St. Mary's University School of Graduate Studies Department of Project Management



# AN ASSESSMENT OF THE PROJECT PLANNING PRACTICES OF ADDIS ABABA HOUSING PROJECT IN THE SITES PROJECT14, PROJECT13, KILINTO AND HEAD OFFICE

**BY: SADIK MOHAMMED** 

(SGS/0529/2008A)

June 2017

Addis Ababa

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# A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY DEPARTMENT OF PROJECT MANAGEMENT FOR THE PARTIAL FULFILLMENT OF MASTER OF ARTS (MA) DEGREE IN PROJECT MANAGEMENT

June 2017

Addis Ababa, Ethiopia

# ST.MARYS'S UNIVERSITY SCHOOL OF GRADUATE STUDIES DEPARTMENT OF PROJECT MANAGEMENT

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# **APPROVED BY BOARD OF EXAMINERS**

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## DECLARATION

I, Sadik Mohammed, hereby declare that the thesis entitled "An assessment of the project planning practice of Addis Ababa housing project", submitted by me to the award of the Degree of Master of project management from St. Mary's University School of Graduates Addis Ababa, is original work and it hasn't been presented for the award of any other Degree, Diploma, Fellowship or other similar titles of any other university or institution.

Sadik Mohammed

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# **ENDORSEMENT**

This thesis has been submitted to St. Mary's University College, School of Graduate Studies for examination with my approval as a university advisor.

Advisor

signature

St. Mary's University College, Addis Ababa June, 2017

## Acknowledgment

First and for most I would like to thank Allah for making me to complete this paper. I also, would like to thanks to my advisor Dr. Dereje Teklemariam, PhD (Asst.Professor) for his constructive and supportive comments for accomplishing of this paper. I also would like to express my indebted gratitude to my entire friends such as Ali Nurye, Ali Mekonnen and Tsega who encourage me and support me in completing this paper.

Sadik Mohammed

# **Acronyms/Abbreviations**

EVM: earned value management PMI: project management institution PMBOK: project management body of knowledge PMIS: project management information system WBS: work break down structure HRM: human resource management SPSS: statistical package for social sciences SD: standard deviation IMF: international monetary fund CBE: commercial bank of Ethiopia AAHDPO: Addis Ababa housing development project office AAIHDPO: Addis Ababa integrated housing development program office GTZ-IS: German Agency for Technical Cooperation- International Services HDPO: housing development program office GRCI: German reconstruction credit institute PERT: program evaluation review technique CPM: critical path method

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## Abstract

Projects are very essential for the economic growth of a country because infrastructures and other developmental activities are executed through projects. Even if projects are this much important, the level of attention given to them in terms of the effective and efficient implementation is very little. There are so many factors that determine the success of projects. One of these factors is preparation of a sound project plan. Projects with a good project plan are the ones that most likely to be successful. Given the importance of project plan for the success of projects, there are limited evidences (especially in Ethiopia) about the practices of project planning such in the case of the Addis Ababa housing sector. Therefore, the main objective of this study is to assess the project planning practices of Addis Ababa housing project in selected four sites. The study employed survey in its descriptive research design. The target population of the study was staffs of the organization in the selected four sites who are project team members and managers. For data collection stratified sampling is applied. A total of 133 questionnaires were distributed and 123 are returned and used by the researcher. SPSS version 20 is applied for processing and analysis purpose. Based on the study conducted the planning practice of the study organization is poor when assessed based on the survey. The result of the analysis shows that the general project planning practice of the study organization is weak but the level of staff awareness regarding the presence of the project plan is good. On the other hand the most widely used project planning tools work break down structure, Gant chart and project management information system are applicable even if it is not in a satisfactory level. It is recommended that the study organization and other organizations to give due attention for project plan.

Key words: project plan, components of a project plan, integrated project plan.

## **CHAPTER ONE**

## **INTRODUCTION**

## 1.1 Background to the Study

Many projects in the world are failing to be completed according to plan due to poor project planning and problems in the planning phase of the project. The study by Donnelly, Ivancevich and Gibson (1998) has shown the importance of project planning on projects and its influence on project success. Findings of their study have proven that higher levels of project planning effort can result in significant cost and schedule savings and poor planning also causes for the failure and increase of the cost of a project. Stakeholders of projects would like to accomplish their projects successfully, according to their plan and schedule. But they fail to achieve what they plan due to the problem they create in the planning phase of the project. A paper by Pedro (2013) explains that project planning is widely thought to be an important contributor to project success.

According to the research paper by Yu-Ren and Edward (2008) well prepared project plan have an impact on the success of the projects. Many developing countries in the world are affected by poor planning in projects. Weakness in planning and implementation has been identified as one of the main reasons for the disappointing results of projects in Africa Moradat, Merrery, Seshoka and Sally (2005). If you have no plan, by definition, you have no control, because it is your plan that tells you where you are supposed to be in the first place. Furthermore, if you don't know where you are, you can't have control Lewis (2005).

African nations simply do not have adequate institutional capacity or trained personnel to plan and implement projects effectively Lavangon (2014). Projects in Africa fail because of poor planning practices in the projects.

Ethiopia's economy has enjoyed a high rate of economic growth for the past decades IMF (2014). So to make this economic growth sustainable she needs to deliver more electric power, roads and expansion of different infrastructural activities like building of hospitals, schools, telecommunication services and building of residential houses. These activities will be implemented through different projects and which will help for the development of the economy of the country. These projects will help for generating additional capital for the

country. Ethiopia as a nation is investing its scarce resources with a view of improving the living standard and socio economic condition of its citizens. These projects are designed with assumption of efficient management. Even though projects have such major contributions in the development of the economy of a given nation, most of them are failed to be completed as planned. Like that of other African countries Ethiopia is also facing the problem of poor project planning. According Tekalign (2014) project success is highly determined by the performance of the project plan prepared. Although the country is trying to make its projects successful most of them are still are either failing or delaying from their date of completion due to the problem of poor planning Tekalign (2014).

When we come to Addis Ababa housing project, it is one of the few mega projects in Ethiopia which are currently implemented by the Government of Ethiopia and it is also affected by the same problem of poor project planning and which in turn is causing for delay and increasing of cost. According to Hiwot (2012) the projects fail because of the capacity of the contractor and its level of project management skill. In the paper it is stated that the level of the knowledge of the contractors in project management determines the fate of the projects in Addis Ababa housing project. So according to her study poor project planning is also one of the main reasons for the failure of completing projects according to specified schedule, cost and quality. According Yardley (2002) there are different reasons for projects to fail. Among this poor project planning is one of the most common one in projects. So the planning practices of the projects should be improved and be systematized so that all projects can be successful. There are no many studies conducted in the field yet in the country. So this research will help to see the gaps in the planning practice of the organization under study and will help to fill same. After assessing of the planning practices, this thesis will recommend the best project planning practices to the concerned organization and similar project running organizations.

## 1.2 Statement of the problem

Project delay and failure to be completed as planned, is the main problem in our country as like that of the other African countries. Project performance is measured in terms of cost, time, and quality of a project. Usually projects fail due to problems in selection, planning, execution, or control phases of a project. A failure in one of the phases may result in the failure of the whole project. According to Yardley (2002) lack of effective planning processs is the main reason for project failure in developing countries. Like that of other developing countries, the planning practices and process of Ethiopian projects is very poor and even projects usually executed without preparing a proper project plan. The planning processes according to PMI (2001) are highly important, and project execution without proper/poor/ development of a project plan often causes delays, high costs and general execution problems in the project. Without a good plan and estimate, resources cannot be managed or organized, risks cannot be mitigated, dates and budgets cannot be forecasted and effective reporting caused problems in all projects will fail. The lack of an implemented project plan has caused problems in all project management areas and has made it impossible for the management team to have the required control of project activities.

Different studies are conducted by different scholars regarding project planning and its impact on project success. The studies by Wang and Gibson (2008), shows that Time spent on project planning activities will reduce risk and increase project success. Other researchers on the project planning activity such as Morris (1998) and Thomas (2008) showed poor planning and problems in the planning phase will lead to a failed project. But the more planning there is in a project, the more successful the project will be. One of the main reasons of project failure in developing countries is lack of effective or poor project planning process Richard (2012).

The Research conducted by Whitaker (1999) indicates that a project plan which is properly prepared is highly determining factor for the project's success. Raz and Shenhar (2003) also state activities done in the planning phase are the most important ones than the other project phases in determining the success of a project.

Poor project planning is also one of the main problems in the projects of Ethiopia. Even though there are no such enough number of studies conducted in the area in our country, the studies conducted justify the existing of the problem in the projects. A paper by Tekalign (2014) and Hiwot (2012) also states that, the role of a project plan is very high in determining the success of a given project. Therefore according to the ideas stated above by the researchers, even if all the resources are available for a given project, poor planning will result for projects to fail. The researcher believed that Meaningful project success in Ethiopia requires careful study of the projects planning, before the project is undertaken or implemented. Many of the projects in Ethiopia are failing due to poor planning and problems in the planning phase. Therefore this study is aimed to assess the project planning practices of the case organization. Most of the studies conducted by other researchers tried to cover issues like failing to properly initiate, problems in determining the scope and in the control phase of the project can affect the success or failure of projects. But very few studies are conducted regarding how a sound and properly prepared project plan can affect project positively in Ethiopia, especially in the housing sector. The student researcher knows about the project planning of the study organization and also gathered information regarding the planning practices from the employees of the organization. The employees believe that there is a problem in the planning process of the organization. So on this paper the student researcher will try to assess in detail the planning practice of the study organization.

## **1.3 Research questions**

In light of the above mentioned problem statement, the following basic research questions were addressed:

- 1. What is the current project planning practice of Addis Ababa housing project?
- 2. Which project planning tools are applied?
- 3. How much is the level of awareness among project staffs about the existing project plan?
- 4. To what extent the project team participates in preparing the project plan?

## **1.4 Objectives of the study**

#### **1.4.1 General objective of the study**

The general objective of this study was to assess the project planning practices in the context of Addis Ababa housing project.

## 1.4.2 Specific objectives of the study

- 1. To explore current project planning practice of Addis Ababa housing
- 2. To identify which project planning tools and techniques are used in the study organization.
- 3. To assess the awareness of the staff about the project plan
- 4. To examine the extent the project team participates in preparing the project plan

## **1.5 Definitions of terms**

**Planning**: is determining what needs to be done, by whom, and by when, in order to fulfill one's assigned responsibility Kernzer (2009).

**Project**: A project has a defined scope, is constrained by limited resource (time, budget), involves many people with different skill and, usually progressively elaborated throughout its life cycle Cleland & Ireland (2002).

**Project plan**: A project plan is a formal approved document used to manage project execution. Project plan is also called integrated management plan because it comprises of all other specific plans PMI (2009).

## **1.6 Significance of the study**

Conducting this assessment has much significance for the student as well as the organization under study. The student was be able to know the actual planning practices of the organization under study and it will also help for the study organization to know what its project plan looks like by comparing with the best practice. On the other hand this study will try to show the importance of preparing a participatory project plan. Finally this research will be somehow a base for interested researchers in the area to conduct a deep study and analysis.

## **1.7 Delimitation and Limitation of the study**

This research has the following major delimitations. Geographically this study covers only the planning practices of those housing projects located at Addis Ababa city in the selected four sites. Conceptually this study tried to assess only the project planning practices of the organization under study even if there are many concepts related with project management and should be assessed. The major target population of the research was those team members of the organization who are part of the project. In the project there are project managers, contractors and professionals that are participating. So this study involved all professionals related with the project. So the scope of the study was as explained above.

Every work is done with limitations. This study is also subject to limitations as that of other researches. To address the objective of the study the student researcher tried to assess only the project plan of the study organization. There are so many factors that affect the success of a given project. Even in the specified study there may be other untouched factors by the researcher. So the student researcher suggests for further study on the area.

While collecting of the data the student researcher faced problems related with the respondents awareness regarding the importance of properly filling the questionnaire. Some of the respondents were not willing to fill the questionnaire. However, considerable care has been taken in the collection and analysis of all the evidential matter in order to minimize the impact of these shortcomings.

## **1.8 Organization of the research report**

The thesis consists of five chapters. The first chapter includes the introductory issues about the research, what the problem in question is, the researchers purpose, brief overview about the methodology, the research objective and the research questions to be answered, definition of terms and concepts used in the study and the significance for undertaking this research.

The second chapter is devoted to literature to the area under study so as to better understand concepts, theories and models related to project plan. The third chapter is devoted to research methodology in a bit more detail than what is discussed in the introduction part while the fourth chapter is dedicated to data presentation, analysis and findings.

The final chapter (chapter five) concludes the topic under discussion with concluding remarks and recommendation.

## **CHAPTER TWO**

## **REVIEW OF RELATED LITERATURE**

## **2.1 Introduction**

Like any of the other developing countries in Africa Ethiopia as a developing nation, she is trying to grow its economy as much as possible and in as much amount. In order to achieve the growth needed projects are necessary. So there are many projects which are underway in the country. The main objective of projects is to help achieve the desired results. In order to achieve what is needed from projects there should be a proper project management. Project management has different parts and the project manager is also responsible for successfully completing the project. One of the main responsibilities of the project manager is to properly plan the project because planning what is needed for the project is the first thing that should be done and which also determines the success or failure of it. So the role of project planning is highly important for any project to be completed successfully. Planning, in general, can best be described as the function of selecting the enterprise objectives and establishing the policies, procedures, and programs necessary for achieving them. Planning in a project environment may be described as establishing a predetermined course of action within a forecasted environment Kernzer (2009). The project's requirements set the major milestones. If line managers cannot commit because the milestones are perceived as unrealistic, the project manager may have to develop alternatives, one of which may be to move the milestones. Upper-level management must become involved in the selection of alternatives. The project manager is the key to successful project planning. It is desirable that the project manager be involved from project conception through execution. Project planning must be systematic, flexible enough to handle unique activities, disciplined through reviews and controls, and capable of accepting multifunctional inputs. Successful project managers realize that project planning is an iterative process and must be performed throughout the life of the project. One of the objectives of project planning is to completely define all work required (possibly through the development of a documented project plan) so that it will be readily identifiable to each project participant. This is a necessity in a project environment because: If the task is well understood prior to being performed, much of the work can be preplanned, If the task is not understood, then during the actual task execution more knowledge is gained that, in turn, leads to changes in resource allocations, schedules, and priorities, The more uncertain the task, the greater the amount of information that must be processed in order to ensure effective performance Kernzer (2009).

## 2.2 Definition of planning

Planning is a very wide concept and different scholars define it in different ways. But in all of the definitions there is similarity. All consider planning as a guide to the execution and as a means of a course of action. Some of the definitions given by different scholars are as follows. Planning is a continuous process of making entrepreneurial decisions with an eye to the future, and methodically organizing the effort needed to carry out these decisions. Furthermore, systematic planning allows an organization of set goals. The alternative to systematic planning is decision-making based on history. This generally results in reactive management leading to crisis management, conflict management, and firefighting. Planning is determining what needs to be done, by whom, and by when, in order to fulfill one's assigned responsibility Kernzer (2009).

Planning is the most fundamental function of management. Different authorities define it in different ways. The following is however, the commonly used definition of planning: "planning is the process of deciding in advance about the short and long-run objectives of the organization and selecting courses of action for accomplishing them." the primary purpose of planning is to minimize the risk or obstacles surrounding future operations. From this point of view, planning can be defined as the process of preparing for change and coping with uncertainty by formulating the means for attaining goals. It is anticipatory decision making that establishes organizational goals and specifies the methods of achieving them Ms sridhar (2009).

Planning is the foundation (primacy) of management: planning provides the entire basis from which all future management functions arise. It takes precedence over the other managerial functions like organizing, staffing, directing and controlling, because none of these functions can be practiced until there is a plan. However, it should be noted that the functions of management are interrelated in that no one function can exist without the other Charles (2003).

In general, planning involves determination of objectives, formulation of programmes and courses of action for attaining them, developing schedules and timing of action as well as assignment of responsibilities for their implementation MS Sridhar (2009).

Therefore the term planning is a very wide concept and is defined differently by different scholars. In this paper the term plan is therefore used as a representative of the following definition. Planning is the process of identifying what is needed to successfully complete a given project. Planning in this context includes planning of time, cost, quality, communication, contract, stakeholder, human resource, scope and procurement of a given project.

## 2.2.1 Scopes of a plan

There are different types of plans depending on the type and nature of the activities that we conduct. There could be long term, short term and midterm plan in an organization or in a given company. So when we say plan it has the following three major scopes according to Rosen (1972). The scope/breadth dimension of plans is a method of categorizing plans based on the range of activities covered. Some plans are very broad and long-range, focusing on key organizational objectives. Others specify how the organization will be mobilizing its resources to achieve these objectives Rosen (1972). Accordingly, plans are classified into three categories based on their scope or breadth. This includes Strategic plans, Tactical plans; and Operational plans.

i. **Strategic plans**: determine the organization's mission objectives, major courses of action and the allocation of major resources necessary to achieve the organization's objectives. Strategic plans thus provide the organization with the overall long-range direction and lead to the development of policies. Strategic planning is usually done taking into account the environmental threats and opportunities and the internal strengths and weaknesses of the organization.

Strategic plans are generally: performed by top level managers, mostly long-range in their time frame, expressed in relatively general non-specific term and a type of planning that provides general direction to the organization.

ii. **Tactical plans:** focus on the process of developing action plans through which strategies are executed. As mentioned earlier, strategic plans focus on what the organization will be in the future; whereas tactical plans emphasize how this will be

accomplished. Tactical plans refer to the implementation of activities and the allocation of resources necessary for the achievement of the organization's objectives. They specifically focus on short-term implementation of activities and resource allocations.

The following are typical examples of tactical planning: Developing annual budget for each department, division, project, choosing specific means of implementing strategic plans; Deciding on course of actions for improving current operations.

iii. Operational plans: are the most specific and detailed plans, focusing on the dayto-day and week-to-week activities of the organization. Such plans include: production schedules, sales plans, lesson plans, etc.

So as explained and listed above we may prepare a plan for short term, midterm or long term. So for any project when we think of planning we may plan that can be used for the life of the project or we may prepare a specific plan that can be used for short period of time or for a specific phase of a project.

## 2.2.2 The planning process

Planning is a systematic and scientific way of doing things and forecasting of the future. When we plan in a given project we have to follow some systematic and scientific ways. There are different processes that are used by different scholars for planning. According to Alexander the planning process involves the following major steps.

The process of planning refers to the specific steps followed in developing organizational plans Alexander (2010) the following are the major steps that a planning process should follow:

#### Understanding the existing situation

The influence of the external environment is of great concern in planning. As a result, it is essential to be aware of the external opportunities and threats that can affect the planning process. Thus, the organization is required to analyze the following and other environmental situations while involving in the planning process.

- Analyze the economic situation (competition, price, demand, supply, etc.).
- Analyze the political situation (government policies, taxation, peace and stability etc.).
- Analyze the social and cultural situations (culture of the society, direction of culture change, attitude of the society towards different products etc.).

Moreover, it is important to examine the internal situations and determine the existing strengths and weaknesses of the organization. Thus, planning requires a realistic diagnosis of the existing strengths, weaknesses, opportunities and threats of the organization.

#### **b.** Forecasting

Planning is deciding about what is to be done in the future. As a result, it becomes essential to have information about what the future would look like. Thus, the manager is required to make certain assumptions based on forecasts of the future in order to plan properly.

#### c. Establishing objectives/goals

The next step of the planning process is to identify the objectives/goals of the organization. The objectives fixed must clearly indicate what is to be achieved, where action should take place, who will perform it, how it is to be undertaken, and when it is to be accomplished. Objectives also need to be measurable. Thus, scheduled completion dates, quantity standards, cost limitations, quality specifications, should be established in advance while trying to achieve the objectives.

#### d. Determine and evaluate alternative plans (course of actions)

Next to the establishment of objectives, alternative plans are developed and thoroughly evaluated. Thus, once alternative courses of action are determined, they must be evaluated. Usually, alternative plans or course of actions are evaluated against such factors like cost, risks, benefits, organizational facilities, etc.

#### e. Selecting the plan (course of action) and formulate derivative plans

This step of the planning process involves selection of the most desirable plan and the development of derivative plans. Selection of one course of action to face future challenges introduces inflexibility in the planning process. Therefore, since the future is uncertain, adoption of several courses of actions becomes essential. Once a choice is made and a master plan prepared, derivative plans must be developed to support it. Within the framework of the basic plan, derivative plans are formulated in each functional area. The division of master plan into departmental, sectional and individual plans provides a realistic picture of things to come in future. In order to be effective, the planning process should also provide for a feedback mechanism.

#### f. Implementing the plan

After the optimum alternative plan or course of action has been selected, the manager is required to develop an action plan to implement it. At this stage of the planning process, the manger must decide on the following issues: Who is going to do what? When will the tasks be initiated and completed? What resources (human and non-human) will be available for the process? How will the plan be evaluated? What are the reporting procedures to be used? And what type and degree of authority will be granted to achieve these ends?

#### g. Controlling and evaluating the results

Once the plan is implemented, the manager is responsible to monitor and evaluate the progress made. He/she may be required to make the necessary modifications based on the evaluation results. It is likely for plans to be affected by environmental factors. In such a situation, modification of plans becomes very essential

According to Bender (2008) planning involves the following major nine steps.

#### a. Identify overall objectives

Before doing anything we need to identify our objectives. When we try to do something we actually have something in mind. So we need to specify and determine what we want to achieve.

#### **b.** List the assumptions

There are things that we will consider them as things that will have an impact on our plan. So we should list all the factors that we assume them will have an impact on our plan.

## c. Define the work effort

We have to clearly define the amount and type of effort that we need in order to achieve the plan that we have set to meet our objectives.

#### d. Define the tasks and products in detail

After we specifically determine the effort needed we also have to specify the type of activities that we have to accomplish to achieve the planned objectives and to do work specified.

#### e. Estimate the work effort

This is all about estimating the work effort that we need to exert while implementing of the plan.

## f. Select resources

We need also resources to accomplish the works and efforts that we defined and specified. So we have to identify and select the amount and type of resource that we are needed to achieve our plan.

## g. Develop the schedule

Having identified the resources that we need to implement the plan we also have to develop a time table for each activity that we will do and for the objective that we will achieve.

## h. Estimate costs

We need to estimate the cost that we will incur in implementing the plan. So after we identify the budget we also have to estimate the cost of implementing the plan to achieve the objective.

## i. Secure approval and funding.

Finally we have to get the approval of the concerned party and we have to ask for a fund to implement the plan.

So the above planning processes are the most commonly used ones in any management system.

## **2.3 Definition of a project**

Many authors and references have defined project in different ways emphasizing its different aspects. Summarizing those definitions given, this paper defines a project as: A temporary endeavor (that has definite beginning and end time) undertaken following specific cycle of Initiation, Definition, Planning, Execution and Close out to create a unique product, service, or result through novel organization and coordination of human, material and financial resources PMI (1996). A project has a defined scope, is constrained by limited resource (time, budget), involves many people with different skill and, usually progressively elaborated throughout its life cycle Cleland & Ireland (2002),. It is a sequence of unique, complex, and connected activities that have one goal or purpose and that must be completed by a specific time, within budget, and according to specification (Robert). In general, a project is a unique, well-defined effort to produce specified results within a set timeframe, at a given cost, in a multifunctional environment and under special management Berry and Duhig (1987).

A project is a temporary endeavor undertaken to create a unique product or service. So projects are an activity that is conducted to achieve something new which was not present before, which is temporary or that with a defined time limit and quality PMI (2000).

A project is an organized effort to a specific, typically one time goal. A has a specific beginning and an end, it has a specific goal, and it is complex and has many details (Bender, 2008). A project is a non-repetitive enterprise, characterized by a clear and logical sequence of events, with a beginning, middle, and end, focused on the accomplishment of a clear and defined objective on deadline, with costs, resources, and quality parameters specified Ricardo (2008).

So the term project is very broad term and it is defined differently by different scholars. Even if they define it by their own understanding it represents the same idea. There is no one universally agreed definition of project. But it all definitions of scholars gave similarity. So in this paper the term project is considered as a temporary activity conducted to achieve a given objective with a defined time, in specified quality, and predetermined budget.

## 2.4 What is a project success?

Pinto and Slevin (1988) stated "There are few topics in the field of project management that are so frequently discussed and yet so rarely agreed upon as the notion of project success". However it is worthwhile to select a reasonable definition from the literature for the purposes of comparing projects based on planning characteristics. Thomas et al (2008) state that measuring project success in not straightforward: "Examples abound where the original objectives of the project are not met, but the client was highly satisfied. There are other examples where the initial project objectives were met, but the client was quite unhappy with the results." Collyer & Warren (2009) cite the movie, Titanic, which was originally touted as a late, over budget flop but eventually became very successful. Project success has been measured in a variety of ways. While the measure of project success can best be judged by the judgment of the primary sponsor. As Shenhar et al (1997) note, assessing success is time-dependent: "As time goes by, it matters less whether the project has met its resource constraints". Shenhar et al (2001) define four levels of project success:

- 1. Project efficiency
- 2. Impact on the customer
- 3. Business success
- 4. Preparing for the future

So when we say project success it is not as easy as we think of it. A successful project comprises of all the four issues listed above. If one is failed to be achieved then it is difficult to say the project is completed successfully. So one of the main reasons for planning in projects is to identify the right stakeholders (customers), to determine and identify the quality of the output of the project, and to have lessons learned. So planning is very influential in the success of the projects.

## **2.5 Definition of a project plan**

Many authors and references have defined project planning in different ways emphasizing its different aspects. Summarizing those definitions given, this paper defines project planning as: The extent to which timetables, milestones, workforce, equipment, and budget are specified or estimating the effort, time, cost and staff resources needed to execute the project Slevin and Pinto (1986) Chatzoglou and Macaulay (1996).

Project plan is a more specific term for the case of projects. As seen above in the definition of planning project plan also is a means of achieving something. It is a guideline or map for the project execution. Some of the views of the scholars of project plan are as follows. A project plan is a formal approved document used to manage project execution. Project plan is also called integrated management plan because it comprises of all other specific plans PMI (2009). Project planning and management is key framework for successful completion of any project. Planning is a procedural step in project management, where appropriate and standard documents are required to create an intact and comprehensive project. Knowledge, skills, tools and techniques are applied to various project activities to meet the project requirements. Planning without management is of no use. In order to develop a successful project, different project management techniques have been widely established in the areas such as planning and control.

In this, various project management methodologies, success and failure, planning activity etc have been proposed. Project plan lies at the heart of project management. As such, it is the key to controlling the progress of the project. A comment (attributed to the managing director of a pharmaceutical company) noted that 'we never seem to have time to plan our projects, but we always have time to do them twice' Turner (2001).

The most important responsibilities of a project manager are planning, integrating, and executing plans. Almost all projects, because of their relatively short duration and often prioritized control of resources, require formal, detailed planning. The integration of the planning activities is necessary because each functional unit may develop its own planning documentation with little regard for other functional units. Planning, in general, can best be described as the function of selecting the enterprise objectives and establishing the policies, procedures, and programs necessary for achieving them. Planning in a project environment may be described as establishing a predetermined course of action within a forecasted environment. The project's requirements set the major milestones. If line managers cannot

commit because the milestones are perceived as unrealistic, the project manager may have to develop alternatives, one of which may be to move the milestones. Upper-level management must become involved in the selection of alternatives Kernzer (2009).

The project manager is the key to successful project planning. It is desirable that the project manager be involved from project conception through execution. Project planning must be systematic, flexible enough to handle unique activities, disciplined through reviews and controls, and capable of accepting multifunctional inputs. Successful project managers realize that project planning is an iterative process and must be performed throughout the life of the project Kernzer (2009).

Without proper planning, programs and projects can start off "behind the eight ball." consequences of poor planning include: project initiation without defined requirement, wild enthusiasm disillusionment, chaos, search for the guilty, punishment of the innocent, promotion of the nonparticipants Kernzer (2009).

There are four basic reasons for project planning: to eliminate or reduce uncertainty, to improve efficiency of the operation, to obtain a better understanding of the objectives, to provide a basis for monitoring and controlling work. Planning is a continuous process of making entrepreneurial decisions with an eye to the future, and methodically organizing the effort needed to carry out these decisions. Furthermore, systematic planning allows an organization of set goals. The alternative to systematic planning is decision-making based on history. This generally results in reactive management leading to crisis management, conflict management, and firefighting Kernzer (2009).

The project plan is the formal document that describes the procedures to be performed during its execution. It is the foundation of the entire execution. It contains all the knowledge area plans, schedules, technical aspects, etc. Ricardo (2008).

## 2.5.1 Tools and techniques of a project plan development.

As seen above project plan is not an easy task. It needs effort of different people and some systematic ways of doing it. There are different tools and techniques that can be used for preparing of project plans. Some of these tools and techniques are described as follow.

## 2.5.1.1 Project planning methodology

We cannot simply prepare a project plan without applying some form of methodology. Methodology is an approach that is used for the purpose of facilitating the preparation of the project plan. A project planning methodology is any structured approach used to guide the project team during development of the plan. It may be as simple as standard forms and templates or as complex as series of required simulations. Most planning methodologies make use of a combination of hard tools such as project management software, and soft tools such as facilitated startup meetings PMI (2009).

#### 2.5.1.2 Stakeholders skill and knowledge

One of the techniques for preparing a sound project plan is involvement of different stakeholders of the project. From doing so it is possible to get so many ideas and skills which help for preparing a sound project plan. Every stakeholder has skills and knowledge that may be useful in developing the project plan. The project management team must create an environment in which the stakeholders can contribute appropriately. Who contributes what and when they contribute will vary PMI (2004).

#### **2.5.1.3 Project management information system (PMIS)**

Project management information system is one of the tools and techniques of project plan. It is software which is applied for different purposes throughout the project. It helps for creating a sound and consistent plan. PMIS helps project managers to make decision that is less risky and costly. It helps them in the different phases of the project. PMIS helps project managers in the selecting, planning, organizing and controlling phases of the project Karim (2011).

## 2.5.1.4 Earned value management (EVM)

Earned value management is one of the project planning techniques which helps for controlling the project performance in terms of project cost and schedule. So in the project plan we prepare planned schedule and cost. So the earned value management system helps us to control the planned costs and schedule whether they are going as planned or not. A technique used to integrate the projects scope, schedule, and resources and to measure and report project performance from initiation and to close out Ricardo (2008).

## 2.5.2 Components of a project plan.

Project plan is an aggregation of different specific plans. These specific plans include project integration management plan, project scope management plan, project time management plan, project procurement management plan, project communications plan, project human resource management plan, project quality management plan, project cost management plan, project risk management plan, project stakeholder management plan and value chain management plan.

## 2.5.2.1 Project integration plan

The processes required to ensure that all project elements are adequately integrated, thus guaranteeing that the whole is always benefited Ricardo (2008).

Project integration plan helps to coordinates the various elements of the project and it is an important part in planning processes. Prioritizing between competing objectives and alternatives are an important task in the integration management. The objective of the development of the project plan is used to create a consistent, coherent document that can be used to guide project execution and control Gupta et al (2008).

As we can see from the below figure integration management works on the integration of all the areas are integrated into a single whole. So the project integration plan helps us to know how to integrate the different parts of the project in to a single entity.

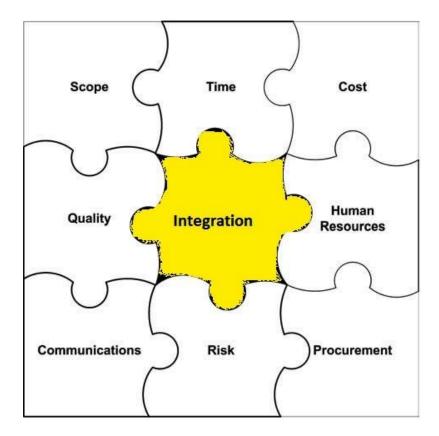


Figure 2.1: Project integration management framework. Source: PMI 2003

## 2.5.2.2 Project scope management plan

It is a process to ensure that the project includes all the work required, and excludes the work that is not required, to complete the project successfully. This planning knowledge area consists of scope planning, scope definition, and creates WBS PMI (2004).

#### 2.5.2.3 Project time management plan

All projects have a defined time to be completed when begin. The sponsor as well as the contractor will be benefited if a given project is completed as per the scheduled time. In order to complete it there should be a proper project time management plan. Project time management is the process that describes how to monitor and control time spent with in a project PMI (2003).

## 2.5.2.4 Project cost management plan

Project cost is the main issue in projects. Each and every activity in projects needs some resource and spending. So this spending of each activity should be estimated and forecasted so that the budget of the project can be determined. Project cost management plan is all about determining the resource requirements of each activity.

Project cost management is the process used to minimize the cost of the project while maintaining acceptable levels of quality as well as the scope of the deliverables for the duration of the project. Project information that forms the basis of a progress monitoring and cost management system includes a detailed description of client objectives, project requirements, quality expectations, resource constraints, funding structure, acceptance test details, administrative milestones, and the anticipated delivery date Parviz (2002).

## 2.5.2.5 Project quality management

Quality management is the process for ensuring that all project activities necessary to design, plan and implement a project are effective and efficient with respect to the purpose of the objective and its performance. Quality management is a continuous process that starts and ends with the project pm4dev (2016). So having a good project plan is very essential for any project because failing to complete the project below what is specified is one of the indicators of project failure.

#### 2.5.2.6 Project human resources management plan

Projects are run by humans. Any project may have different resources including human and material resources. Even if any project has whatever amount and type of resources it cannot be executed without human knowledge and skill. So there should be a well prepared human resource management plan for every project. HRM in projects is very essential and it is a little bit different in the general environment due to the specific features of projects and project oriented organizations. Since projects are temporary by nature and unique in character the HRM also is somehow different and complicated from the normal organizations Huemann et al (2006). So there should be a well prepared project plan which is based on the type of the project.

## 2.5.2.7 Project communications management plan

Project communication plan is a system which designed to ensure that are required information is distributed to the right person at the right time. Project plans are deliverables. As such, the communication tools applied reflect the need to express a clear understanding of both the intent of the project and the deliverables that are to be produced. Project communication plan is a plan which explains in detail how information in the project is transferred from one point into the other. A well prepared communication plan is highly important for the success of any project Pitchard (2004).

Communications are necessary both to link the stages of a project and to facilitate progress within each stage. Communication is so central to the management of a project that poor communications can be considered a serious risk that would threaten the likelihood of completing the project successfully Martin (2006).

#### 2.5.2.8 Project risk management plan

In projects there are different kinds of risks and uncertainties that can be an obstacle for achieving the objective of the project. So in any project this risk and uncertainty should be planed before the execution of the project. As one part of the project management body of knowledge areas, the main objectives of project risk management is to increase the probability and impact of events that are positive to the project and decrease the probability and impact of events that are negative to the project. Risk planning includes risk identification, qualitative and quantitative risk analysis, and risk response planning PMI (2004).

## 2.5.2.9 Procurement management plan

Procurement management is one of the most important bodies of knowledge areas in project management and which is one of the most important part in determining the success of a given project. So preparing a good project procurement plan is very essential. If properly planned it increases the probability of the success of a project and if not it may be one of the failure factors in projects. Morris and Pinto (2007) defined it as a set of processes interlinking vendors, producers, and customers along the supply chain with its attendant work activities,

actors, organizations and technologies. The project management body of knowledge areas is summarized in the picture below. As we can see from these processes the planning part includes the upper part. So the project plan should include all those explained in the diagram which is in the next page.

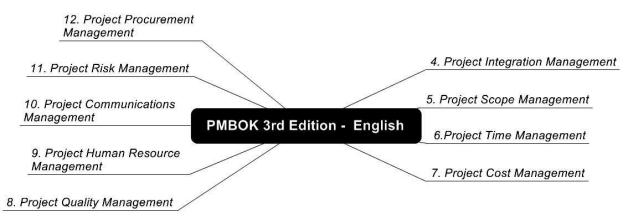


Figure.2.2 Project management body of knowledge areas (PMI, 2003)

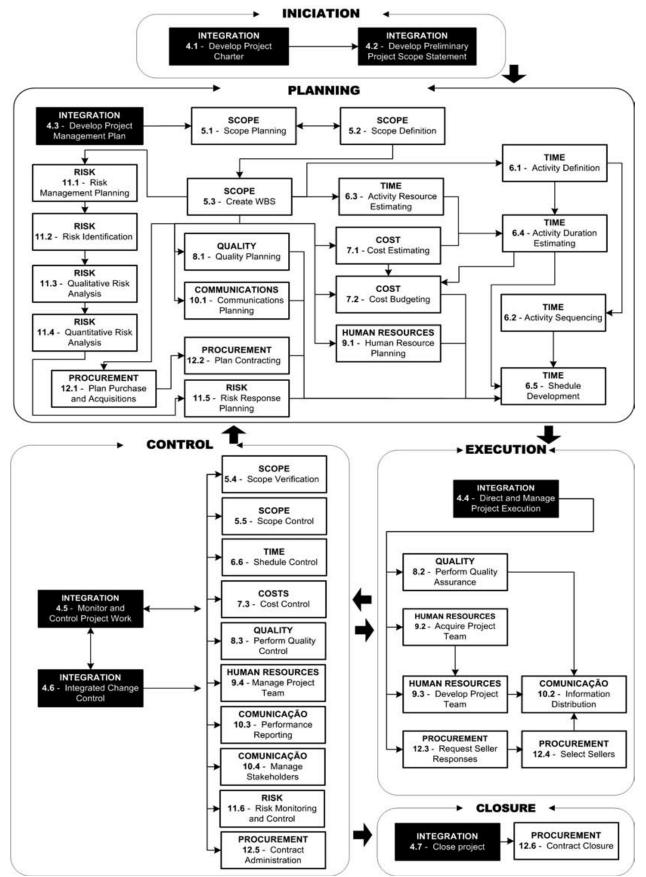


figure 2.3 Project management body of knowledge areas and their processes (Ricardo, 2008)

As we can see from the pictures above, each knowledge area involves planning. So a project plan is a combination or an aggregate of specific plans listed earlier on this paper. Very recently the PMI areas are increased to 11 and the additional are project stakeholder management and contract management. So the project plan also should involve the stakeholder and contract management plan.

#### 2.6 Empirical evidences

The theoretical part of this paper shows that project management is a very essential factor for the successful completion of projects. It is impossible to determine what is needed for projects to be completed as per the defined budget, cost, time and quality if there is no a properly defined project plan.

When we come to the empirical literature review, a paper by Lemma (2012) indicates that project success is highly determined by the quality of the project plan. The probability of successfully completing a given project will be high if it has a well-established plan. A research paper by Garg and Yadav (2014) states that project planning and management is a key framework for successful completion of any project. Planning is very essential for any project with its tools and techniques. A research paper by researchers Morardet et al (2005) proves that weakness in planning and implementation have been identified as one of the main reasons for the disappointing results of agricultural water development and management projects.

So from the reviewed literature project plan is an aggregate of specific plans which are developed form each knowledge area. In addition preparing a sound project plan is a very important factor for successfully completing of any project.

### 2.7 Conceptual framework

As shown on the below diagram from the different literatures reviewed the researcher developed the following conceptual framework. Project plan is an aggregate plan which includes all mentioned in the below figure. So this conceptual framework demonstrates project plan should include each specific project plans from each knowledge area.



*Figure 2.4: Conceptual framework. Source: Developed by the researcher based on the literature review* 

As shown from the above picture project plan is an aggregate of specific plans listed on the picture. So assessment of the project planning practice is made based on the above variables.

# CHAPTER THREE RESEARCH METHODOLOGY

In this part the type of research design, study population and sampling, sources of data and instrument of data collection, procedure of data collection, data sources and data analysis method that are applied on the study are explained.

#### 3.1 Research design

The purpose of this research is to assess the project planning practices of the organization under study. Descriptive research design is applied to describe what the current project planning practice looks like in the study organization. The researcher has chosen this design because the major purpose of descriptive research is description of the state of affairs as it exists at present and it reports what has happened or what is happening Kothari (1990). So as justified above the major reason for conducting this study is to assess the planning practice of the organization under study. For such type of studies the recommended research design is the descriptive one. It is used to describe and report the fact as it is.

#### **3.2 Data type and source**

For conducting the study both quantitative and qualitative data is used. Qualitative data's collected from company procedures and manuals are used to assess the current planning practice of the study organization. As a source, both primary and secondary sources of data are used. For collecting the primary data self-administered survey questionnaire will be employed for the current project staffs and project management staff of the case study organization. Secondary data is collected from annual reports which are both published and unpublished

#### 3.3 Sampling design and procedure

In this research the researcher consider employees that are working now in the organization in the selected four sites. These four sites are Project14, Project13, Kilinto site and employees who work at head office. These sites are selected because the researcher believed that it is possible to get all the needed information for the study and because of convenience in location for the researcher. Based on the data obtained from Addis Ababa housing agency the organization under study has a total of 200 employees in these four sites. Because it is impossible to include the total population in the study the researcher will select some representative samples of the population. The sample size of the study is determined based on the following simplified formula proposed by Yamane (1997), as cited in Fisseha (2011) by considering the above size of target population:

$$n = \underline{N} + N (e^2)$$

When, n is sample size, N is the population size and e is the level of precision. A 95% confidence level and e = 0.05, is assumed for the purpose of determining sample size for this study. Accordingly, the sample size for the study is calculated as follows.

n=200/1+200 (0.05<sup>2</sup>) = 133

So the sample size of this study conducted was 133 staffs that are directly related with the projects.

Besides, a key informant interview is conducted on a purposively selected 5 key project management staffs.

Respondents are diversified in terms of educational qualification, jobs variety and other parameters. Thus stratified sampling method is applied to avoid such heterogeneity of the population.

Kothari (1990) complements the above rationale of this study for adopting the stratified sample design. Stratified sampling technique is applied to obtain a representative sample of the population. Under this type of random sampling the population is divided into sub-population that is individually more homogenous than the total population. Then it is possible to select items from each stratum to constitute a sample.

#### 3.4 Methods of Data collection and instrument used

The data collection was administered by using both primary and secondary data sources. The primary data is collected using questionnaire and key informant interview guide and it is the main method for data collection. It contains close ended questions with five Liker-scale from (strongly agree to strongly disagree) and was distributed to respondents. The Secondary data collected from reports released by the organization is used.

Primary Data was collected using close ended standard questionnaire specifically designed to capture responses to assess the practices of the organization. Primary data collected using questionnaire was used to assess and analyze the planning practice of Addis Ababa housing project, to assess the level of awareness of staff about the project plan, to assess the project planning tools that are applied and finally to assess the level of staff participation in preparing the project plan.

#### 3.5 Methods of data analysis

After the data gathered by using of questionnaire (which is prepared using Likert scale) it is edited, classified and tabulated by using different techniques. Both in house and field editing made and data analysis done using SPSS for the data collected using the questionnaire.

Descriptive statistics such as standard deviation, mean, frequency and percentage is used to analyze the data that is obtained from the questionnaire and the secondary sources. According to Goodwin (2004), descriptive statistics provides a summary of the main features of a set of data collected from a sample of participants.

# CHAPTER FOUR RESULTS AND DISCUSSION

#### **4.1 Introduction**

This chapter deals with the analysis and presentation of the data collected through questionnaire. Descriptive statistics like frequencies and mean were used to analyze the data. Interpretations are made based on the frequency and percentages of the data. The findings from the questionnaires were analyzed using SPSS (version 20). The results from the study are presented in the form of frequency table. Among the 133 questionnaires that were distributed to employees as a representative of the total population 123 questionnaires were properly filled and returned which is 92.5% response rate. The first part of the questionnaire consists of the demographic information of the participants related to personal and professional characteristics. Whereas the second part intended to obtain respondent's opinion and perception regarding project planning practice of the study organization. This analysis is conducted based on the knowledge areas and the conceptual frameworks developed in chapter two.

#### 4.2 Overview of Addis Ababa housing project

The Addis Ababa Housing Development project office (AAHDPO) previously known as Addis Ababa Integrated Housing Development Program, (AAIHDPO) was inaugurated after successful completion of Bole Gerji pilot apartments 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. GTZ- IS works also 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.

The Addis Ababa City Administration is the managing agency for the IHDP in Addis Ababa. The office is responsible for the selection of new sites; the allocation of government resources; the extraction of funds from the city's budget to finance construction; the acquisition of bonds from the Commercial Bank of Ethiopia (CBE) to pay for all other factors including the infrastructure costs and design-team costs; and the compensation of all households displaced by inner-city renewal. The City Administration created the Housing Development Project Office (AAHDPO) specifically to manage the implementation of the housing program. The Office was set up to ensure the successful delivery of the three main processes in the IHDP in Addis Ababa: the 'design', the 'construction', and the 'housing transfer and administration'. Ten sub-city branch offices of the HDPO were set up around the city to facilitate the construction of condominium units. To meet its main objective of affordability and employment creation, the program adapted low cost technology through alternative construction methodologies (use of prefabricated building component), lowered the building standards to acceptable standard for low cost housing and use of monotonous building typology and mass construction GTZ-IS (2005).

# **4.3** Body of knowledge areas planning practice in the Addis Ababa housing projects of selected sites

Addis Ababa housing project development office specifically the selected sites have the following practices in the body of knowledge areas. The practices are taken from the offices report and planning data.

#### 4.3.1 Project integration knowledge area practice

In this regard the project offices studied does not have an integrated project plan. The integrated project plan involves project plan development, project execution and integrated change control. They develop a project plan and execute it as well but they fail to control the changes that come into the project due to different reasons. Even when developing the project plan they fail to use inputs like, historical information, constraints and assumptions.

#### 4.3.2 Project risk planning practice

In the Addis Ababa housing projects office project risks are not well identified and analyzed so that it is possible to control and manage them. Risk management planning is not well done initially when projects are implemented. In the best practicing projects risks are planned, identified, quantified, qualitative risk analysis made, response plan is prepared and finally monitoring and control is done. But some of these process like risk identification, qualitative analysis and monitoring and control are not practiced in the case of Addis Ababa housing projects of the selected sites. Form the company documents review it is observed that some of these risk planning processes are not made.

#### 4.3.3 Project Quality planning practice

Addis Ababa housing project offices quality planning practice is not standardized as compared with the best practicing project running organizations. There is a quality plan prepared but quality assurance activities are not made well. The quality assurance process is the very important part of the quality planning process in the projects in order to control what is planned. Quality control is also very weak. When the quality plan is made quality planning tools like benchmarking, flow charting, and benefit cost analysis is not well done. Even the quality control process is not well done. Quality audits and inspection are barley done.

#### 4.3.4 Project communication planning practice

In the Addis Ababa housing project development offices of selected sites the communication practice is as follows. Communication planning is made at the initiation of the project by identifying the information needed; communication tools are barley applied. Information distribution to and from the concerned staff and stakeholders are made traditionally. Performance reporting is made and variance and trend analysis is somehow used for measuring the performance of the project. there is no a documented plan for communication in the projects.

#### 4.3.5 Project scope planning practice

Scope planning is made by Addis Ababa housing project offices. In the best performing project running organizations project scope planning involves initiation, scope planning, scope definition, scope verification and scope change control. But in the Addis Ababa housing project offices all these are not well performed. After initiation of the project in the product description phase and the subsequent phases there is a problem. Even definition of the activities and the resources required is not properly made. Scope statement is developed but it is not updated when changes are made. Work break down structure and decomposition are applied to determine the scope but in a limited manner. Scope verification is not made at all in the projects. Verifying of the work results is not done. Scope plan is not usually updated when there is a change. So the scope planning practice is not good.

#### **4.3.6 Project procurement planning practice**

In the procurement process the organizations plans its procurement ahead of everything. Solicitation planning is also conducted after the procurement is planned. The organization also chooses its suppliers based on their capacity. There is also a contract administration mechanism, in the study organization selected sites. After completion of the projects the contracts are formally closed out by agreeing with the supplier according to the initial plan.

#### 4.3.7 Project human resource planning practice

In the Addis Ababa housing project offices the human resource planning practice is as follows. Staff requirement is identified and planned in the initiation phase of the project; roles and responsibility are identified and assigned. All the necessary staffs for completing of the projects are acquired and different techniques like negotiations, pre assignment and procurement are made for acquisition of the staffs. Then staffs are assigned according to their duty and responsibility. Teams are also developed according to requirements and performance reviews are conducted.

#### **4.3.8 Project cost planning practice**

In determining the cost of a given project the following four major inputs are necessary. These are Resource planning, cost estimating, cost budgeting and cost control. For resource planning there are different inputs and tools and techniques that can applied. In the Addis Ababa housing projects of selected sites resources needed are not well planned. Because there is a problem in the scope definition phase of the project it is impossible to use work break down structure as an input in planning the cost of the project. Activity duration estimates are not used for determining and planning the cost of the project. When conducting the project cost determination experts are not well involved and project management software is not also applied. In Estimating the cost work break down structure is not applicable rand they use analogous estimating technique. In this technique an old cost estimation data or record is used. Because resource requirement and activity definition are poorly made in the scope definition phase it is difficult to estimate the nearest possible cost of the projects. so the cost budgeting made based on the estimation is wrong and that is why most of the projects of Addis Ababa houses project are over budget. Cost control mechanism of Addis Ababa houses project in the selected sites is weak. The cost baseline developed is not a good reference or measure of performance because it is not properly developed. Earned value management (EVM) is used to measure the performance of the projects. So the cost planning practice of Addis Ababa housing project is weak.

#### 4.3.9 Tools and techniques used in the planning of the projects

There are many different types of planning tools and techniques used in the planning the projects. Tools like WBS, Gant chart, CPM, PERT, PMIS, project planning methodology and

so many others are used. But in the case of Addis Ababa housing projects the most widely used ones are WBS, Gant chart and PMIS. So most of the planning tools listed above are not applicable in the projects of selected sites of Addis Ababa housing projects.

#### 4.4 Analysis of Project planning knowledge areas

In a 5-point Likert scale the possible score ranges from 1-5 and 3 become the hypothetical average score. A calculated mean score less than 3, which is hypothetical average, can be considered as low mean score whereas greater than 3 can be considered as high mean score. Therefore the analysis will be made based on this assumption.

In this part the planning processes or knowledge areas are descriptively analyzed. The main problem areas from the knowledge areas are identified by comparing their mean and standard deviation. The lower the mean of the knowledge areas indicate that they are poorly performed. In order to assess the current planning practices of the Addis Ababa housing projects of the selected four sites, analysis is made based on the project planning inputs that are widely applied by PMI. In the following tables the current planning practices of the Addis Ababa housing projects is analyzed.

Finally the involvement of the customers in the planning stage is very low with a mean of (1.92+0.811) below the hypothetical mean of 3 and only 6.5% of the respondents believe that customers involved in the planning stage of the project.

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std.
Risk planning knowledge area	31(25.2)	72(58.5)	8(6.5)	12(9.8)	-	2.00	0.844
Quality planning knowledge area	17(13.8)	63(51.2)	1(0.8)	36(29.3)	6(4.9)	2.6	0.92
Communication planning knowledge area	18(14.6)	74(60.2)	15(12.2)	13(10.6)	3(2.4)	2.2	0.92
Integration planning knowledge area	21(17.1)	85(69.1)	8(6.5)	7(5.7)	2(1.6)	2.05	.781
Scope planning knowledge area	19(15.4)	68(55.3)	9(7.3)	25(20.3)	2(1.6)	2.37	1.02
Procurement planning knowledge area	1(0.8)	14(11.4)	6(4.9)	91(74)	11(8.9)	3.78	0.791
Human resource planning knowledge area	1(0.8)	15(12.2)	5(4.1)	94(76.4)	8(6.5)	3.75	0.782
Cost planning knowledge area	25(20.3)	76(61.8)	7(5.7)	15(12.2)	0	2.09	0.86
Time planning knowledge area	18(14.6)	77(62.6)	10(8.1)	17(13.8)	1(0.8)	2.23	0.89

Table 4.3.1 Descriptive statistics for planning knowledge areas

Source: Own survey, 2017:31=frequency (25.2) = percentage

The above listed knowledge areas are considered as the most important components of a project plan and the performance of a given project plan is assessed based on the perfectness of these project planning processes.

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Project risk identified	30(24.4)	75(61)	8(6.5)	10(8.1)	-
Project completed as per the planned cost	41(33.3)	74(6.2)	6(4.9)	2(1.6)	-
Project managers and organizations are communicated in the planning phase	33(26.8)	73(59.3)	9(7.3)	7(5.7)	1(0.8)
Duration of each activity is determined and planned	18(14.6)	77(62.6)	10(8.1)	17(13.8)	1(0.8)
Work break down structure is made	2(1.6)	36(29.3)	8(6.5)	73(59.3)	4(3.3)
More effort is made in the planning phase of the project	26(21.1)	64(52)	4(3.3)	17(13.8)	12(9.8)

Table 4.3.2 Descriptive analysis of planning knowledge areas

Source: own survey, 2017. 30=frequency (24.4) = percentage

According to the result from table 4.2 project risk plan has a mean score of (2.00+0.844) and which is the lowest from the other knowledge areas. Only 12(9.8%) of the respondents believe that there is a project risk management plan in the projects. This indicates that risks are not properly identified, quantified and planed by the organization under study. As shown from the table below only 8.1% of the respondents, believe that risks in the projects of the study organization are identified.

Integration project plan is also the second lower mean scorer among the planning inputs. The mean score of integrated project plan is (2.05 + 0.781). So there is a poor integration in project planning. There is no well-defined and integrated plan in the organization under study.

The next specific project plan is cost management plan. According to the analysis cost management plan is the third poorly planned area of project plan. Its mean score is (2.09 + 0.86). Only 12.2% of the respondents believe that well established cost management plan is prepared in projects. As we can see from the below table from the analysis of the data

Obtained from the survey, most of the projects under study are not completed with the original budget.

Communication plan is also poor in the study organization. Its mean score is (2.2+0.92). So there is no properly established communication channel and system in the projects of the organization under study. Information in the projects is not timely disseminated to the concerned people in the organization.

Project time management is very poorly planned in the projects of the organization under study. The mean score is (2.23+0.89). Most of the projects are delayed from their original plan due to poor time management plan of the organization under study. As we can see from the below analysis the response rate of the respondents indicates the poor practice of project time management plan. As we can see from the table only 14.6% of the respondents believe that duration of each activity is determined and planned.

Project scope is poorly determined and planed in the projects. The mean score of project scope plan is (2.37+1.02). Such numbers indicate that there is a poor project scope plan in the projects. In order to prepare a good project scope plan there should be a perfectly established work break down structure. As we can see from the below table only 62.2% of the respondents believe that work break down structure is applied in the projects.

As shown above on the table 30.9% of the respondents believe that work break down structure is not properly prepared. So preparing of a good project scope plan is impossible without having a proper work break down structure.

The next project planning input is project quality plan. The mean score of quality plan is (2.6+0.92). In the organization under study there is a poor project quality management plan. 34.2% of the respondents believe that there is a quality management plan in the projects of the study organization.

The next and the highest scorer of the planning inputs is project procurement plan. According to the analysis in the study organization there is a better project procurement plan. It has a mean score of (3.78+0.791). So there is better procurement management plan than that that of the other planning inputs.

Generally most of the respondents believe that the planning phase of the project is given more emphasis than the other phases of the project. The table below which is obtained from the analysis describes the result.

Only 23.7 % of the respondents believe that more effort is made in the planning stage than that of the other project phases. 3.3% of the respondents are indifferent about the attention

given about the planning phase of the project. The rest 73.1% of the respondents believe that the focus given to the planning phase of the project is low. So the planning practice of the study organization is poor.

#### 4.5 Level of participation on the preparation of the project plan.

In order to assess the level of participation of the project team members in the planning phase of the project some related questions are asked for the participants in the study. Their response is analyzed and discussed as follows.

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
Project managers were involved in project planning.	20(16.3)	74(60.2)	7(5.7)	22(17.9)	-	2.25	0.93
Project managers and organizations are communicated in project planning	33(26.8)	73(59.3)	9(7.3)	7(5.7)	1(0.8)	1.94	0.80
Training is given for project team members regarding planning of the project	5(4.1)	76(61)	8(6.5)	30(55.3)	4(3.3)	2.5	0.95

Table 4.4 Level of participation of project team members in project plan preparation

Source: own survey, 2017

As shown form the above table the level of the participation of project team members is low in the preparation of the project plan. 94(76.5%) of the respondents believe that project managers are not well involved in the planning phase of the project. the mean score is 2.25 which is below the hypothetical mean of 3. 7(5.7%) of the respondents are indifferent about the question and only 22(17.9%) of the respondents believe that project managers are involved in preparation of the project plan. The level of project manager's communication is also poor in while preparing of the project plan. As shown from the above table 110(86.1%) of the respondents said that project managers are poorly communicated while preparing the project plan. The mean score is 1.94 which is below the hypothetical mean score of 3. 9(7.3%) of the respondents are neutral about the question. 6(6.5%) agree that project managers are communicated in the planning phase of the project. 76(61%) of the respondents said that training is not given for project team members regarding project plan. The mean score is 2.5, which is above the hypothetical mean score of 3. So the level of participation of project team members is poor in preparing the project plan.

# 4.6 Level of the application of project planning tools

For preparing a good project plan application of project planning tools is very essential. There are different types of project planning tools. Based on the following very important tools the analysis is made. And the table below shows the analysis.

Items	Strongly	Disagree	Neutral	Agree	Strongly	Mean
	disagree				agree	
Work break down	2(1.6)	36(29.3)	8(6.5)	73(59.3)	4(3.3)	3.3
is used while						
planning						
Gant chart is	1(0.8)	20(16.3)	7(5.7)	88(71.5)	7(5.7)	3.65
applied while						
planning						
Project	1(0.8)	23(18.7)	6(4.9)	86(69.9)	7(5.7)	3.6
management software is						
applied while						
planning						

Source: own survey, 2017 \*2=frequency (1.6) percentage

As can be seen from the table the listed tools are applied in the projects of the organization under study. The mean score of all is greater than three the hypothetical mean. Even though it is above three the level of the applicability of the tools is still low. The mean score of the applicability of WBS is 3.3, which is low even if it is above three. On the other hand Gant chart is relatively more applicable than the other tools.

# 4.7 Level of staff awareness of the existing project plan

Table 4 6 Deceminting analy	aid of the lowel of a	www.www.www.act.mlan
Table 4.6 Descriptive analy	sis of the level of a	iwareness of project plan

Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The project plan is well noticed	2(1.6)	56(45.5)	-	64(52)	1(0.8)

Source: own survey, 2017 \*2=frequency (1.6) percentage

The level of the awareness of the project team members about the existing project plan is analyzed as follows. Most of the respondents believe that they are aware of the project plan in their projects. 58(47.1%) of them said that they are unaware of the existence of the project plan. The rest 65(52.8%) of the respondents are aware of the existing of the project plan of the organization.

## **CHAPTER FIVE**

# SUMMARY OF FINDINGS OF THE STUDY, CONCLUSION AND RECOMMENDATION

#### 5.1 Summary of Major findings of the study

- Regarding the project planning practice, the selected Addis Ababa housing project sites have a poor planning practice when analyzed based on the data collected form the respondents and the review of documents. As explained in the earlier part of this chapter a good project plan is one that which involves specific plans explained in table 4.5. Only procurement and human resource planning practice of the organization are good because their mean value is above 3. So most of the respondents believe that there is a poor project planning practice in the four sites of the study organization.
- Concerning the level of staff participation in the preparation of the project plan, the study organization is not good according the responses obtained from to the respondents. Greater than half of the respondents believe that there is poor project team member's participation in preparing the project plan. The level of the project manager's participation is very low with mean value below three in the preparation of the project plan. Even the project managers, team members and organizations are not well communicated during the preparation of the project plan. Most of the respondents believe that project team members were not given a training regarding the preparation of the project plan of the project plan of the projects.
- On the subject of the application of the project planning tools in preparing the project plan, most of the respondents believe that the most widely used planning tools Gant chart, WBS, PMIS were applied better than other planning tools. So the applicability of the explained project planning tools is good according to the majority of the respondents.
- Regarding the awareness of staff on the existence of the project plan, most of the respondents said that they aware of the existence of the project plan. So majority of the staffs of the organization are aware of existence of the plan of the projects they are involved.

#### **5.2 Conclusion**

In Chapter four, data analysis and interpretation has been presented. Based on the analysis conclusion and recommendations are forwarded.

This study has been conducted in the assessment of the planning practice of Addis Ababa housing projects in some selected sites. In this study the researcher tried to see the most important components of a good project plan and tried to analyze the study based on the best practices which are explained in book named PMBOK. In the study the general project planning practice of the study organization is analyzed.

To assess the planning practice of the study organization different points are raised and discussed. There are different specific components of a project plan. These include, project risk plan, project cost plan, project time plan, project communication plan, project human resource plan, project integration plan, project quality plan, project procurement plan and project scope plan. Major conclusions are made regarding these variables and project plan in the study conducted.

- Regarding project risk plan the organization under study has a poor project risk planning practice. Risks are not properly identified, quantified, prioritized and planned even if project risk plan is one of the most important component of integrated and the whole project plan. So the practice in risk planning is poor.
- Project cost planning is poorly conducted. Preparing a good cost management plan is one of the most essential inputs in preparing a good project plan. As one part of the aggregate plan failing to properly prepare a good cost management plan have an impact on the whole project plan. So as a result of having poor cost management plan, the study organization completes most of its projects over the initial budget. This is also another indicator of the poor planning practice of the study organization.
- Project time management plan is also poorly prepared. According to the data obtained and the analysis made based on it, most of the projects in the study organization are delayed from their planned completion time. Duration of activities in the projects is not well determined and as result it is impossible to determine the actual time needed for each activity and the whole project schedule of completion. So there is a poor time management plan in the study organization and, it is an indication of poor project planning practice.

- In the study organization the communication plan is also weak or it is not properly planed. There is no well-established system for transferring and disseminating information to the concerned bodies in the project. The result of the analysis confirms that the communication system of the study organization is not well organized. Communication is one of the most important inputs in determining and preparation of a good project plan.
- Regarding project integration plan in the study organization the respondents believe that there is no as such good integration practice and plan in the projects that the organization runs. So based on the findings of the study the organizations integration planning practice is poor.
- Project quality management plan is also poorly practiced by Addis Ababa housing projects. Based on the data gathered from the sample respondents and the documents reviewed from the projects there is no well-organized project quality management plan. In any project there should be a quality plan and quality assurance mechanism as well. But the study organization has a weak quality management system and planning practice.
- Project procurement planning practice of the study organization is better than the other specific plans. The procurement practice and plan is more formal and systemized than the other specific project plans.
- Project scope planning is not well done in the study organization because activities are not properly determined. For determining the scope of the project and to prepare a plan each activity in the project should be well defined. But in the study organization, according to the data obtained from the survey and the analysis made there is a poor practice of defining activities. As a result it is impossible to determine the scope and prepare a good project plan.
- The organization is also weak in participating staff in the participation of the project plan of the projects of the study organization.
- Project planning tools are applied in somehow good condition. The three most commonly used project planning tools WBS, Gant chart and PMIS are used in planning of the projects of the study organization.
- The planning practice is poor according to the study findings.
- ✤ The level of staff participation in the planning phase is low.
- ✤ Lastly most of the respondents said that project team members are aware of the existence of the project plan of the organization and they also believe that project

planning tools like WBS, Gant chart and PMIS are used in preparing the project plan. These are the most widely used project planning tools by the selected project sites of the organization.

#### **5.3 Recommendation**

Project plan is one of the most important factors that determine the success of a given project. A properly established plan is very essential and it contributes positively to the success of a project. On the other hand failing to properly plan in projects is the main reason for failure of projects. Thus the student researcher believes that for successfully completing projects Addis Ababa housing projects should establish a good project plan. As explained earlier in this paper there are about nine and more specific plans which in aggregate gives the whole project plan. So these specific plans should be prepared well so that it is possible to have a good project plan.

Based on the study findings the student would like to recommend the following major points.

- More effort should be made at the planning stage of the project. A project with a good project plan is with a good road map. So giving attention and making a good effort in preparing the plan helps in successfully completing the project.
- Even though some planning tools and techniques are applicable in a limited manner, it is important to use them all in a more advanced way while preparing the project plan.
- The level of stakeholder involvement is low while preparing the project plan in Addis Ababa housing projects. Stakeholders should be involved in the planning stage of the project. Involving stakeholder's in the planning stage helps to see the project from different points of view. So attention should be given to the importance of preparing a participatory project plan.
- From the findings it is observed that the planning practice of the organization under study is not good based on the data collected and the analysis made. The organization will implement many new projects in the future. So the researcher would like to recommend to the study organization to improve its project planning practice by considering and referring the best planning practices. Because such huge projects implemented with a high budget, failing to properly plan will have an economic, social and political impact in the country. The researcher would like to recommend that effective project

planning is critical factor for the success of any project. So the host organization should focus in its planning as compared with the other project phases. If planning is perfectly prepared it will have a positive impact on the other project phases as well.

Even if staffs are aware of about the existing project plan, it is low according to the finding of the study. So there should be an effort by the organization for creating a better awareness of the project plan by the staffs. It is possible to prepare an awareness programs and trainings that could help in increasing the awareness level of staff about the project plan.

To close the gap between the practices and the theories, the organization should look in to its practices and take evaluation, restructuring and corrective actions. If the organization takes in to consideration the recommendations, it would be possible to support the organizational performance.

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# APPENDIX

#### SAINT MARRY UNIVERSITY PROJECT MANAGEMENT GRADUATE PROGRAM QUATIONNAIRE FOR SURVEY

#### TITLE: "ASSESMENT OF THE PROJECT PLANNING PRRACTICESS OF ADDIS ABABAHOUSING PROJECT" Dear respondent,

The purpose of this questionnaire is to collect information for the study that assesses the project planning practices of Addis Ababa housing project. The study is a requirement for achieving master degree. Your response to each question is indispensable for the effectiveness of this study. The student researcher would like to assure you that your response to the questionnaire would be kept confidential and it has no intention except for academic purpose. Please don't write your name or any personal identifier on the questionnaire. For any clarification needed, please contact me on the below telephone number.

Thank you in advance

Yours Sincerely Thank you for your assistance Sadik.M Mobile: - 0921454587

**Instructions**: Please refer/consider/ the projects in Addis Ababa housing agency that you are participated and answer the following question. For each of the questions, please tick[x] in the provided space the most suitable answer using the given scale. Please also answer all the questions to enhance the objectivity of the research.

#### PART I: PERSONAL DETAILS OF THE RESPONDENT

Q.1. Sex: Male	female		
<b>Q.2.</b> Age: 20-30	31-40	41-50 50 ar	nd above

**Q.3**. what is your level of education?

Certificate Diploma 1ST Degree Master's Degree
Others (specify)
Q.4. How long have you been working with the organization?
0-5 years 6-10 years 11-20 years 21-30 years 30 years and above
<b>Q.5</b> . what is your position.

# PART II: Questions on project planning practices of Addis Ababa housing project.

No	Description	Scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1	Project managers were well experienced in planning processes					
2	More effort was spent in planning stage compared to other stages					
3	Team members were well experienced in planning process					
4	Team members were well committed in planning stage					
5	Customers/users were involved in planning stage					
6	Project planning tools are applied while planning					
7	Project managers and organizations					

	11				
	was well				
	communicated during				
	Planning phase				
8	Schedules were well				
	developed (prepared)				
9	Activities were well				
9	defined				
10	Resource for project				
	determined				
11	Project Risk				
11	identified				
10					
12	The project				
	completed with the				
	planned budget				
13	Integrated project				
	schedule prepared				
1.4	Training was siver				
14	Training was given				
	for project team				
	member				
15	Work break down is				
	used while planning				
16	The project scope is				
	well defined before				
	execution				
17	Gant chart is				
17	applicable while				
	planning in projects.				
10					
18	Project management				
	software is applicable				
	while planning.				
19	Project managers				
	were involved in				
	planning phase of the				
	project.				
20	Quality planning				
	performed				
21	Human resource				
<u>~1</u>	planning is performed				
22					
22	Procurement plan is				
	prepared				
23	Projects are				
	completed according				
	to the original plan	 			
24	Communication plan				
	is prepared				
25	Integrated project				
23	schedules are				
26	prepared				
26	Project cost planning				
<u> </u>	is well made				
27	Project risk plan is				
	prepared		<u> </u>	<u> </u>	

28	Resources needed for the project is determined and planned	
29	Duration of each activity is well determined and planned	
30	Project team are aware of the existence of the project plan	