decision making"

Regarding the whole group of "*decision making*" it was ranked in the first position among the six groups, with *Relative Importance Index* equals (88.96%), and the mean value of 4.45, the respondents totally agree that this group "*decision making*" is influencing the stakeholder management process HDPOs have the responsibility to compromise conflicts among stakeholders, and formulate appropriate strategies to manage stakeholders. During the process of decision-making, HDPO should always try to predict the reaction of stakeholders and choose the optimal solution for managing stakeholders.

4.2.5. Factors affect the action and evaluation

From Table 4.7, it is shown that, "*implementing the strategy based on schedule plans*" was ranked in the first position by the respondents under this group as a critical factor influencing the action and evaluation with *Relative Importance Index* equals (86.57%), and the mean value of 4.33. This result reflects the full agreement of respondents regarding the importance of the Implementing the strategy based on schedule plans. This activity is self-explanatory. The formulated strategies should be implemented accordingly, and the outcome of this activity is to keep the project moving forward.

"Evaluation the stakeholder satisfaction in terms of achievement of the stakeholder pre - project expectation" was ranked in the second position by the respondents under this group as a critical factor influencing the action and evaluation with *Relative Importance Index* equals (81.49%), and the mean value of 4.07. The respondents' perceptions showed that, this factor plays a significant role in influencing stakeholder management. It has been emphasized that if a project's key stakeholders are not satisfied with the ongoing project outcomes, the project team will as a result be required to adjust scope, time, cost and quality in order to meet the stakeholders' requirements and expectations.

"Flexibility in the implementing strategy to deal with stakeholder' reaction" was ranked in the last position by the respondents under this group with *Relative Importance Index* equals (81.19%), and the mean of 4.06. This result reflects the full agreement of respondents regarding the importance of flexibility in the implementing strategy to deal with stakeholder' reaction.

Project management must be aware when designing strategies on how to respond to stakeholder claims, and be aware of the implications of their responses to different dimensions of the project success. The obtained results are in line with the findings of Freeman et al. (2007), and Eloranta et al. (2008).

Statement	Mean	RII (%)	Rank
Implementing the strategy based on schedule plans	4.33	86.57	1
Evaluation the stakeholder satisfaction in terms of achievement of the stakeholder pre – project			
expectation	4.07	81.49	2
Flexibility in the implementing strategy to deal with stakeholder' reaction	4.06	81.19	3
All factors of the group	4.15	83.08	

Table 4.8: RII and Mean value of factors affect the "action and evaluated and evaluated at the section at the sect	ation"
--	--------

(Source: own survey data, 2018)

Regarding the whole group of factors affect the "action and evaluation" it was ranked in the fourth position among the six groups, with *Relative Importance Index* equals (83.08%), and *the mean* of 4.15. The respondents totally agree that this group "factors affect the action and evaluation" influencing in the stakeholder management process in AAHDP. The action and evaluation group is the final management activity group in the process of stakeholder management, and the inputs required are the formulated strategies, and the level of stakeholder engagement to ensure effective communication.

4.2.6. Factors affecting continuous support

From Table 4.8, it is shown that, "*communication with the engaging stakeholder properly and frequently*" was ranked in the first position by the respondents under this group as a critical factor affecting continuous support with *Relative Importance Index equals* (87.76%), and the mean value of 4.39. The respondents' perceptions showed that, this factor plays a significant role in influencing stakeholder management. Formal and clear communication channels/networks are needed to warrant an efficient information transfer. Therefore, increasing the degree of communication amongst the project participants, the higher the participant satisfaction. The obtained results are in line with the findings where the information coordination between the HDPO and project parties lead to government satisfaction in a construction project in the AAHDP.

"*Mutual trust and respect amongst the stakeholder*" was ranked in the second position by the respondents under this group as a critical factor affecting continuous support with *Relative Importance Index* equals (86.27%), and the mean of 4.31. Mutual trust is a facilitator of positive relationships among project stakeholders. Trust is argued to enhance a variety of stakeholder relationships, including the project team, HDPO, contractor, consultant, SMEs, beneficiaries, governmental institutes, and other stakeholder that building mutual trust among project stakeholder as an important factor which has a positive impact on the project management success.

"Obtain support assistant from higher authorities" was ranked by the respondents in the third position under this group with Relative Importance Index equals (83.88%), and so the mean of 4.19. The top management in the implementing government organization always monitor the management process, help figuring out problems, and used the effects of stakeholder management as an indicator for performance measurement of the management team, and HDPO during the project Lifecycle face a lot of conflict and sometimes the decisions making need support from other in order to eliminate the objection, and to increase the ability of enforcing that decision. The obtained results are in line with the findings of Yang et al. (2011a)

"Keeping and promoting an ongoing relationship with stakeholder" is ranked the third position under this group with *Relative Importance Index* equals (83.88%), and the mean of 4.19. The result indicates that it is wrong to ignore the stakeholders or attempt to impose a rigid detailed control on the project stakeholder relationship. These are challenging and demands which the HDPO cannot overlook, but have to take into consideration and address.

"*Stakeholder involvement in decision-making*" is ranked in the fifth position under this group with *Relative Importance Index equals* (82.69%), and so the mean 4.13. Participation of project stakeholders in different stages of construction project (e.g. The planning and development phases) can be beneficial in several ways, on the other hand Community opposition for instance; the community in Oromiya Region around Addis Ababa boarder due to various factors had been reported as the main reason for failure in several instances due to low involvement in decision making process, so the stakeholder involvement in housing development projects plays a very important role.

anceing	continuous su	
Mean	RII (%)	Rank
4.39	87.76	1
4.31	86.27	2
4.19	83.88	3
4.19	83.88	3
4.13	82.69	5
3.96	79.10	6
3.93	78.51	7
3.91	78.21	8
3.81	76.12	9
4.18	83.59	
	Mean 4.39 4.31 4.19 4.19 4.13 3.96 3.93 3.91 3.81	4.39 87.76 4.31 86.27 4.19 83.88 4.19 83.88 4.13 82.69 3.96 79.10 3.93 78.51 3.91 78.21 3.81 76.12

Table 4.9: RII and Mean value for factors affecting "continuous support"

4.2.7. The important factors affecting the stakeholder management process on overall

Table 4.9 shows "*project manager competencies*" under the group of "management support (group one)" with *Relative Importance Index* (94.33 %), and "*transparent evaluation of the alternative solution based on stakeholder concern*" under the group of "decision making (group four)" with *Relative Importance Index* equal (91.64 %) were ranked in the top of the factors that affect stakeholder management process. "Evaluate *the stakeholder power*" with *Relative Importance Index* (80.60 %) under the group of "factors that affect organization with *Relative Importance Index* (80.60 %) under the group of "management support (group one)" were ranked in the last position.

Table 4.10: The overall important factors affecting stakeholder management process

Factor	RII (%)	Over- all Rank	Group
Project manager competences	94.4	1	Management support
Transparent evaluation of the alternative solution based on stakeholder concern.	91.6	2	Decision making
Ensuring effective communication between the project and its stakeholder.	90.2	3	Decision making
Setting common goal and objective of the project	89.6	4	Information input
Exploring the stakeholder need and expectation	89	5	Information input

Communication with the engaging stakeholder properly and frequently.	87.8	6	Continuous support
Implementing the strategy based on schedule plans.	86.6	7	Action and evaluation
Mutual trust and respect amongst the stakeholder	86.2	8	Continuous support
Formulate appreciate strategy to deal with stakeholder.	85	9	Decision making
Managing stakeholder with corporate social responsibilities	83.8	10	Management support
Identifying stakeholders	83.8	10	Information input
Assessing stakeholders' attitude	83.8	10	Stakeholder' assessment
Obtain support assistant from higher authorities.	83.8	10	Continuous support
Keeping and promoting an ongoing relationship with stakeholder.	83.8	10	Continuous support
Evaluating the stakeholder legitimacy	83.6	15	Stakeholder' assessment
Predicting the influence of stakeholders	83	16	Stakeholder' assessment
Understanding area of stakeholders' interests	82.6	17	Stakeholder' assessment
Stakeholder involvement in decision- making.	82.6	17	Continuous support
Understand the stakeholder urgency.	82	19	Stakeholder' assessment
Evaluation the stakeholder satisfaction in terms of achievement of the stakeholder pre - project expectation.	81.4	20	Action and evaluation
Flexibility in the implementing strategy to deal with stakeholder' reaction.	81.2	21	Action and evaluation
Flexible project organization	80.6	22	Management support
Evaluate the stakeholder power	80.6	22	Stakeholder' assessment

4.3. Stakeholder assessment

In order to demonstrate the level of stakeholders' influence and how they should engage in construction projects in the condominium houses projects of Addis Ababa, stakeholder assessment will be presented in two subsections as follows: (i) assessing the stakeholder attributes, and (ii) prioritizing stakeholder based on their mean and Relative Importance Index.

4.3.1. Assessing the stakeholder attributes

Based on the obtained resulted in Section 4.2.3 (factors influence the stakeholder assessment), the respondents were agreed that all the selected attributes which are used in this study to assess the

stakeholder are important factors and affecting the stakeholder assessment, and these attributes are: attitude (RII = 83.88%), legitimacy (RII = 83.58%), vested interest (RII = 82.69%), urgency (RII = 82.09%), power (RII = 80.60%), knowledge (RII = 78.81%), and proximity (RII = 77.31%).

After presenting the results of each individual attributes and values of these attributes will be used in prioritizing stakeholder then classifying those stakeholders, and finally examine the challenges for managing construction stakeholder's expectations and influences in condominium houses projects of Addis Ababa, by doing that the objective of this section will be achieved.

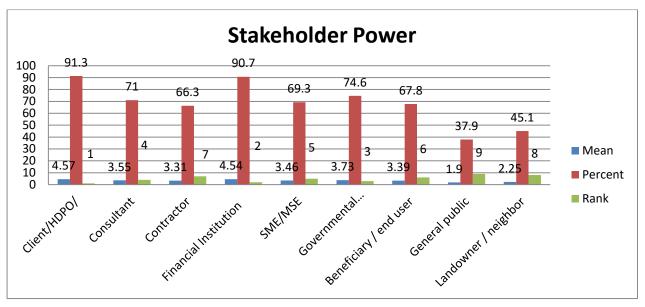
4.3.1.1. Stakeholder power

The responses to this item are used to estimate the value of the power variable for each of the stakeholders (Figure 4.1). All respondents share the view that project *client/HDPO/* (RII = 91.1 %) and *Finance Institutes* (RII = 90.7%) have the highest power. This can be explained by the fact that most construction projects in the condominium houses projects of Addis Ababa have been funded by the loan from CBE and beneficiaries saving account based on the need of the HDPO as client. Therefore, in these projects, the finance institute and HDPO not only have the power of providing finance, but have also held the political power in the national level to formally approve and decide whether the project is to be implemented or changed.

The respondents point out to the power level of *consultant* (RII = 71%) and *governmental agencies* (RII = 74.6%) as moderate. This is not surprising because the consultant only has the power to manage the supervision activities in the project, deal with technical issues and assist HDPO in making decisions related to projects. But they have no power to decide either financial issues or changes.

Respondents think that *the beneficiary* (RII = 67.8%), *contractor* (RII = 66.3%), and *SMEs* (RII = 69.3%) have some capacity to stop, terminate or change the work in the project.

Additionally, respondents agree that the power level of *landowner* (RII =45. 1%), and *general public* (P=37.9%) in construction projects is low, since both of them are external stakeholder and their attitude toward the project based mainly on the reaction to the implemented activity. Therefore; some contractors and MSEs (almost half of the respondents) are reserved to communicate with the HDPO and consultant whenever necessary due to their power influence.



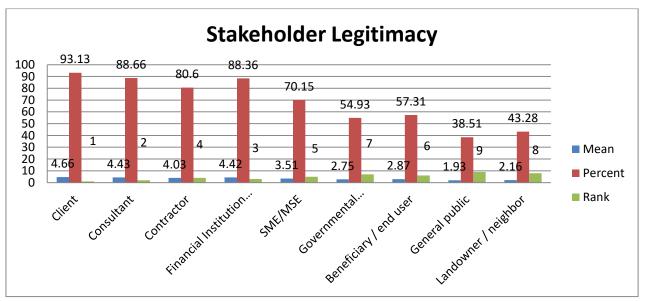
4.3.1.2. Stakeholder legitimacy

The respondents think that this group (*client/HDPO/, consultant, Finance institute, and contractors*), has a high degree of legitimacy, because they are internal stakeholders and they have been integrated into a construction project, and their valid relationships with projects which are stipulated in the contract, and the following result is obtained (Figure 4.2); *client/HDPO/* (RII = 93.13%), consultant (RII = 88.66%), *Finance institute* (P= 88.36%), and contractor (RII = 80.60%).

SME's (RII = 70.15%) also has a contractual relation, but it seems to be the degree of legitimacy is less than the first group, since these SME's are a supplying prefabricated construction components and service provider for the contractor as a sub-contractor and this role was clear enough for respondents to classify them in a less degree of legitimacy.

Beneficiary and *government Authorities* record the following score respectively (beneficiary RII = 57.31%, and government Authorities RII = 54.93%). The reason for this is that there is a legal requirement toward these two stakeholders should be considered in the project.

It is not surprising that respondents believe that legitimacy of both landowner (RII = 43.28%) and general public (RII = 38.51%) is low, since legal requirement toward these two stakeholders there is not significant from point view of the respondents. They have unrealistic expectations.



(Source: own survey data, 2018)

4.3.1.3. Stakeholder urgency

In general, HDPO management teams tend to respond to the demands of all stakeholders (Figure 4.3). Specifically, managing teams asked immediately urgent reply to the claims of *the client/HDPO/* (RII = 90.75%), and *Financial Institution* (RII = 86.27%).

Thus, HDPO rate the overall communication between project participants as medium. The other most important urgency is project financing for the contractor's and sub-contractor's (MSEs) payment.

Urgent reply with a short time frame to *the consultant* (RII = 79.7%), *contractor* (RII = 71.34%), *SME's* (RII = 69.55%), *beneficiary* (RII = 67.76%), and *government Authorities* (RII = 62.99%). Contractors and MSEs who are responsible for the execution of the construction work jointly under the supervision of the consultant but their urgency for the project as the result showed that depend on the project managing team /HDPO/ and finance.

Meanwhile, the claims of the rest of the listed stakeholders (*landowner*,41.49% and general public, 38.21%) are replied to within the planned time.

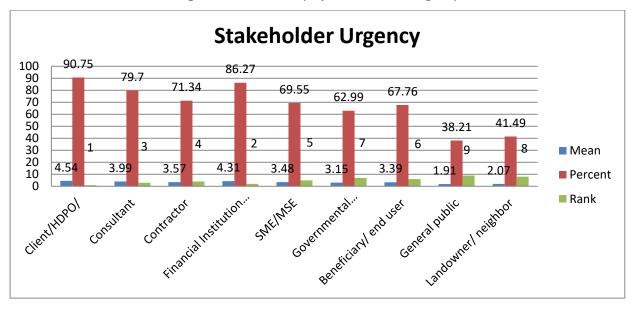


Figure 4.5: Summary of stakeholder urgency

4.3.1.4. Stakeholder proximity

All respondents believe that *HDPO* (RII = 87.76%) and *consultant* (RII = 84.78%) directly work full time from the beginning, to the closure of construction projects, since the HDPO follow up the project from preliminary design up to finalizing the project, and consultant beside the supervision of the implementation many times he performs the design and preparing of project documents. Meanwhile, most other stakeholders have directly participated in projects, However, they did this on a part-time basis as they also simultaneously engage in other projects so the more common the challenge in the project and the first in that order is low commitment to execute the construction timely; *contractor* (RII = 73.43%) whom participated mainly in the implementation phase (Figure 4.4).

SME's (RII =71.94%), *Financial Institution* (RII = 69.55%), *beneficiary* (RII = 68.66%), and *governmental* Offices (RII = 64.78%) are routinely involved in the work. On the other hand, *landowner* (RII = 40%), and *general public* (RII = 40.6%) detach from the work, but they have regular contact with or input in the project process.

The most important communication is between contractors and MSEs because they have a tied work relation. As a result of the contractors, communicating with the MSEs is difficult while MSEs are not attach with the contractors for the project execution success. Thus, according to result effective problem solving mechanism is not practiced on site between stakeholders.

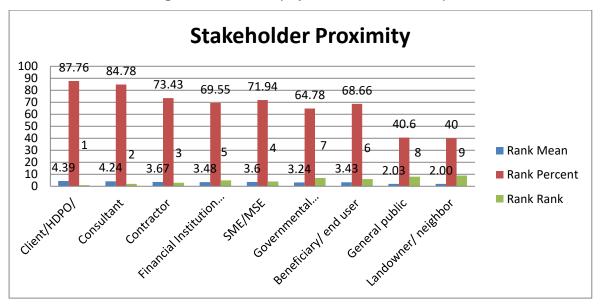
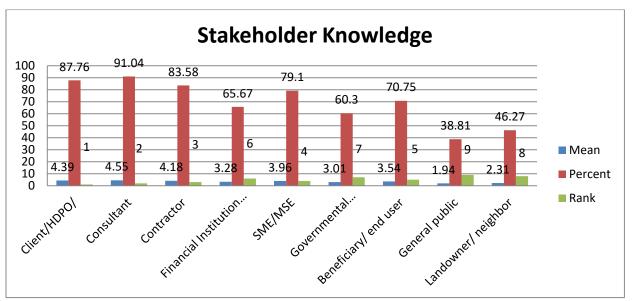


Figure 4.6: Summary of stakeholder Proximity

4.3.1.5. Stakeholder knowledge

All respondents (*Figure 4.5*) agree that *the consultant* (RII = 91.04%), and *client/HDPO*/ (RII = 87.76%), and *contractor* (RII = 83.58%) could have a full awareness of projects, this can be explained by the fact that the client/HDPO/, consultant, and contractor are the people who take full responsibility, take charge in dealing with technical issues, solving problems, attending meetings etc. throughout the project Lifecycle. The results also show that *MSE's* (RII = 71.94%), and *Financial Institution* (RII = 69.55%), *beneficiary* (RII = 68.66%), and *governmental authorities* (RII = 64.78%) have a considerable knowledge of the project activities. MSEs struggle to apply quality system because of lack of technical skills. Technically majority of government authorities have problem in following up on the project as required especially regarding to fulfil the infrastructure for the project.

In contrast with *general public* (RII =40.6%) and *landowner* (RII = 40%) whom has the least degree of knowledge. So there is knowledge and experience gap between stakeholders even MSEs and contractors themselves. They do not prepare schedules for material request and work progress and many are not well organized in their working methodology and keeping data. As this is the case, the majority of the respondents (MSEs) find the contractual and technical documents unclear and difficult to understand because of their less educational background and lack of work experience.



⁽Source: own survey data, 2018)

4.3.1.6. Stakeholder vested-interest

In the light that stakeholders are characterized as having a 'stake' in the proposed project and trying to influence its implementation so as to guard their individual interests (*Figure 4.6*). The respondent clarifies that *client/HDPO/* (RII = 87.76%), *consultant* (RII = 91.04%), *contractor* (RII = 83.58%), and *Financial Institution* (RII = 79.10%) have an interest in the construction project and trying to influence the implementation of the project, since they are the key player whom decide the final shape of the project.

Beneficiary (RII = 64.48%), *SME's* (RII = 60.6%), and *governmental authority* (RII = 58.81%) have a moderate interest. While *landowner* (RII = 47.48%), and *the general public* (RII = 47.46%) have a low interest.

The occupants are not at all satisfied with the houses they are living in due to the poor quality and defects of the construction. The majority of MSEs were concerned and influenced about the stability of their job. This together with insufficient profit from the project, lack of working space and supply of less quality raw material affects their interest negatively.

Gov't authorities also influenced due to access to finance, insufficient commitment and long payment processing. The landowners and communities have complain concerning the insufficient compensation they received from the government.

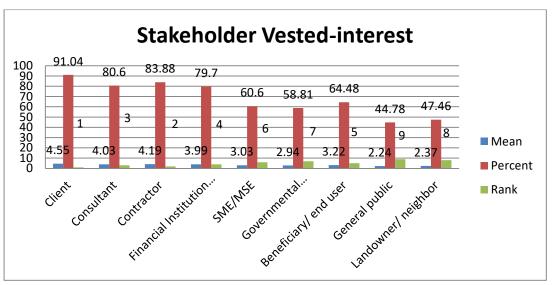


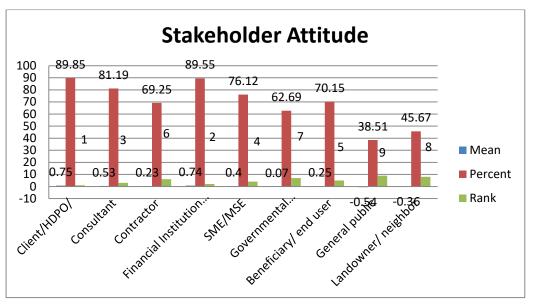
Figure 4.8: Summary of stakeholder vested-interest

(Source: own survey data, 2018)

4.3.1.7. Stakeholder attitude

Most respondents think that *client/HDPO/* (RII = 89.85%), and *Financial Institution* (RII = 89.55%) express an active supporting attitude towards projects. This can be explained by the fact that the success of those projects would have created many advantages, such as encourage for saving, and achieving the strategic goal for the socioeconomic development of the country. Also it is apparent that *the consultant* (RII = 81.85%), and *SME's* (RII = 76.12%) express a range of passive support attitudes. *Beneficiary* (RII = 70.15%), *contractor* (RII = 69.25%), and *government authorities* (RII = 62.69%) express a range of passive support attitudes to no commitment, for the beneficiary/ end-user this related to the degree of satisfaction from taking their expectation in the project, from contractor point of low bidding price has its effect on the degree of commitment.

The project has political implications; the issue of the lat two stakeholder's issues as external stakeholders might not be sound for the HDPO officials thus they might be reserved to cooperate with the project work. *The landowner* (RII = 45.67%), and *general public* (RII = 38.51%) express a range of no commitment to passive opposite, this can be explained by the fact that the landowner/ neighborhood of the project is always looking for protecting their benefits rather than the project itself. So these stakeholders are unable to share the vision.



⁽Source: own survey data, 2018)

4.4. Practical approaches for effectiveness of analyzing stakeholders

To evaluate the current practice approaches of stakeholder management in the construction project. Stakeholder analysis and engagement are the main tasks in stakeholder management. To identify operational approaches for stakeholder analysis and engagement, the questionnaire survey was done to evaluate the current practice of strategic stakeholder management in the construction project. To achieve the research objective three questions were designed in the questionnaire to evaluate the most effective approach that the respondents usually used in current practice of managing the stakeholder in the following issue: (i) analyze stakeholders' concern and need; (ii) effectiveness of stakeholder management; (iii) response strategy to deal with the stakeholder claims.

4.4.1. Approaches of analyzing stakeholders' concern and need

The respondents were asked about their points of view regarding the effective approaches to analyze stakeholders' concern and need in the condominium houses construction project of Addis Ababa.

The analyzed results in Table 4.10 indicated the project management teams considered the approaches was useful, and it should be used as a supplement to a systematic process of stakeholder management.

Approach	Mean	Rank
Personal past experience	4.49	1
Interviews	4.07	2
Professional services	3.90	3
Workshops	3.78	4
Questionnaires and surveys	3.48	5

Table 4.11: Effective approaches to analyze stakeholders' concern and need

(Source: own survey data, 2018)

In terms of analyze stakeholder concern and need "personal past experience" is ranked higher, this indicates that the experience of HDPO who responsible for managing the project is important. This finding is in line with the study conducted by Chinyio and Akintoye (2008), as they identified 'intuition' as an important approach for stakeholder management.

Interview fall in the second rank, since HDPO when they do not prepare schedules for material request and work progress and many are not well organized in their working methodology and keeping data about the need and concern of the stakeholder, they face a problem related to the availability of full information, so the interview gives them an opportunity to overcome this problem since the interview is usually low cost, and easy to arrange.

Professional services come to the third rank, since it provides complete plans for stakeholder management, and saves time for HDPO officers and consultants. Workshop fall in the fourth ranks, by selecting this approach HDPO will get a chance for discussion on criteria or analysis of alternatives with contractors and MSE's/SMEs, but they need to be well facilitated and interpersonal skills to deal with challenging issues. As the project involves so many stakeholders, it is necessary to identify the type of relationship and flow of communication among project participant. One of the professional service and workshop are giving trainings on the selected subject matters related to the project implementation and creating awareness regarding the goal and objectives of the AAHDP for MSE's/SME's, contractors and supervisors.

Questionnaires and surveys are ranked in lowest position, since the HDPO is a governmental organization that not well defined to practice the project management skills and knowledge due to the political influence, and the information gathered can be superficial and the reasons behind an opinion may not always be clear.

4.4.2. Approaches of effective stakeholder management

Based on the obtained resulted in Section 4.2.3 (factors influence the stakeholder assessment), each attributes have its strengths and limitations, so the most appropriate way for effectiveness of stakeholder management is to use a combination of elements of each approach as circumstances dictate.

The respondents were asked about their points of view regarding the effective approaches to manage stakeholders needs and expectations in the construction project. Table 4.11 below shows the statistical analysis results including mean, and Relative Importance Index for this question.

According to the results of the questionnaire, 'meeting' is ranked first, followed by 'interviews', 'negotiation', 'social contact', and 'workshop'.

Meetings and interview the most common approaches for engaging stakeholders in a construction project in the housing construction project of Addis Ababa. Since the meeting is face-to-face contact ensures attendees understand the issues and information that can be elicited about opinions they express, and cheap and relatively easy to organize. On the other hand, interview give the ability to explain points in own local language, and usually low cost and easy to arrange.

Approach	Mean	Rank
Meeting	4.72	1
Interviews	4.28	2
Negotiation	3.99	3
Social Contacts	3.66	4
Workshops	3.36	5

Table 4.12: Effective communication approaches to manage the stakeholders

(Source: own survey data, 2018)

Negotiations can also be categorized as communication with stakeholders, especially settling disputes and problems. Social contacts are informal approach, but it seems to be an effective approach for establishing and maintaining relationships with some stakeholder that used by the project managing team, and it helps in building trust with stakeholders, and maximizes two-way dialogue.

The workshop is ranked in lowest position, since HDPO needs to be well facilitated, and have to have the interpersonal skills to deal with challenging issues, although it is an excellent approach for discussion on criteria or analysis of alternatives.

As the result obtained in section two and three, each stakeholder has their own priorities. And also during face to face interview, both the consultants and HDPO officers criticize contractors because of their priority to maximize profit at any cost. Even if the contractors agree profit as their priority, also they agree completion on time and gaining experience are their highest priority. From the survey made on customer satisfaction, more than 75% of occupants (the respondents) are not satisfied with the quality of the houses they are living in. Yet there is no independent office to report their complaint. Thus, customer satisfaction is addressed in the survey because meeting customer satisfaction is one of the effectiveness indicators. The interview findings include all stakeholders' opinion on customer satisfaction. Accordingly, 80% of contractors mention that customer satisfaction is their priority but practically there are no project participants who satisfy their needs and expectations. The consultant stated that they are trying to meet customer satisfaction through undertaking performance measurement and give the feedback to contractors every two weeks. The construction officer from HDPO added that it is difficult to satisfy all the customers with all the constraints the project has. One of the coordinators of the consultant during the interview mentioned how difficult it is to perform coordination work between contractors and MSEs, because MSEs-2 might not be there when the contractor need them. He also added that there are times that they vanished from the site for a long time so that they need to search them through phone. This would affect contractor's performance and might incur additional cost and time.

In general, the findings in assessing effectiveness of stakeholder management at "Akaki-kality" condominium house construction project of Addis Ababa tell that there are conditions that affect the motivation of project participants, each stakeholder has their own priority, customer satisfaction is not the main concern, and there is a coordination problem among them. Through these all, no one can assure that there are shared vision to achieve the AAHDP goal and mutually understanding towards successfulness.

Chapter 5: CONCLUSION AND RECOMMENDATION

This chapter includes the conclusions and recommendations of the practices and challenges of stakeholder management: case of Addis Ababa Housing Development Project at "Akaki-kality" project site, and recommendations for future study are suggested.

5.1. Conclusion

This research had four primary objectives, which were achieved through the data collection using survey techniques and the detail analysis of the survey results. Based on the results obtained from this study, the following conclusions of the study are drawn:

There are 9 stakeholder groups identified by researcher with their duties and responsibilities they include; AAHDPO, Consultant, Contractors, MSEs, Financial institution, government Authorities, Public Authorities, Beneficiaries/end users and community.

Following this was a total of 30 factors affecting the stakeholder management process were synthesized in six groups in the survey, which were shown to be reliable. Data were collected from a representative sample of government(HDPO), private (Contractors and consultants), MSEs/SMEs and occupants in the Addis Ababa housing development project at "Akaki-kality" project site. The findings from the study show that 23 factors are regarded as critical for the success of the stakeholder management process in construction projects by most respondents. The most top three factors that affect the stakeholder management process in the construction project were ranked based on their *Relative Importance Index* are: hiring a project manager with high competencies (RII = 94.4%), transparent evaluation of the alternative solution based on stakeholder concern (RII = 91.6%), and ensuring effective communication between the project and its stakeholder (RII = 90.2 %).

From the findings of section 3 assessing the stakeholder attributes, it is simple to conclude that, challenges of stakeholder management in Addis Ababa housing development project at "Akaki-kality" construction site are summarized as below:

- Some contractors and MSEs (almost half of the respondents) are reserved to communicate with the HDPO and consultant whenever necessary their power influence.
- Low commitment of the contractor to execute the construction works.
- Consultants have no power to decide either financial issues or changes.
- Landowners and communities have unrealistic expectations.

- Most of the stakeholders have limited knowledge of the project activities except HDPO, Contractors and Consultants.
- Low (MSEs, Landowners, and communities) involvement in decision making process.
- Conflicting interests of local community/neighborhood of the project always looking for protecting their benefits rather than the project itself.

Finally, Meetings and interview the most common approaches for communicating stakeholders in a construction project in the housing construction project of Addis Ababa at "Akaki-kality" site. The ultimate test of the effectiveness of communication with stakeholders is assuring the effectiveness of stakeholder management (Doloi. H., 2013). From obtained results of section four above: lack of collaborative working atmosphere at the project site, Lack of good communication between project participants, coordination problem between contractor and MSEs.

From the literature of this study, for effectiveness of stakeholder management identify and prioritize stakeholders, understand stakeholder's needs and expectations, manage expectations through tailored communication and then getting feedback from the stakeholders themselves are very crucial (Yang et al., 2011a). So it is assumed that unsatisfactory and unrealistic solution to the problem being addressed is obtained to meet the concerns and expectations of the stakeholders involved has resulted the effectiveness of stakeholder management.

5.2. Recommendation

As concluded in the above sections, the following recommendations are the most important ones that can be realized by this study.

- It is advisable that the HDPO recruit a project managing team based on competencies to lead the management of the stakeholder successfully, in the same time to delegate a suitable degree of authority and delegation to the project management team.
- The HDOP in collaboration with concerned offices should provide training courses to the project management team in the area of communication and negotiation with stakeholders in order to increase their awareness regarding this issue.
- The project managing team/HDPO/ have to develop the project communication management plan. In order to ensure the effective communication between the project and its stakeholder to build a relationship based on the mutual trust, in the same time to involve

them in the decision making according to their interest issue based on agreed common goals, objectives, and project priorities.

5.3. Recommendations for further study

Based on the limitations of the study,

- It will be necessary to conduct additional study on the private construction projects, since this type of project is growing rapidly, as a result of the demand for the private housing projects is increased in Ethiopia.
- Further study is needed to examine and evaluate the application of the stakeholder assessment in construction project management across different stages and levels of project execution.
- Finally, I recommend to develop a framework for stakeholder management process in the construction project.

REFERENCE

AAHA (2012), progress report of condominium houses, AAHA, AA

- Arditi, D. & Gunaydin, H. (1998), "Factors that affect process quality in the lifecycle of building projects", Journal of Construction Engineering and Management, ASCE, vol. 124, pp. 194-203.
- Assudani, R. and Kloppenborg, T. J. (2010), Managing stakeholders for project management success: an emergent model of stakeholders. Journal of General Management, *35 (3), pp. 67-80*.
- Atkin, B. and Skitmore, M. (2008) Editorial: stakeholder management in construction, Construction Management and Economics, 26 (6), pp. 549-552.
- Bourne, L. Walker, D. H. T. (2006). Visualizing stakeholder influence two Australian examples. *Project Management Journal*, 37 (1), pp. 5–22.
- Brooke, K. and Litwin, G. (1997) Mobilizing the partnering process. Journal of Management in Engineering, 13 (4), pp. 42-48.
- Chen, W. T., Chen, T. T. (2007) Critical success factors for construction partnering in Taiwan. International Journal of Project Management, 25 (5), pp. 475–484.
- Cleland, D.I. and Ireland, R.L. (2007) Project Management: Strategic Design and Implementation, *New York, McGraw-Hill.*
- Doloi. H. (2013), Cost Overruns and Failure in Project Management: Understanding the Roles of Key Stakeholders in Construction Projects", Journal of Construction Engineering and Management, 139(3), pp.267-279.
- Doloi, H. K. (2011) Understanding stakeholders' perspective of cost estimation in project management. International Journal of Project Management, **29** (5, **pp**.622–636.
- EBCS-2, (1995); Ethiopian Building Codes and Standards, Structural Use of Concrete.
- El-Gohary, N. M., Osman, H. and Ei-Diraby, T.E. (2006) Stakeholder management for public private partnerships, *International Journal of Project Management*, 24 (7), pp. 595-604.
- Elias, A.A., Cavana, R.Y. and Jackson, L.S. (2002) Stakeholder analysis for R&D project management. R&D Management 34 (2), *pp. 301–310*.
- Freeman, R.E., Harrison, J.S. and Wicks, A.C. (2007) Managing for Stakeholders Survival, Reputation, and Success, Louis Stern Memorial Fund, US, pp. 53.
- George, D. and Mallery, P. (2003). SPSS for window step by step. Fourth edition.
- GTZ-IS/ Ethiopia 2003 and 2005, Low cost housing technical manual (1), Ministry of Federal Affairs, Addis Ababa.
- Hiwot Bahru Gemeda, (2012); "Effect of poor project performance on the quality of housing construction: Case of condominium houses in Addis Ababa", *Thesis of MSc Programme in Urban Management and Develop, Rotterdam, The Netherlands.*
- Jefferies, M., Gameson, R. and Rowlinson, S. (2002) Critical success factors of the BOOT procurement system: reflections from the Stadium Australia case study. *Engineering, Construction and Architectural Management*, 9 (4), pp. 352-361.
- Jepsen A. L. and Eskerod, P. (2009) Stakeholder analysis in projects: Challenges in using current guidelines in the real world. *International Journal of Project Management*, 27(4), pp. 335–343.
- Jergeas, G.F., Eng. P., Williamson, E., Skulmoski, G.J. and Thomas, J.L. (2000) Stakeholder management on construction projects, 2000 AACE *International Transaction*, 12.1-12.6.

- Karlsen, J.T. (2008) Project stakeholder management, Engineering Management Journal, 14 (4), pp. 19-24.
- Li, Y., Lu, Y. and Peng, Y. (2011) Hierarchical structuring success factors of project stakeholder management in the construction organization. *African Journal of Business Management*, 5 (22), pp. 9705-9713.
- Lim, G., Ahn, H. and Lee, H. (2005) Formulating strategies for stakeholder management: A case-based reasoning approach. *Expert Systems with Applications, 28 (4), pp. 831–840.*
- Mitchell, R.K., Agle, B.R. and Wood, D.J. (1997) Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review*, 22 (4), pp. 853-887.
- Moore house consulting. (2007). Beyond Conventional Stakeholder Management: Developing PRIME Intelligence on Complex Programmes. Available: http://www.moorhouseconsulting.com/.
- Neil, Walker A. (2011) Managing Stakeholder Expectations
- Olander, S. (2007) Stakeholder impact analysis in construction project management. Construction Management and Economics, 25 (3), pp. 277-287.
- PMI (Project Management Institute) (2008) A Guide to the Project Management Body of Knowledge, Fourth version, Newtown Square, Pa, p. 246
- Project Management Guidelines (2011) available at:http://www.egovernment.tas.gov.au [Accessed 14/05/2018]
- S. Hammad, "Investigating the Stakeholder Management in Construction Projects in the Gaza Strip," Available: https://www.researchgate.net/publication/256295321
- S. Olander and A. Landin, "Evaluation of Stakeholder Influence in the Implementation of Construction Projects," *International Journal of Project Management, Vol. 23, No. 4, 2005, pp. 321-328. Available: http://dx.doi.org/10.1016/j.ijproman.2005.02.002*
- Smith, J. and Love, P.E.D. (2004). Stakeholder management during project inception: Strategic needs analysis. *Journal of Architectural Engineering*, 10 (1), pp. 22–33.
- Takim, R. (2009) The management of stakeholders' needs and expectations in the development of construction project in Malaysia. *Modern Applied Science*, 3 (5), pp. 167–175.
- Tam, V. W. Y. and Le, K. N. (2006). *Environmental assessment by power spectrum*. Sustainable Development through Culture and Innovation.
- UN-HABITAT 2011a, Condominium housing in Ethiopia: the integrated housing development program, UNON publishing services section, Nairobi
- Walker, D.H.T. Bourne, L.M. and Shelley, A. (2008) Influence, stakeholder mapping and visualization. *Construction Management & Economics, 26 (6), pp. 645-658.*
- Yang, J. Shen, G. Q. Derek, S. M. and Hoa, Xue, X. (2011a) Stakeholder management in construction: An empirical study to address research gaps in previous studies. *International Journal of Project Management*, 29 (7), pp. 900–910.
- Yang, J., Shen, G.Q., Ho, M., Drew, D.S. and Chan, A.P., (2009). Exploring critical success factors for stakeholder management in construction projects. *Journal of civil engineering and management*, 15(4), pp.337-348.

Annex: Questionnaire

ADDIS ABABA UNIVERSITY

School of Commerce

Questionnaire

Thank you for taking time for the questionnaire. This questionnaire is a study instrument for the fulfilment of my MA program in Project Management and of the study on "*Practices & Challenges of Stakeholder Management in Addis Ababa Housing Construction Projects*". Your response will be completely anonymous and confidential, will not be identified by individual. All responses will be compiled together & analyzed as a group.

Instructions:

- 1. Please answer this questionnaire with reference to your previous experience about stakeholder management of one representative project that you have participated.
- 2. Please answer the questions by ticking the appropriate box, e.g. Divil work.

Questionnaire Contents:

Part I: General information

Part II: Factors affecting the stakeholder management in the construction project.

Part III: Stakeholder management practice

Part IV: Evaluate the attributes of the stakeholders in the construction project.

If you have any queries, please contact me at (0911-398083) or via email at <u>aklilm2004@gmail.com</u>

Yours Sincerely,

Aklile Tesfaye

PART I:	Personal Information				
	Nature of Institution	Governmental	Private	SME	Others
	Nature of institution				
	Your position	General Manager	Project Manager	Supervisor engineer	Others
	Your experience	Less than 5 years	5–less than 10 years	10 – less than 15 years	More than 15 years

PART II: Factors affecting the stakeholder management in the construction project

Based on your experience in the field of project management, please give feedback to the following questions

2.1 Management Support								
		(5)	(4)	(3)	(2)	(1)		
NO.	To what extent do you think that the following	Strongly				Strongly		
	factors are effective in managing the stakeholders?	agree	Agree	Neutral	Disagree	disagree		
1	Managing stakeholder with corporate social responsibilities							
2	Flexible project organization							
3	Project manager competences							
	5 6 1							

2.2 Infor	mation input					
No.	To what extent do you think that the following factors are effective in managing the stakeholders?	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
		ugree	Agree	Neutrai	Disagree	uisugree
1	Setting common goal and objective of the project					
2	Identifying stakeholders					
3	Exploring the stakeholder need and expectation					
2.3 Stake	holder assessment					
		(5)	(4)	(3)	(2)	(1)
No.	To what extent do you think that the following factors are effective in managing the stakeholders?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Assessing stakeholders' attitude					
2	Understanding area of stakeholders' interests					
3	Predicting the influence of stakeholders					
4	Analyzing conflicts and coalitions among stakeholders					
5	Evaluate the stakeholder power					
6	Evaluating the stakeholder legitimacy					
7	Understand the stakeholder urgency .					
8	Determine the stakeholder proximity.					
9	Determine the stakeholder Knowledge.					

2.4 Decisi	2.4 Decision making								
		(5)	(4)	(3)	(2)	(1)			
No.	To what extent do you think that the following factors are effective in managing the stakeholders?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
1	Transparent evaluation of the alternative solution based on stakeholder concern.								
2	Ensuring effective communication between the project and its stakeholder.								
3	Formulate appreciate strategy to deal with stakeholder.								

2.5 Actio	n and evaluation					
		(5)	(4)	(3)	(2)	(1)
No.	To what extent do you think that the following factors are effective in managing the stakeholders?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Implementing the strategy based on schedule plans.					
2	Flexibility in the implementing strategy to deal with stakeholder' reaction.					
3	Evaluation the stakeholder satisfaction in terms of achievement of the stakeholder pre - project expectation.					
2.6 Conti	nuous support					
		(5)	(4)	(3)	(2)	(1)
No.	To what extent do you think that the following factors are effective in managing the stakeholders?	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	Communication with the engaging stakeholder properly and frequently.					
2	Stakeholder involvement in decision-making.					
3	Keeping and promoting an ongoing relationship with stakeholder.					
4	Analyzing the change of multiple stakeholder engagement and the relation.					
5	Obtain support assistant from higher authorities.					
6	Mutual trust and respect amongst the stakeholder					
7	Reduce the uncertainty					
8	Maintain alignment between or among the stakeholder					
9	Access to resource and knowledge					

PART III : Evaluate the Attributes of the Stakeholders in the Construction Project. Based on your experience in the field of project management, please give feedback to the following questions 4.1 Attitude: refers to whether the 4.2 Vested Interest: Stakeholder Stakeholder supports or opposes the interest in a project How do you evaluate the attributes of the following project No. stakeholders? (5) (4) (3) (2) (4) (3) (2) (1) (1) (5) Very High Very Very High Very Low Medium Medium High Low High Low Low 1 Client 2 Consultant 3 Contractor 4 **Financial Institution** 5 SME/MSE Governmental Authorities 6 7 Beneficiary / end user 8 General public 9 Landowner / neighbor

		4.3 Power: stakeholder's capacity to make a change in the project					4.4 Proximity: relation type between stakeholders and projects				
No.	How do you evaluate the attributes of the following stakeholders?	(5)	(4)	(3)	(2)	(1)	(5)	(4)	(3)	(2)	(1)
		Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low
1	Client										
2	Consultant										
3	Contractor										
4	Financial Institution /Donor										
5	SME/MSE										
6	Governmental Authorities										
7	Beneficiary / end user										
8	General public										
9	Landowner / neighbor										

No.	How do you evaluate the attributes of the following stakeholders?		4.5 Legitimacy: the relation type between stakeholders and projects				4.6 Urgency: level of response to claims made by each stakeholder in projects.				
		(5)	(4)	(3)	(2)	(1)	(5)	(4)	(3)	(2)	(1)
		Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low
1	Client										
2	Consultant										
3	Contractor										
4	Financial Institution /Donor										
5	SME/MSE										
6	Governmental Authorities										
7	Beneficiary / end user										
8	General public										
9	Landowner / neighbor										
	How do you evaluate the attributes of the following stakeholders?	4.7 Knowledge: Stakeholder									
			knowledge of project activities								
No.		(5)	(4)	(3)	(2)	(1)					
		Very High	High	Medium	Low	Very Low					
1	Client										
2	Consultant										
3	Contractor										
4	Financial Institution /Donor										
5	SME/MSE										
6	Governmental Authorities										
7	Beneficiary / end user										
8	General public										
9	Landowner / neighbor										

PART IV Stakeholder management practice

Based on your experience in the field of project management, please give feedback to the following questions

3.1 Methods of analyzing stakeholders' concern and need

To what extent do you think the following methods are effective to analyze stakeholders' concern and need?

No.	Methods	(5)	(4)	(3)	(2)	(1)
		Strongly				Strongly
		agree	Agree	Neutral	Disagree	disagree
1	Personal past experience					
2	Interviews					
3	Questionnaires and surveys					
4	Professional services					
5	Workshops					

3.2 Effec	3.2 Effectiveness of stakeholder Management								
To what extent do you think the following dimensions are effective to communicate the stakeholders?									
	Dimensions	(5)	(4)	(3)	(2)	(1)			
No.		Strongly				Strongly			
NO.		agree	Agree	Neutral	Disagree	disagree			
1	Meeting								
2	Interviews								
3	Negotiation								
4	Social Contacts								
5	Workshops								

3.3 Assessing Effectiveness of stakeholder Management

To what extent do you think the following dimensions are effective to manage the stakeholders?

No.	(5) Measurement indicators agree	(4)	(3)	(2)	(1)	
			Agree	Neutral	Disagree	Strongly disagree
1	Accessibility to the decision making process					
2	Clear understanding of stakeholder interests and concerns					
3	Diversity of views represented					
4	Integration of interests and concerns					
5	Information exchange					
6	Mutual learning/respect					

Thank you for your valuable contribution!