

Project Planning and its Practice in the Industrial Parks of Ethiopia

A Case of Jimma Industrial Park

A Research Thesis Submitted to the School of Graduate Studies of Jimma University in Partial Fulfillment of the Requirements for the Award of Master's Degree in Accounting and Finance (MSc.)

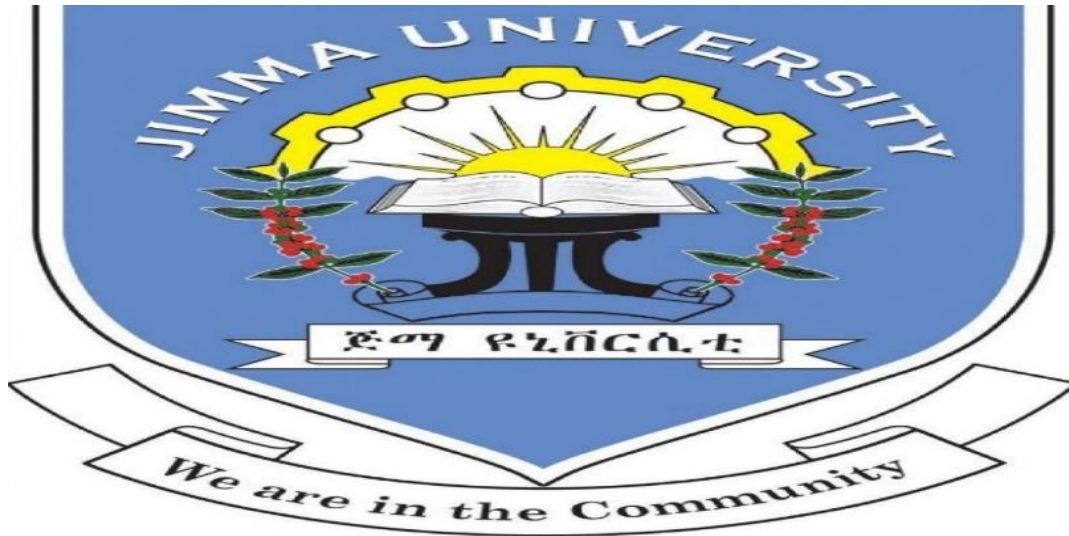
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**JIMMA UNIVERSITY
COLLEGE OF BUSINESS & ECONOMICS
MSC.PROGRAM IN ACCOUNTING AND FINANCE**

***AUGUST, 2020
JIMMA, ETHIOPIA***

DECLARATION

I, the undersigned, hereby declare that this is my own original work and that all sources have been accurately reported and acknowledged, and that this document has not been previously, in its entirety or in part, submitted at any university in order to obtain academic qualifications.

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Abstract

Lack of effective planning process 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. This research deals with the study of project planning and its practices in Industrial parks of Ethiopia a case of Jimma industrial park project. The objectives of the research were to assess the extent to which project management knowledge areas are practiced during the planning process of projects and identify the level of use of project management tools and techniques during planning stage of projects in the organization under study. The study was conducted based on data gathered from FDRE (Federal Democratic Republic of Ethiopia) Industrial Park Development Corporation office. Both census and purposive sampling techniques were used in selecting of the sample. A mixed research approach was employed to answer the research questions that emerge through the review of existing literature. The data obtain through questionnaire was analyzed using descriptive statistics. A total of 104 questionnaires were distributed and 101 are returned and used by the researcher. SPSS version 20 was applied for processing and analysis purpose. The result of the analysis shows that the general project planning practice, project management knowledge area and project planning tools and techniques were poorly performed in the study organization. The study recommended the study organization more effort should be made at the planning stage of the project, more advanced project planning tools and techniques should be applied while preparing project planning and team members should take appropriate training.

Key Words: *project plan, project planning practices, project management knowledge area, tools and techniques.*

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Acronyms

CPM	Critical Path Method
PERT	Program Evaluation and Review Technique
WBS	Work Break Dawn Structure
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institution
HRM	Human Resource Management
SPSS	Statistical Package for Social Sciences
SD	Standard Deviation
FDRE	Federal Democratic Republic of Ethiopia
IPDC	Industry Park Development Corporation

CHAPTER ONE

1 INTRODUCTION

This chapter presents the background of the study, statement of the problem, research question, objectives of the study, significance of the study, scope of the study, limitation of the study and structure of the thesis.

1.1 Background of the study

A feasible project plan serves as a road map for the execution process in the same way that an air plane map serves to guide a planned trip. In both cases, we realize that the map may not have identified all items along the way, but hopefully, the detours encountered will be minor and we will always be close to the defined target areas. Also, the plan can help us move back in the desired direction. To accomplish this goal, the project plan must accurately capture the stated requirements, map an appropriate technical work pathway to achieve those requirements, incorporate various necessary technical items into the plan to support the output, allocate required resources to work units, and integrate these together such that all necessary components are in synchronization (Carstens and Gary, 2013).

According to (Kerzner, 2003) the major responsibility of the project manager is planning. If project planning is performed correctly, then it is conceivable that the project manager will work himself out of a job because the project can run itself. This rarely happens however, few projects are ever completed without some conflict or trade-offs for the project manager to resolve.

Project planning in many cases is not performed well in the building industry, and, as a result, the building sector suffers from poor or incomplete scope definition, frequently experiencing considerable changes that result in significant cost and schedule overruns. (Kamau, Mireri and Usman, 2013) confirmed that the growing complexity of the building industry calls for increased effectiveness in the planning and control of projects.

The planning process consists of those processes performed to establish the total scope of the project effort, define and refine the objectives, and develop the course of action required to attain those objectives. These include, developing the project management plan and documents that will be used to carry out the project; such as, Schedule development, determining the budget,

Work break down structure, developing the quality plan, the procurement plan, risk response plan, communication plan and human resource plan (PMI, 2008).

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, et al. 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 (Serrador, 2013) explains that impact of project planning is widely thought to be an important contributor to project success.

According to the research paper by (Wang 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, et al. 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. African nations simply do not have adequate institutional capacity or trained personnel to plan and implement projects effectively (Lavangon, 2012). 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 it needs to deliver more electric power, roads and expansion of different infrastructural activities like building of hospitals, schools, telecommunication services and currently as we know industrial park project. 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 the 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. Accordingly, 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 (Lemma, 2014).

According to (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 others 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. According to (Yardley, 2002) lack of effective planning process 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 (Tekalign, 2014). 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 cannot take place, as a result projects will delay or fail.

Moreover, inadequate analysis and planning will lead to a failed project but the more planning there is in a project, the more positive outcome is expected. Even if all the resources are available poor project planning will result to project failure. According to (Wang and Gibson, 2008) planning and analysis are important and the more planning there is in a project, the more successful the project will be. Time spent on these activities will reduce risk and increase project

success. On the other hand, inadequate analysis and planning will lead to a failed project (Morris, 1998).

A research conducted by (Whitaker, 1999) indicates that a project plan which is properly prepared is highly determining factor for the project's success. (Dvir, et al. 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 (Tekalegn, 2014). Even though there are not such enough number of studies conducted in the area in our country, the studies conducted justify the existence of the problem in the projects.

A paper by (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. Poor planning of industrial parks could result in planned industrial slums, with traffic problems, industrial nuisances, and inadequate buildings and utilities.

If the project takes longer time than anticipated, it requires additional resources, and budgets. This consequently increases labor, material, machinery and equipment cost. This affects the budget of other projects and in general, it affects the economy of the country. Project failure is also the main challenge of our country's projects. The performance problems of project (cost overrun, time delay, quality deficiency) are caused by either in selection, planning, execution or control phase of the project and other factors. However, according to (Richard, 2012) planning is often cited as the most critical of the management functions in determining the overall project performance. And it is also considered the most important and critical phase to the success of an organization in meeting its goal and objectives. According to (Antvik & Sjöholm, 2007) the planning processes are highly important, and project execution without proper development of a project plan often causes delays, high cost and general execution problems in the project. 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. The study by (Wang and Gibson, 2008) shows that time spent on project planning

activities will reduce risk and increase project success. Effective project planning processes gets better the performance problem of project outcomes (Griffith and Gibson, 1995; Griffith et al., 1998) and the study by (Hamilton and Gibson, 1996) have 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. Therefore planning was identified as awfully important project management function for the successes of project outcome. The success of such projects becomes vital for the achievement of Jimma industrial park project of vision. This study focuses on identifying and assessing the project planning practices and problem areas in Jimma industrial park and eventually helps the company to provide a better recommendation on project planning practices and take corrective actions and prevents project delay or failure of other industrial project plan.

1.3 Research Questions

- What is the level of project planning process and its practice in Jimma industrial park project?
- To what extent does project management knowledge areas are practiced or implemented during the planning process of Jimma industrial park project?
- To what extent does project management tools and techniques are applied during the planning stage of Jimma industrial park project?
- To what extent the project team member participates in preparing the project plan?

1.4 Objectives of the Study

1.4.1 General Objective

The main objective of the study was to assess project planning and its practices in Ethiopia industrial park a case of Jimma industrial park.

1.4.2 Specific Objectives of the Study

- i) To explore the level of project planning processes that has been practiced in Jimma industrial park project.
- ii) To study the extent to which the project management knowledge areas are practiced or implemented during the planning process of the project.
- iii) To identify project management tools and techniques that are being applied during the planning stage of project plan.

- iv) To examine the extent to which the project team member participates in preparing the project plan.

1.5 Significance of the Study

The study was examined the construction project of Jimma industrial park project planning and its practices against project management knowledge areas, tools and techniques.

The study was provided lessons that will help the organization to improve its overall project performance thereby improving project planning knowledge within the organization and the concerned body of the organization member.

The major finding of this study is useful for industrial park project planer of the country and also the finding of the study useful for policy maker, practitioner and other government organization involved in project planning practices, because this sector spend billions dollar of the country budget and also it's believed to transform the country from agriculture to the industry world. The researcher 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 current the best practice according to standard. On the other hand this study was try to show the importance of preparing a deep and technologically advanced project plan. Finally this research will be somehow a base for interested researchers in the area to conduct a deep study and analysis.

1.6 Scope of the Study

The study was conducted in Oromia regional state in Jimma city where Jimma industrial park project is located and in Addis Ababa city where the head office of FDRE Industrial Parks Development Corporation is located. The study was limited to assessing the project planning and its practice in Jimma industrial park construction project in Jimma city in relation to project management body of knowledge areas. As clearly defined in the study background the study has been an assessment of the existing situation/variables without making any inference. Thus, a descriptive research design was employed and both quantitative and qualitative data analysis methods were used to suit the research objective of study organization.

1.7 Limitation of the study

This research has the following major limitations due to time and resource. Geographically this research study covers only project planning and its practices of Jimma industrial park. 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. There are so many factors that affect the success of a given project. So the student researcher suggests for further study on the area.

1.8 Structure of the thesis

The study is organized in five chapters with different sections and sub-sections. Chapter one deals with background of the study, statement of the problem, research question, general and specific of the study, significance of the study and scope of the study. Chapter two discusses the review of relevant literatures and included prior research works on topic area. The third chapter contain research design, population and sampling techniques, type of data and instrument of data collection, method of data analysis and reliability. Chapter four deals with result and discussion. Chapter five discuss about conclusion and recommendation of the research work.

CHAPTER TWO

2 LITERATURE REVIEW

This chapter presents relevant literature review and prior studies to support the objective of the study. Under this chapter, theoretical background on basic concepts, empirical reviews and conceptual framework of the study also presented.

2.1 Theoretical Literature Review

2.1.1 What is a Project?

According to the Project Management Body of Knowledge (PMI, 2004), a project is a plan or proposal consisting of a sequence of unique, complex, and connected activities having one goal or purpose and that must be completed by a specific time, within budget, and according to specification. A project comprises a number of activities that must be completed in some specified order, or sequence. The activities in a project must be unique. A project has never happened before, and it will never happen again under the same conditions. Something will always be different each time the activities of a project are repeated. The activities that make up the project are not simple, repetitive acts, such as mowing the lawn, painting the house, washing the car, or loading the delivery truck. They are complex. For example, designing an intuitive user interface to an application system is a complex activity.

2.1.2 Project Management

The application and integration of modern management and project management knowledge, skills, tools and techniques to the overall planning, directing, coordinating, monitoring and control of all dimensions of a project from its inception to completion, and the motivation of all those involved to produce the product, service or result of project on time, with in authorized cost, and to the required quality and requirement, and to the satisfaction of participants (Atkinson, 1999); (Kerzner, 2003) project management deals mainly with coordinating resources and managing people and change. Generally managing a project includes: identifying requirements, establishing clear and achievable objectives, balancing the competing demands for quality, scope, time and cost; adapting specifications, plans, and approach to the different concerns and expectations of the various stakeholders (PMI, 2004).

2.1.3 Project Management Process

The functions of project management include defining the requirements, establishing the extent of work, allocating the resources required, planning the execution of the work, monitoring the

progress and adjusting deviations from the plan (Munns and Bjerimi, 1996). As described in Project Management Body of Knowledge Guide (PMI, 2008), there are five phases of project management processes: initiating, planning, executing, controlling and closing (PMI, 2000). These processes are described below.

1. Initiating processes: To initiate a project or just the concept phase of a project, someone must define the business need for the project, must sponsor the project and take on the role of project manager. Therefore; you cannot equate process groups with project phases. Recall that there can be different project phases, but all projects will include all five process groups.

2. Planning processes: include devising and maintaining a workable scheme to ensure that the project addresses the organization's needs. There normally is no single "project plan." There are several plans, such as the scope management plan, schedule management plan, cost management plan, risk management plan, and so on, defining each knowledge area as it relates to the project at that point.

3. Executing processes: include coordinating people and other resources to carry out the various plans and produce the products, services, or results of the project or phase.

4. Monitoring and controlling processes: include regularly measuring and monitoring progress to ensure that the project team meets the project objectives. The project manager and staff monitor and measure progress against the plans and take corrective action when necessary. A common monitoring and controlling process is performance reporting, where project stakeholders can identify any necessary changes that may be required to keep the project on track.

5. Closing processes: include formalizing acceptance of the project or project phase and ending it efficiently. Administrative activities are often involved in this process group, such as archiving project files, closing out contracts.

2.1.4 Planning

By definition, planning is an orderly (step by step proposal on how an end product) goal will be achieved (Jemima, 2015). 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 is concerned with the future.

According to Jemima, whether documented (as should ideally be the case) or not, a project plan should address the following areas with regard to the project;

- The scope of the project i.e. time and cost-within what time do you want to complete your construction and working within what budget?
- Objectives of the project - what kind of structure are you setting up and what will be the necessary requirements needed to be put in place to ensure that the project meets its intended objectives?
- Milestones-what activity or stage of the project will signify substantial progress?
- A work schedule and breakdown structure - given the different tasks, it is important to clearly indicate when each of these tasks will be carried out and the systematic sequence that the different tasks will follow.
- Progress tracking - with respect to the schedule, one should be able to track the progress of the project based on actual output against planned output and determine whether the project is on course or lagging.

2.1.5 Project Planning

Before the commencement of any project, the first thing that we need to do is project planning. Any reasonable project manager certainly understands the importance of planning a project well. Carefully planned project takes into account necessary aspects of a project (e.g. tasks, milestone, schedule, risks, communication, quality, etc.) and provide a plan which project team can refer during execution.

According to (PMI, 2004), a project plan expresses the objectives and requirements of the project in terms of:

- Project Scope
- Project schedule
- Resource requirement
- Project cost estimation
- Project quality and
- Project risk management

A project planning enables project manager to translate project requirement into work break down Structure (WBS), tasks list, Gantt Charts, resource assignments and risk register, etc.

Therefore, in this study project planning is defined as the systematic arrangement of resources and processes of defining project objective and determining the framework to achieve project objective.

2.2 Project Planning Knowledge Areas

In Project Management body of Knowledge nine knowledge areas of project management are identified namely: - scope, time, cost, risk, quality, human resources, communications, procurement and integration knowledge areas (PMI, 2008). Each knowledge area in PMBOK is composed of processes that are expected to be addressed to attain the objective of the knowledge areas. The relative importance of the project management Knowledge areas used during the planning phase of a project and their impact on project success. Additionally, this article identifies the most important Knowledge Areas of the planning phase.

2.2.1 Project Integration planning knowledge areas

Project integration planning knowledge areas 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. The plan should include general plans regarding all areas of the project such as; project objectives, time schedule, budget, etc. (PMI, 2004). Since project plan is the main document developed in the planning process and it is very important to allocate sufficient amount of time and resources for this process. A project with a poor developed project plan is most likely to be poorly executed with high costs and delays as a result. The integration between the different elements of the plan is a complex process and is therefore often required to be iterated several times in order to reach a complete and integrated project plan (Antvik & Sjöholm, 2007).

Scope planning is the process of elaborating the work that is needed to deliver the product of the project. It should be based on the product/output/ description and requirements from the customer (PMI, 2004). The outcome from the scope planning is the scope management plan that mainly describes how the project scope will be managed and how scope changes will be integrated into the project. Defining the project scope significantly influences the projects overall success. The development of the project scope management plan and the detailing of the project scope begin with analysis of information contained in the project charter, the preliminary project scope statement, the latest approved version of the project management plan, historical

information contained in organizational process assets, and any relevant enterprise environmental factor.

In the scope definition, the projects major deliverables/products/ and conditions documented in the scope statement are analyzed. The analysis should be based on needs and expectations from stakeholders, and thereby generate requirements of the project. When more specified requirements are known, the deliverables are subdivided into smaller, more manageable groups, through the use of a Work Breakdown Structure. By dividing major tasks into smaller work packages, the accuracy of cost, time and resource estimates are improved. A WBS also makes it easier to assign clear responsibility to each group of tasks, which is necessary in order for the project organization to gain control of the project (Antvik & Sjöholm, 2007).

2.2.2. Project Scope planning knowledge areas

Project scope management planning 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). The importance of a well formulated scope of work has been shown several times in different projects. It is not unusual that a project is rushed into start without the proper planning and preparation. This often leads to problems as extra costs and delays are likely to occur (Antvik & Sjöholm, 2007). A clear project scope facilitates for the project organization to realize the actual magnitude of the work and creates an understanding for the achievements that are required in the project. Scope planning is the process of elaborating the work that is needed to deliver the product of the project. It should be based on the product/output/ description and requirements from the customer (PMI, 2004). The outcome from the scope planning is the scope management plan that mainly describes how the project scope will be managed and how scope changes will be integrated into the project. Defining the project scope significantly influences the projects overall success. The development of the project scope management plan and the detailing of the project scope begin with analysis of information contained in the project charter, the preliminary project scope statement, the latest approved version of the project management plan, historical information contained in organizational process assets, and any relevant enterprise environmental factor.

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2.2.3 Project Time planning knowledge areas

Project time planning knowledge area includes all planning processes that are required to ensure a timely completion of the project. The planning processes in time knowledge area are activity definition, activity sequencing, activity resource estimating, and activity duration estimating and schedule development. The time schedule is one of the most important plans in a project. The development of time schedules should be based on the previously developed WBS. According to (Antvik & Sjöholm, 2007) in order to develop realistic and achievable schedules, it is important that activities are sequenced accurately. The activity sequencing involves identifying logical relationships and dependencies between the project activities. The process of activity resource estimation involves determining what resources and what quantity of each resource that will be used in the project. Required resources can be personnel, equipment and material. This process also includes determining when each resource will be available to the project (PMI, 2004). There are in general two methods of resource estimation; top-down and bottom-up. If the project has limited detailed information, the top-down method is often used. It is carried out by the higher management of the project and is based on experience from similar projects. The bottom-up method is also called qualitative based estimations and involves each specific work category in the process.

The bottom-up method is more time consuming to perform, but often generates a more accurate result. The activity duration estimation should be based on the project scope, required types of resources, estimated resource quantities and the availability of resources. The result of the process is later used to develop schedules. To get an accurate estimation of duration it should be carried out by a person or group who is familiar with the specific activity. The development of schedules is often carried out through the use of project management software. If the previous estimations are made correctly the schedule development mostly consists of aggregating the information into one document. To develop an efficient schedule it is important that the critical

chain is identified and that the lags in the schedule is used to allocate the projects resources effectively (PMI, 2004).

A time schedule without control is fairly useless to the project organization. The control must be carried out regularly and relatively often in order to detect deviations early. This makes it possible for the project team to take necessary actions to avoid longer delays. The schedule control and development must be an iterative process in order for the project team to have updated schedules throughout the project. Estimating schedule activity durations uses information on scope of work, required resource types, estimated resource quantities, and resource calendars with resource availabilities. Inputs originate from the person or group on the project team who is most familiar with the nature of the work content in the specific schedule activity. Duration estimates are progressively elaborated, and the process considers the quality and availability of input data.

2.2.4 Project Cost planning knowledge areas

Project cost planning knowledge area includes the processes of cost estimating and cost budgeting. The main objective of cost planning knowledge area is to complete the project within the approved budget. The project budget is very important and influences all areas in both planning and execution of a project. It is important to keep track of total costs as well as costs for different work packages in a project. A professional developed budget does not only control the project costs, but also creates good conditions for development of a well-functioning cash flow in the project. The consequence of insufficient cash flow in a project is often connected to large extra costs and delays, as there is a high risk for a temporary stop of the whole project. The cost estimation should be based on the project scope, the WBS and be connected to the project plan. To reach a correct estimation it is important that each activity is estimated based on the conditions of the execution of the specific activity. Since there often are several factors that are uncertain in a project, a reserve cost can be assigned to activities with a low level of detailed information or work packages with potential high financial risks (Olawale & Sun, 2010).

Cost budgeting involves aggregating the estimated costs of individual schedule activities or work packages to establish a total cost baseline for measuring project performance. The project scope statement provides a summary budget. However, schedule activity or work package cost estimates are prepared prior to detailed budget requests and work authorizations. Management

contingency reserves are budgets reserved for unplanned, but potentially required, changes to project scope and cost.

2.2.5 Project Quality planning knowledge areas

Project quality planning knowledge area involves all processes and activities in the project organization to determine quality policies and control that the performed work is of a satisfying quality. The major processes in quality management are quality planning, quality assurance and quality control (PMI, 2004). The project team must identify which quality standards those are relevant in the project in order to perform quality control. The identified standards should be considered the baseline in the development of a quality plan. It is important that the quality plan not only consist of required levels of quality in different activities, but also methods to achieve the requested quality (Wei & Yang, 2010).

2.2.6 Project Human Resources planning knowledge areas

Human resource planning knowledge areas is the processes used to ensure that the project organization is established in a way that provides the project with good conditions to succeed. Major processes in human resource management are human resource planning, acquire project team, develop and manage project team (PMI, 2004). In the early phases of a project it is necessary for the project management to plan how the project team should be organized and determine what roles that is required (Al-Maghraby, 2008). Each role in the project team should be assigned with areas of responsibility, authority and required competence (Antvik & Sjöholm, 2007). It is important that a role with a defined area of responsibility also has the authority to make decisions within that area. Responsibility without authority makes it very hard for middle management to influence the work, which most likely will affect the project negatively and a project in the context of one country or culture is likely to experience different problems and have a different structure than projects in another context (Walker, 2007). Human resource planning Determining project roles, responsibilities, and reporting relationships culminating in the staffing management plan Acquire project team Process of obtaining the human resources needed for completing the project.

2.2.7 Project Communication planning knowledge areas

Project communications management planning is the processes used to ensure that required information is distributed to the right person at the right time. The major planning processes in communications management are communications planning (PMI, 2004). How communication in a project is handled must be planned in order to perform effective work and minimize the

risks. A communication plan is necessary to ensure that both internal and external project communication is carried out effectively.

The plan should contain details regarding what type of information that need to be distributed, who needs to receive the information, the purpose of the information, the frequency of the distribution and the responsible person to issue the information (Ramsing, 2009). The communication plan should also include what meetings are required within the project and a specification of participants, purpose and frequency for each type of meeting (PMI, 2004).

It is important that the project management performs frequently progress reports, mainly to inform clients and other stakeholders of the status of the project but also for the management team to keep control of all areas of the project. A progress report should focus on deviations from the project plan and contain current status of the project, executed and planned actions, uncertainties and forecasts regarding cost and time (Antvik & Sjöholm, 2007). When deviations from the baseline are identified in the progress report, the management team should include recommended corrective actions in order to bring the project in line with the project plan (Ramsing, 2009). As stated in the Project Management Book of Knowledge (PMI) from the Project Management Institute, communication planning involves “Determining the information and communications needs of the stakeholders: who needs what information, when will they need it, and how will it be given to them.

2.2.8 Project Risk planning 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).

All projects have uncertainties that can either turn out to be an opportunity or a risk. Uncertainties often occur in areas where the management has little information of the current conditions. By effective management many uncertainties can be evolved into an opportunity rather than a risk (Antvik & Sjöholm, 2007). Risk analysis is often carried out early in a project when the information is highly limited within several areas. To manage risks and opportunities effectively, the analysis must be iterated throughout the project as more and more information becomes clear to the management team (Kululanga, Kuotcha, Mccaffer, et al, 2010).

The purpose of a risk analysis is to gain control of the uncertainties in the project. When risks are identified it is therefore important that a strategy is developed in order to response to the risk (PMI, 2004). A response strategy can be to eliminate the probability or impact of a risk, or to accept the risk and calculate with a potential extra cost if the risk occurs (Kululanga, Kuotcha, Mccaffer, et al, 2010). A common and effective approach to analyze risks is to estimate the probability and impact of a risk. The risk response is then based on the combined value of each risk, which leads to a risk management where the response is in relation to the magnitude of the risk (Briner, Hasting & Geddes, 1996). Risk identification determines which risks might affect the project and documents their characteristics. All persons associated with a project should be encouraged to identify risks. It is important to have the project team involved in the identification process so that they can develop and maintain a sense of ownership and responsibility for the project risks and associated risk response actions. Quantitative risk analysis is performed on risks that have been prioritized by the qualitative risk analysis process as potentially and substantially impacting the projects competing demands. Quantitative risk analysis assigns a numerical rating to risks and applies quantitative approaches to making decisions in the presence of uncertainty using such techniques as Monte Carlo simulation and decision tree analysis

2.2.9 Project Procurement planning knowledge areas

Procurement management planning is the processes to control and administrate contracts and purchase orders from sources external to the project organization. The major processes in procurement management planning are developing procurement (identifying which project needs can be best met by procuring products or services outside the project organization) and solicitation planning (preparing the documents needed to support solicitation/request) (PMI, 2004).

The planning of procurement management should be carried out early in the project and focus on analysis of which products or services that need to be purchased. After the initial planning a procurement plan should be developed that includes all major procurements that are needed in the project (PMI, 2004). The procurement plan is an important tool for efficient procurements throughout the project. It should be developed based on the project's WBS and time schedule in order to include all procurements and to be timely integrated in the project. The procurement plan includes budgeted cost and required finished date for procurement (Eriksson & Westerberg, 2011).

A poorly developed procurement plan is likely to cause high procurement costs and in worst case even force the production to be stopped. In larger projects there are often a procurement manager assigned to control and handle procurement activities. The procurement manager is responsible to plan and execute purchases. An important part of the procurement manager's work is to evaluate quotes in order to achieve cost effective contractors (Eriksson & Westerberg, 2011). To keep control of the cost forecasts in the project the procurement manager must follow-up the actual cost in relation to budgeted cost for each purchase (Antvik & Sjöholm, 2007).

2.3 Benefits of Developing a Project Plan

One of the main 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 (Kerzner, 2006). According to the authors, 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.

According to the authors, these considerations are important in a project environment because each project can be different from the others, requiring a variety of different resources, but having to be performed under time, cost, and performance constraints with little margin for error. Careful & detailed planning help us to reduce risk and in turn uncertainty in any given project. In a well-planned project, project planner attempts to make a provision for potential occurrences of uncertainties in advance. (Meredith and Mantel, 2010) on the other hand put the benefits of project planning as follows

i) Planning reduces uncertainty

Even though we would never expect the project work to occur exactly as planned, planning the work allows us to consider the likely outcomes and to put the necessary corrective measures in place.

ii) Planning increases understanding

The mere act of planning gives us a better understanding of the goals and objectives of the project. Even if we were to discard the plan, we would still benefit from having done the exercise.

iii) Planning improves efficiency

Once we have defined the project plan and the necessary resources to carry out the plan, we can schedule the work to take advantage of resource availability. We can also schedule work in parallel; that is, we can do tasks concurrently, rather than in series. By doing tasks concurrently we can shorten the total duration of the project. We can maximize our use of resources and complete the project work in less time than by taking other approaches. According to (Annie, 2003), project planning yields the following importance for construction projects in particular:

- Planning helps to minimize the cost by optimum utilization of available resources.
- Planning reduces irrational approaches, duplication of works and inters departmental conflicts.
- Planning encourages innovation and creativity among the construction managers.
- Planning imparts competitive strength to the enterprise.

2.4 Challenges of Project Planning Activities

Project plan development is more than opening a project plan and typing tasks that need to be completed to get the job done. It requires thoughtful activity definition, sequencing, and resource estimating and their direct integration with the program's detailed development life cycle. Developing and using standard estimating models and templates aligned to the program's development life cycle is critical and one of the first steps in successfully building a plan that can provide true status of progress (Brisgone, 2007). A study by (Karlsson, 2011) also indicated that financial status, education, politics, resource and culture are all contextual factors that highly affect approaches and methods in project management.

According to (Brisgone, 2007), there are number of challenges that affect the quality of project planning and consequently the entire project performance. These are:

- Time Management
- Determining budget
- Prioritizing Project tasks
- Getting up-to-date information
- Economic and political instability

- Personnel turnover
- Lack of conflict resolution strategy
- Availability of qualified personnel
- Meeting the required quality
- Identifying risks
- Coordinating the various stakeholders, etc.

2.5 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, 2010) the planning process involves the following major steps.

i) 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.

ii) 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.

iii) Establishing objectives and 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.

iv) 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.

v) 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 feed-back mechanism.

vi) 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 manager 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?

vii) Controlling and evaluating the results

Once the plan is implemented, the manager is responsible to monitor and evaluate the progress made. It 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.

2.6 Project Planning Tools and Techniques

One of the most significant phases of project management is the “Planning phase”, in which all work to be done is determined and defined. Planning is the most time consuming set of activities but valuable if done properly. In this phase, many different techniques are used, work breakdown structure (WBS), Gantt charts and networks, Program Evaluation and Review Technique (PERT), critical path method, classic technique, waterfall technique, agile project management, extreme project management etc.

Work Breakdown Structure

Work Breakdown Structure is used to divide projects into individually planned subprojects/phases, which can then be planned and executed individually. The potential uses of WBS include:

- Dividing the project into phases
- Dividing the project into responsibility areas within the organization
- Dividing the schedule of the project into sub-schedules whose interrelations are known
- Giving grounds to following the cost of the project by defining clear targets (work packages) to it
- Giving hierarchical outlining and coding for the work to be done
- Enabling integration planning and managing of the project from both financial and scheduling perspective (Pelin, 1996).

Finding out the best use of WBS in different organizations and different situations is always an iterative and heuristic process; there are no generic answers that apply to all situations. WBS (Work Breakdown Structure) is an organizational chart that breaks the project into sub systems, components and tasks that can be readily accomplished. It is used for scheduling, pricing and resource planning. It simplifies summarizing and reporting progress and costs. Organization Breakdown Structure (OBS) is a model that organizes resources into groups for better management. It can be used to keep track of resource allocation and specific work assignments. There is a strong interdependency between OBS and WBS (Badiru and Pulat, 1995).

Gantt chart

A Gantt chart is a matrix, which lists on the vertical axis all the tasks to be performed. Each row contains a single task identification, which usually consists of a number and name. The horizontal axis is headed by columns indicating estimated task duration, skill level needed to

perform the task, and the name of the person assigned to the task, followed by one column for each period in the project's duration. Each period may be expressed in hours, days, weeks, months, and other time units. In some cases it may be necessary to label the period columns as period 1, period 2, and so on. The graphics portion of the Gantt chart consists of a horizontal bar for each task connecting the period start and period ending columns. A set of markers is usually used to indicate estimated and actual start and end. Each bar on a separate line, and the name of each person assigned to the task is on a separate line. In many cases when this type of project plan is used, a blank row is left between tasks. When the project is under way, this row is used to indicate progress, indicated by a second bar, which starts in the period column when the task is actually started and continues until the task is actually completed. Comparison between estimated start and end and actuals start and end should indicate project status on a task-by-task basis. (Pelin, 1996).

Program Evaluation and Review Technique (PERT)

Program evaluation and review technique (PERT) charts depict task, duration, and information. Each chart starts with an initiation node from which the first task, or tasks, originates. If multiple tasks begin at the same time, they are all started from the node or branch, or fork out from the starting point. Each task is represented by a line, which states its name or other identifier, its duration, the number of people assigned to it, and in some cases the initials of the personnel assigned. The other end of the task line is terminated by another node, which identifies the start of another task, or the beginning of any slack time, that is, waiting time between tasks (Pelin, 1996).

A PERT chart is a project management tool used to schedule, organize, and coordinate tasks within a project. PERT is a methodology developed by the U.S. Navy in the 1950s to manage the Polaris submarine missile program. A similar methodology, the Critical Path Method (CPM), which was developed, for project management in the private sector at about the same time, has become synonymous with PERT, so that the technique is known by any variation on the names: PERT, CPM, or PERT/CPM. Project Evaluation and Review Technique (or PERT) is designed for research and development type projects when activity completion times are uncertain.

Critical Path Method

Critical Path Method (CPM) type project planning networks are characterized by estimates of normal time for task completions. CPM is appropriate when activity times can be accurately

predicted such as construction or maintenance work. Charts are similar to PERT charts and are sometimes known as PERT/CPM. In a CPM chart, the critical path is indicated. A critical path consist that set of dependent tasks (each dependent on the preceding one) which together take the longest time to complete. Although it is not normally done, a CPM chart can define multiple, equally critical paths. Tasks, which fall on the critical path, should be noted in some way, so that they may be given special attention. One way is to draw critical path tasks with a double line instead of a single line (Pelin, 1996).

2.7 Empirical Literature Review

Poor planning will contribute towards an unsuccessful project where as good planning practice leads to successful 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, studies by (Andineh and Sadik, 2017) and (Endalkachew, 2018) shows 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. According to (Antvik and Sjöholm, 2007) the planning processes are highly important, and project execution without proper development of a project plan often causes delays, high cost and general execution problems in the project. 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. The study by (Wang and Gibson, 2008), shows that time spent on project planning activities will reduce risk and increase project success.

Effective project planning processes gets better the performance problem of project outcomes (Griffith and Gibson, 1995; Griffith et al. 1998) and the study by (Hamilton and Gibson, 1996) have 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. Therefore planning was identified as awfully important project management function for the successes of project outcome.

According to (Idoko, 2008) many projects in developing countries encounter considerable time and cost overruns, fail to realize their intended benefit or even totally terminated and neglected before or after their completion. One of the main reasons for the failure of projects in developing countries is lack of effective planning processes. Research works by (Whittaker, 1999; Dvir, Raz and Shenhar 2003) and others have indicated poor project planning to be one of the reason for project failure in developing countries. So from the reviewed literature preparing a sound project plan is a very important factor for successfully completing of any project.

2.8 The literature review finding

In the literature reviews above the main input factors for project planning were discussed more detailed. So what we understand from the literature is that for better project planning performance project managers, experienced team member and any other stakeholder are appropriately involved. And also the literature indicates that applying appropriate project managements tool and techniques in planning processes increases the chance of project successes. For the planning processes to be effective top management support, involvement of different functional department, availability of resource, definition of requirement and project scope are the main input factors identified in the above literature and also project management knowledge areas and project management tools and techniques are appropriately applied. The literature review has shown the relationship between planning processes and project success. Poor planning could be the main cause for the large number of project cost overrun and time delay, customer dissatisfaction and quality deficiency.

2.9 Literature Gaps

Different study confirms that poor project planning leads to project delay or failure. According to (Antvik & Sjöholm, 2007) the planning processes are highly important, and project execution without proper development of a project plan often causes delays, high cost and general execution problems in the project. A 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. Their results indicated that there is a high correlation between the planning efforts and overall project success. Although

the previous studies have considered many factors that influence project outcomes, but planning was mentioned as an important factor for project success.

Based on this different study identifies the relative importance of project planning knowledge area in different countries. A study by (Zwikael, 2009) investigates the relative importance of the project management Knowledge areas used during the planning phase of a project and their impact on project success. Further, this article identifies the most important Knowledge Areas of the planning phase. And also the study by (Mainguyen, 2006) identifies the relationship between project planning activities in project successes factors in software industries. This and other related study were conducted in industrialized countries or the countries that are different in culture, geographic location, resource, and politics. Because of the difference indicated above, the results obtained in developed countries may not be applicable in developing countries. By itself a project is unique, project in the context of one country or nation is likely to experience different problems and have a different structure than projects in another on text. The study by (Karlsson, 2011) also indicated that financial status, education, politics, resource and culture are all contextual factors that highly affect approaches and methods in project management. For example many Ethiopian mega project fail due the presence of problem stated above. A project in the context of one country or culture is likely to experience different problems and have a different structure than projects in another context (Walker, 2007).

2.10 Conceptual Framework

It has been learnt from the literature review that construction projects often necessitate project management knowledge, tools and techniques. It is also understood that project planning is one of the most important process in project cycle which entails all knowledge areas; such as; project integration, scope, time, quality, cost, human resource, communication, risk and procurement.

This study derived its conceptual framework in relation to the above nine Project Management knowledge areas that are supposed to be applied during the planning phase of a project cycle with the application of different project planning tools and techniques. To this effect; the study will assess the project planning practices of the construction of Jimma industrial park project plan.

The following figure which is develop to illustrates the intention of the study by relating important variables /project planning knowledge areas/ affecting the project planning practice of the study organization.

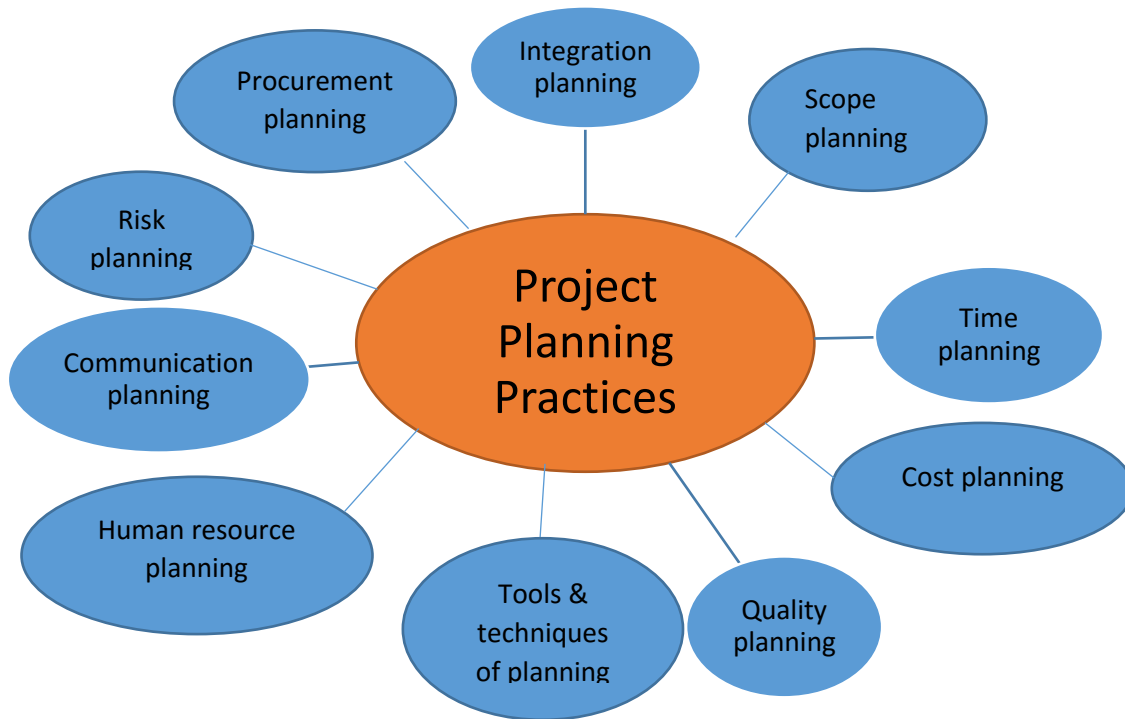


Figure 2.1: Conceptual framework of the Study

Source: Developed by the researcher based on the literature review.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Research Design

The purpose of this research is to assess the project planning practices of the organization under study. Descriptive research design was applied to describe what the current project planning practice looks like in the study organization. According to (Kothari, 2008) the major purpose of descriptive research is description of the state of affairs as it exists at present.

Both quantitative and qualitative research approaches were followed by the researcher. Quantitative designs are plans for carrying out research orient towards quantification and was applied in order to describe current conditions or to investigate relationships. The study was also applied qualitative approach using structured interviews in order to allow the researcher provide elaborate interpretations of phenomena.

3.2 Population and Sampling Technique

3.2.1 Target Population

The population for this study were the staff members of FDRE industrial parks Development Corporation who were involved during the planning session, there were one hundred two staff member and two respondent at the regional level Jimma city municipality mayor and vise mayor who were involved in the feasibility study of pre-project planning. Since it is manageable to assess the whole population of the study; census and purposive were used to collect data from this staff.

3.2.2 Sampling Techniques

Both purposive and census sampling techniques were used in selecting of the sample. The total sample size of the study was conducted 104 that are directly related to the project planning practices. Among from the total seven respondent were selected for in depth interview purposefully, the five respondents are members of top managements in the Industrial Park Development Corporation office and two respondent are at the regional level Jimma city municipality mayor and vise mayor those involved in the feasibility study for project planning. The census sampling techniques was used for selecting 97 respondent or the rest of the sample population from Industrial Park Development Corporation for questionnaire survey.

3.3 Types of Data and Instruments of Data Collection

3.3.1 Type and Source of Data

Both primary and secondary data were obtained using different data collection methods and instruments. The source for primary data is the sample group which is staff members at Addis Abeba city where FDRE industrial parks development corporation office situate and Jimma city municipality. And also the primary data will be gathered through observation of the implemented project plan. The secondary data was gathered through the use of reported project document, books, and internet, publish and unpublished document.

3.3.2. Instruments of Data Collection

a) Questionnaire Survey

A close ended questionnaire was developed and the response options for a closed-ended question was exhausted and mutually exclusive. For this purpose nominal scale such as ‘yes’ or ‘no’ and a Likert scale measurement was considered. For the Likert scale, the items will be scored on the 5 point Likert scale ranging from strongly agree, agree, neutral, disagree and strongly disagree. The researcher was chose to use questioner survey because, it is thought to be cheap and fast to administer; and even it increases the degree of reliability as well as enhances the chances of getting valid data. (Kothari, 1990).

b) Interviews

Interviews was one-to-one oral communication in which one person or a group of people are interview at a time. An interview is considered because it has the advantage of ensuring probing for more information, clarification and capturing facial expression of the interviewees. From the sample population seven individual (respondent) were interviewed.

c) Documentary Review

Documents cannot be underestimate as it provides necessary background and much need context both of which make re-use a more useful and systematic work. Documentary review is necessary for gathering of secondary data such as various project report, books, internet and different media news.

3.4 Method of Data Analysis

The collected data was analyzed using both quantitative and qualitative methods of data analysis. For the quantitative analysis, data was sorted using the Statistical Package for Social Scientists (SPSS) version 20 and the analysis trust on descriptive statistics. The descriptive statistics includes use of frequency tables, standard deviation, mean, percentage, charts, and graphs. Qualitative data on the other hand was analyzed based on the description summaries from the responses against the thematic area of the study.

3.5 Reliability

The reliability of a measuring instrument is defined as its ability to consistently measure the phenomenon. Cronbach’s alpha is a coefficient of reliability used to measure the internal consistency of a scale; represent as a number between 0 and 1. Cronbach alpha was used to

determine the consistency of scales use to measure study variables. The internal consistency reliability is higher if the Cronbach's alpha is closer to 1. The most common techniques was used in the literature to assess the scale's reliability and stability is use of Cronbach Alpha Statistics.

CHAPTER FOUR RESULTS AND DISCUSION

4.1 Introduction

This chapter dealt with the analysis, presentation and interpretation of the data collected through questionnaire, observation and structure interview. In the study, one hundred four respondents (104) were selected. From the total, one hundred one (101) respondents were successfully responded. The response rate was almost ninety seven (97 %). In order to analyze the respondent result SPSS (version 20) was used. The analyzed data was presented and interpreted by descriptive statistics such as frequency, table, mean, chart and percentage.

4.2 Background information of the respondent

The study participants on survey questionnaire have dissimilar personal information. The background profile of respondents, participated in this study was shown in table 4.1 as follows.

Table 4.1: Respondents' background profile

Variables	Classification of variables	Frequency	Percentage
Educational level	Degree	58	61.7
	Masters	33	35.1
	PhD	3	3.2
Receive training on PM planning	Yes	44	46.8
	No	50	53.2
Experience	0-5 years	50	53.2
	6-10years	38	40.4
	11-20years	5	5.3
	21-30years	1	1.1
The organization gave you a chance of upgrade PM planning	Have PM	44	46.8
	Have no PM	50	53.2

Source: own survey, 2020

As presented on the above table, the highest percentages of the participants had bachelor degree that was 58(61.7%) of the total participants and to the reverse the lowest percentages of the participants are PhD that was 3(3.2%) from the total participants. When we come to receiving training on project management planning the highest percent of the participant that was 50(53.2%) did not take training. Regarding to experience from 0-5 years the highest percent of the respondent that was 50 (53.2%) from the total respondent this tells us less experienced. Lastly the organization gave chance of upgrading project management planning the highest percentage of the participant 50(53.2%) this means the participant did not had a chance of upgrading project management planning.

4.3 Reliability Test

Statistical Package for Social Scientists (SPSS version 20) was used to calculate Cronbach's alpha in order to determine how reliable the data collection instrument (questionnaire) was over

the data the study collected. The internal consistency reliability is acceptable if the Cronbach's alpha (α) >0.67 (Hulin et al. 2001). The finding showed that overall Cronbach's Alpha value was 0.855 which was acceptable for the study.

Table 4.2: Cronbach's Alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.855	.863	4

Source: own survey 2020

4.4 Analysis of project planning practice, knowledge area, tools and techniques of Jimma industrial park project plan

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 was made based on this assumption. In this part the project planning practice, knowledge area, tools and techniques are descriptively analyzed. The main problem areas are identified by comparing their mean and standard deviation. The lower the mean indicate that they are poorly performed.

In order to assess the current planning practice, knowledge area and tools and techniques of Jimma industrial park plan, analysis was made based on the project planning inputs that are widely applied by PMBOK. In the following tables the planning activities of Jimma industrial park was analyzed.

4.4.1 Analysis of project planning practices of Jimma industrial park

In this part we show the planning practices of the study organization and the extent in which team member's participated in planning process. The analysis was made by comparing there mean and standard deviation. The result also identified by frequency and percentage.

Table 4.3 Descriptive analysis of project planning practices of Jimma industrial park

planning practices	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Sd.
The team members have best knowledge about project	17(18.10)	57(60.6)	–	19(20.2)	1(1.1)	2.26	1.015
The need and benefit of Project Management, recognized by your organization’s management	25(26.6)	47(50.0)	–	19(20.2)	3(3.2)	2.23	1.149
The planning process take more time	36(38.3)	38(40.4)	–	12(12.8)	8(8.5)	2.13	1.289
The project managers of organization had solid knowledge base of project management	41(43.6)	20(21.3)	10(10.6)	10(10.6)	13(13.8)	2.30	1.465
Do you believe that general feasibility study are enough for project planning	22(23.4)	43(45.7)	1(1.1)	10(10.6)	18(19.1)	2.56	1.448
More attention was given to project planning stage compared to other stage	15(16.0)	60(63.8)		14(14.9)	5(5.3)	2.30	1.076
Resources needed for the project is determined and planned well	13(13.8)	43(45.7)	2(2.1)	24(25.5)	12(12.8)	2.78	1.321

Source: own survey, 2020

The above table show that the descriptive analysis of Jimma industrial park project planning practices. According to the above result the planning process take more time has a mean score (mean =2.13, standard deviation =1.289) and which is the lowest mean from the planning practices. Around 74(78.7%) of respondent disagree about planning process take more time, it indicates that enough time are not given to project planning process.

The need and benefit of project management, recognized by your organization’s management was also the second lowest mean among the planning practices inputs. The mean score

(mean=2.23, standard deviation=1.149) and about 72(76.6%) of respondent disagree. This indicate that need and benefit of project management was not properly well-known, measured and planed by the organization under study.

The third poorly performed project planning practices are the team members knowledge about project, the mean score (mean=2.26, standard deviation=1.015) and about 74(78.8%) of the respondent disagree, which implies that team member did not had solid knowledge of project this also shown as overall project planning practices or process are negatively affected. According to in depth interview, respondent of the interviewer agreed about team members was not well experienced. The planning members are chosen by vacancy and as a country industry park project was a new kind of investment in Ethiopia so experienced personnel was hard to find. Even if these was a challenge, the government try to advice international expert towards industrial park plan.

Manager's solid knowledge base of project management the mean score is (mean=2.30, standard deviation=1.076) which was below the average mean value. Only 28 (29.7%) respondent believe that managers had solid knowledge base of project management. This indicate that managers of the studied organization did not had solid knowledge base of project management and during the planning session of any project, knowledge of project management was necessary and the solid knowledge of project management of a manager was a key factor for successful planning activities.

The general feasibility study the mean score (mean=2.56, standard deviation=1.448) and around 65(9.1%) of respondent not believe about idea. The mean score was below hypothetical mean average this indicates that the feasibility study was poorly performed. Feasibility study is ways of gathering the necessary information required for project planning, before planning activity was started. According to the interviewer all respondents explained that the feasibility study was not enough for project planning, the study was not in detail and also sufficient stakeholder around the city are not involved. According to the response of Jimma city mayor and vise mayor, the feasibility study was done as a city but not enough to plan Jimma industrial park project plan.

The resource needed must be done before planning. As shown from the above table resource needed for the project determined and planned well had better mean score relative to other mean (mean=2.78, standard deviation=1.32). Even though the mean value was higher relative to other it was below hypothetical mean average. Generally as shown from the above table analysis, the

mean value of the whole activities was below average hypothetical mean so the project planning practices of Jimma industrial park poorly performed.

4.4.2 Analysis of project management planning knowledge areas of Jimma industrial park

It is well discussed in the literature review that project planning phase of the project management cycle is involved in all knowledge areas of project management which enables to defining the problem to be solved by the project, define the scope of project using the WBS, estimate activity durations, resource requirements, and Prepare the project master schedule and budget, decide on the project organization structure, develop the risk response plan, communication plan and the procurement plan. In this part the 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.

Table 4.4 Descriptive analysis of project management planning knowledge area

knowledge areas	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
Project management integration plan	5(5.3)	37(39.4)	25(26.6)	22(23.4)	5(5.3)	2.84	1.019
Project management scope plan	2(2.1)	40(42.6)	5(5.3)	30(31.9)	17(18.1)	3.21	1.235
Project management time plan	1(1.1)	69(73.4)	3(3.2)	15(16.0)	6(6.4)	2.53	.991
Project management cost plan	4(4.3)	29(30.9)	23(24.5)	27(28.7)	11(11.7)	3.13	1.109
Project management quality plan	6(6.4)	56(59.6)		17(18.1)	15(16.00)	2.44	.837

Project management HRM plan	14(14.9)	49(52.1)	2(2.1)	27(28.7)	2(2.1)	2.51	1.124
Project management communication plan	53(56.4)	21(22.3)		8(8.5)	12(12.8)	2.78	1.059
Project management risk plan	9(9.6)	57(60.6)	9(9.6)	17(18.1)	2(2.1)	2.43	.967
Project management procurement plan	22(23.4)	45(47.9)	12(12.8)	8(8.5)	7(7.4)	2.29	1.142

Source: own survey, 2020

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

Procurement planning is also one of the most important components in project management knowledge area discussed in the literature section. The researcher had also considered this section as one of the most important one. According to the result from table 4.4 project procurement plan a mean score of (mean=2.29, standard deviation=1.142) and which was the lowest from the other knowledge areas and the mean score was below average hypothetical mean. Only 15(15.9%) of the respondents believe that there were a project procurement plan in the projects. Therefore, the procurement planning practice of the organization was assessed in view of whether procurement plan was prepared for projects, the time by which procurement bid evaluation was conducted and when most of projects are outsourced /awarded to contractors. The assessments made with regards to those thematic areas indicate that the procurement planning area were not adequately considered. This indicates that project procurement are not properly identified, quantified and planned by the organization under study.

As discussed in the literature review part that risk in relation to construction projects is one of the most important factor to be considered during the planning process and if underestimated whose variation results in uncertainty in the final cost, duration and quality of the project and so on. To

this effect, the risk management planning practice of the study organization has been assessed from the perspective that risk identification and analysis has been conducted, risk management planning was prepared during the planning process. Project risk plan was also the second lower mean score among the planning inputs. The mean score of project risk plan is (mean=2.43, standard deviation=0.967) and only 19(20.2%) of the respondent agree about risk. The mean score is below average hypothetical mean. The results of the assessment show that risk management plan at the study organization was not satisfactory. There was no well-defined and strong risk plan in the organization under study.

This section presents the result of the assessment which represents the extent to which independent project quality plan was prepared in order to meet the quality requirements of industrial park projects in the study organization. According to the analysis project management quality plan was the third poorly planned knowledge area of Jimma industrial park project plan. Its mean score is (mean=2.44, standard deviation=0.837) and only 32(34.1%) of the respondents believe that well established quality plan was prepared in project plan. The mean score was below hypothetical mean. It indicate that quality assurance, total quality management, quality control and quality plan was performed poorly. As the response of the interviewer five of the participants have the same opinion that planning process not follow standard of quality planning. The other participants agreed somewhat planning process follow standards of quality plan. When we come to generalization Jimma industrial park plan was not follow standards of quality plan.

It is well discussed the review of literature that projects often require acquisition of adequate project team that effectively implement planned projects. In order to assess the human resource planning practice, questions are asked if the organization has the experience of planning /allocating project team early in the planning phase, if team members /officers are motivated to participate in the planning process, weather frequent project planning and/management training was given to the staff and if most of project team leaders and/ managers assigned are capable enough to successfully manage construction projects. Its mean score is (mean=2.51, standard deviation=1.124) and only 29(30.8%) of the respondent believe about the idea of human resource management plan. It indicate that mean score is below average hypothetical mean so responses of the assessment presented above describe that in view of the above mentioned questions, according to most of respondents the human resource planning practice was not well considered by the study organization.

Project time management is one of the project management knowledge area in which contributes to the planning process. The practice of the study organization with respect to properly scheduling project activities and completing the whole planning process before the next phase (project execution phase) of the construction projects could be understood. According to the above respondent assessment project management time plan was very poorly planned in the organization under study. The mean score is (mean=2.53, standard deviation=0.991) and only 21(22.4%) of respondent believe that duration of each activity was determined and planed well.

Project Communication management is another important knowledge area supposed to be considered throughout the project cycle including the planning phase. With regard to this study, communication planning practice of the organization under study is assessed in view of weather the organization had the experience of developing project communication plan and strategy to deal with construction projects, if communication channels was established early in the planning phase and the extent to which it was maintained. According to the respondent result project communication plan its mean score is (mean=2.78standard deviation=1.059) and the mean score is below average hypothetical mean. There was no properly established communication channel and system in the projects of the organization under study. Only 20(21.3%) of the respondents believe good communication plan was established. This indicates that there was no good communication plan it creates a bridges between different stakeholders who may have different cultural and organizational backgrounds, different level of expertise, and different perspectives and interest, which impact or have an influence upon the project execution or outcome.

Project management integration plan, the descriptive analysis also indicate that there was poor project integration plan the mean score (mean=2.84, standard deviation=1.019), which is also less than the average mean value. Only 27(28.7%) of the respondent agree that there was organizational integration planning practiced. It showed that poor project integration plan which was not includes the process and activities to identified, defined, combined, unified and coordinated various processes and project management activities within the project management processes.

An assessment result for reviewing the scope planning process at Industrial Park Development Corporation (IPDC) show that irrespective of the quality of work during, the process of defining and refining scope of project plan was well performed. As shown from the above table project scope plan is one of the higher scorer of knowledge area of planning inputs. According to the

analysis in the study organization there was a better project scope plan. It has a mean score of (mean=3.21, standard deviation=1.235). So the average mean value of project scope plan was greater than average hypothetical mean this indicate that better project scope plan in the study organization. About 47(50.0%) of the respondent believe the project scope plan was well done.

Project cost planning was also another important variable considered in the assessment to examine the practice of the study organization with respect to cost planning. Project cost plan was also the second largest mean score (mean=3.13, standard deviation=1.109). According to the analysis in the study organization there was a better project cost plan. Most of the respondent about 38(40.4%) of the respondent believe project cost plan were well performed.

According to the respondent of in depth interview the project management knowledge area almost all respondent not agree with the proper application of knowledge area and also there was a knowledge gap about project management as a general.

In addition to in depth interview observational assessment were done by observing organization document and recorded file. According to the observational assessment, project management knowledge area were highly observed and the observation was done as project management book of knowledge standards.

The observed project management knowledge area are scope, time, risk, human resource management, communication, cost, quality, integration and procurement planning.

Out of the observed project management planning knowledge area only project scope and cost plan were planned well and the rest are not performed well. Among from the planning knowledge area procurement plan was the least performed. When we generalize the observed documents and some of recorded file a lot of limitation and drawback of project planning practices activities of the study organization were observed.

4.4.3 Analysis of tools and techniques of Jimma industrial park project plan

Reviews of literatures recommend that in order to conduct a construction project plan there are several useful tools and techniques that are more or less frequently used. To this effect, the extent to which project management tools and techniques are applied during project plan. The results of the assessment are presented here bellow.

Table 4.5 Descriptive analysis of tools and techniques of Jimma industry park plan

Project management Tools and techniques	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Sd.
Project management tools and techniques are appropriately used	10(10.6)	44(46.8)		32(34.0)	8(8.5)	2.83	1.250
Project management techniques*	10(10.6)	37(39.4)	4(4.3)	38(40.4)	5 (5.3)	2.90	1.201
Extreme Project Management Software used	55(58.5)	25(26.6)	4(4.3)	7(7.4)	3(3.2)	1.70	1.066
WBS prepared in defined scope	16(17.0)	39(41.5)		28(29.8)	11(11.7)	2.78	1.353

* Work break down structure (WBS), program evaluation and review techniques and critical path method were used in project planning

As can be understood from the table the listed tools and techniques are applied in the projects of the organization under study. Even though there are different types of project planning tools and techniques analysis was made as a general. As shown the above table project management tools and techniques are appropriately used under study organization the mean score is (mean=2.83, standard deviation=1.250). Only 40(42.5%) of the respondent believe project management tools and techniques are appropriately used.

As shown from the above table project management techniques such as work break dawn structure (WBS), program evaluation and review techniques (PERT) and critical path method (CPM) were used during activities scheduling and sequencing but found to be not well done in planning session. The mean score is (mean=2.9, standard deviation=1.201) and 47(50%) of the respondent disagree about their performance and the mean score is below average hypothetical mean. This respondent answer shown as the project plan was poorly performed in the study organization.

Extreme project management technique (XPM) emphasizes elasticity in planning, open approach, and reduction of formalism and deterministic management and used for certainty of

plan. According to the above table extreme project management software used mean is the lowest score (mean=1.70, standard deviation=1.066) which is only 11(10.6) of respondents are believe and also mean score was below average hypothetical mean. This indicates that extreme project management software almost all or poorly applied in the Jimma industrial park project planning processes.

4.5 Challenges of planning activities and benefit of planning process

One of the main 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 (Kerzner, 2006). Project plan development is more than opening a project plan and typing tasks that need to be completed to get the job done. It requires thoughtful activity definition, sequencing, and resource estimating and their direct integration with the program's detailed development life cycle. There are number of challenges that affect the quality of project planning and consequently the entire project performance (Brisgone, 2007). The overall organizational challenges are analyzed below. According to in-depth interviewer all of the respondent agreed that there are challenges, in addition to that the study organization is newly emerged and lack well experienced experts.

4.5.1 Challenge in determining budget of planning

Project plan development is more than opening a project plan and typing tasks that need to be completed to get the job done. Budget determining requires thoughtful activity definition, sequencing, and resource estimating and their direct integration with the programs detailed development life cycle.

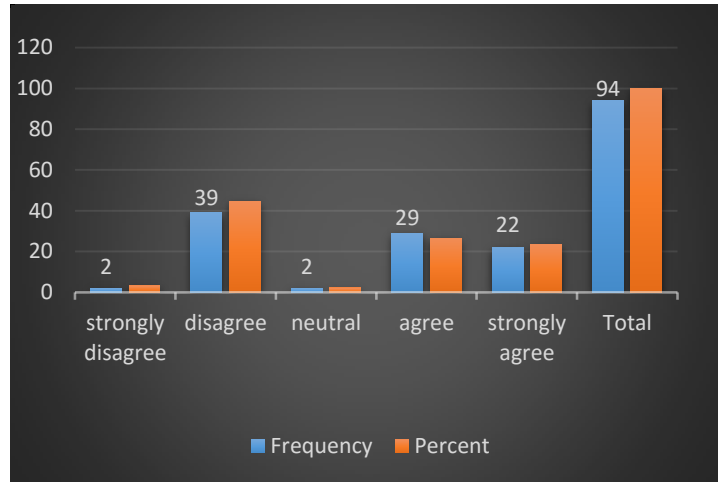
challenge in determining budget of planning		
Respondent	Frequency	Percent
strongly disagree	2	2.1
disagree	39	41.5

neutral	2	2.1
agree	29	30.9
strongly agree	22	23.4
Total	94	100.0

Table 4.6 challenge in determining budget of planning

Task of planning well understood prior to plan		
Responses	Frequency	Percent
strongly	23	24.5

Figure 4.5.1 Challenge in determining budget



According to table shown above challenge in determining budget of planning 54.3% of the respondent believe there was a problem of determining budget of project planning of the study organization. Around 43% of respondent disagree challenge determining project budget plan and only 2% are neutral. This respondent answer show as there was a problem in determining project planning budget of Jimma industrial park project plan.

4.5.2 Task of planning prior to plan

Task of planning prior to plan is one of a challenge in project management planning activities.

The planning members are well understood about task of project plan prior to planning.

Table 4.7 task of planning well understood prior to plan

disagree		
disagree	45	47.9
neutral	6	6.4
agree	13	13.8
strongly agree	7	7.4
Total	94	100.0

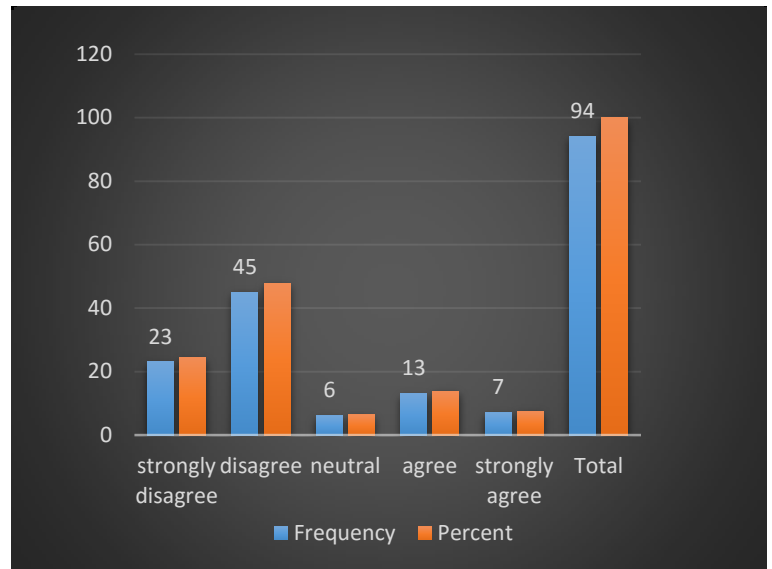


Figure 4.5.2 the task of the planning prior to plan

As shown from the above table the respondent response of the study organization, the task of planning was well understood prior to plan 68 (72.4%) of the respondent disagree. Only 20 (21.2%) of the respondent agree and 6(6.4%) of respondent are neutral. This confirm that task of planning was poorly understood prior to plan.

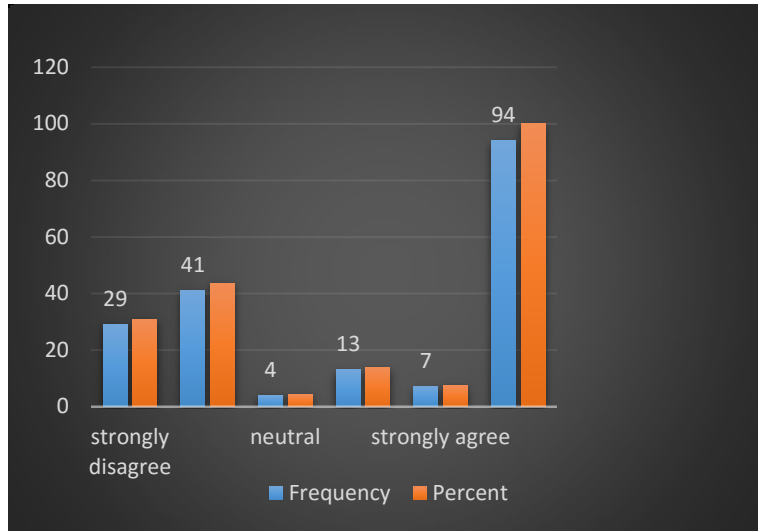
4.5.3 The benefits of planning process

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, 2010) the planning process involves the following major steps such as *understanding the existing situation, forecasting, establishing objectives and goals, determine alternative plan, selecting the plan and implementing the plan. The benefit of planning is increase the certainty of project success.*

Table 4.8 Member well understood the benefits of planning process

Figure 4.5.3 the benefits of planning process

The Survey results of respondents in the above table and chart show that 70 (74.5%) of the respondent disagree



Staff understood benefits of planning process		
Response	Frequency	Percent
strongly disagree	29	30.9
Disagree	41	43.6
Neutral	4	4.3
Agree	13	13.8
strongly agree	7	7.4
Total	94	100.0

about member of the organization well understood the benefits of planning process. Only 20(21.2%) of respondent agree the benefits of planning process and about 4(4.3%) of respondent have no idea. According to the above assessment result finding of the respondent, the benefit of planning process was not well understood by the staff member. All participants in depth interviewer agreed that, the benefit of planning process were not well understood by staff members.

4.5.4 Detailed and understandability of plan for stakeholder

Plan must be detailed and understandable for every stakeholder participated in the project work. Which means when plan become detailed it decrease the project failure and the reverse increase the chance of success and also easily understandable.

Plan was detailed & understandable		
Response	Frequency	Percent
strongly disagree	25	26.6

Disagree	47	50.0
Neutral	4	4.3
Agree	9	9.6
strongly agree	9	9.6
Total	94	100.0

Table 4.9 Detailed and understandability of plan

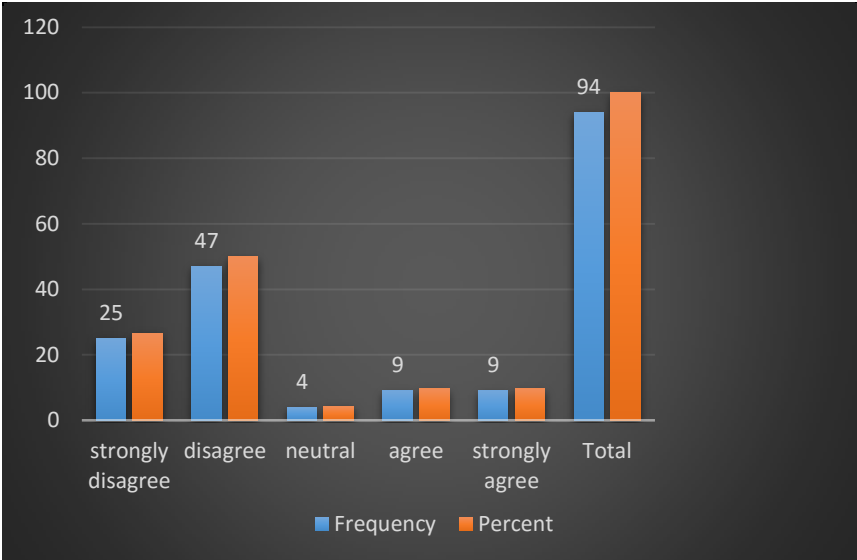


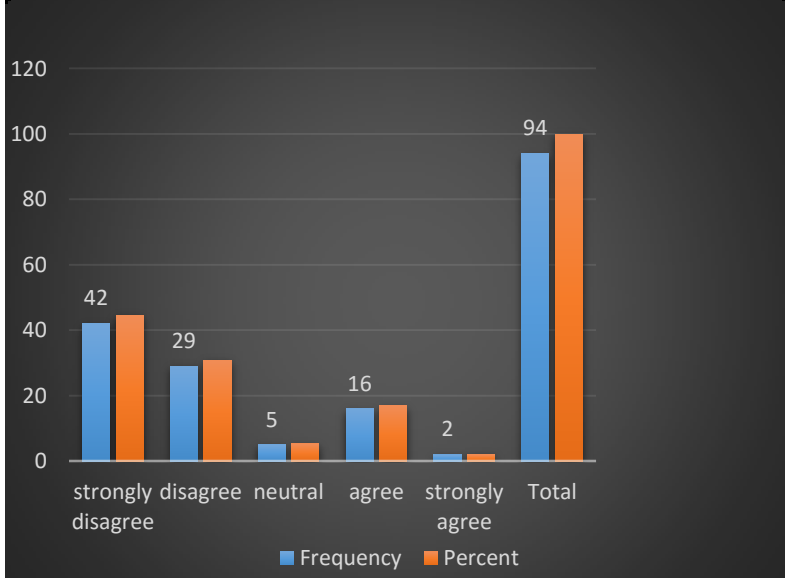
Figure 4.5.4 detailed and understandability of plan

Results of respondents’ survey presented in the above table demonstrate that in every aspect of the planning activities was not detailed and easily understandable. Over 72(76.6%) of respondents, do not agree with the idea plan was detailed and easily understandable by every stakeholder. Only 18(19.2%) of the survey respondents are agree with idea.

4.5.5 The economic and political situation

It is well discussed the review of literature about challenges of projects planning. Economic and political condition is one of the decisive factor for project planning activities. Planning must be free from any kinds political interference and not be done for political profits. The economic situation also another factor because it related with overall financial activities and budget of planned project.

Table 4.10 Economic & political environment was stable



Economic & political environment was stable		
Response	Frequency	Percent
strongly disagree	42	44.7
disagree	29	30.9
neutral	5	5.3
agree	16	17.0
strongly agree	2	2.1
Total	94	100.0

Figure 4.5.5 economic and political stability

According to respondents view proved above, economic & political environment was not stable, with over 75.6% of respondents argue that the project planning was lack of understanding existing political, economic, social and cultural situation. Only 18 (19.1%) of respondent of study organization argued about the idea of economic and political environment was stable. According to the respondent result analysis the planning activities was not considered the existed economic and political situation.

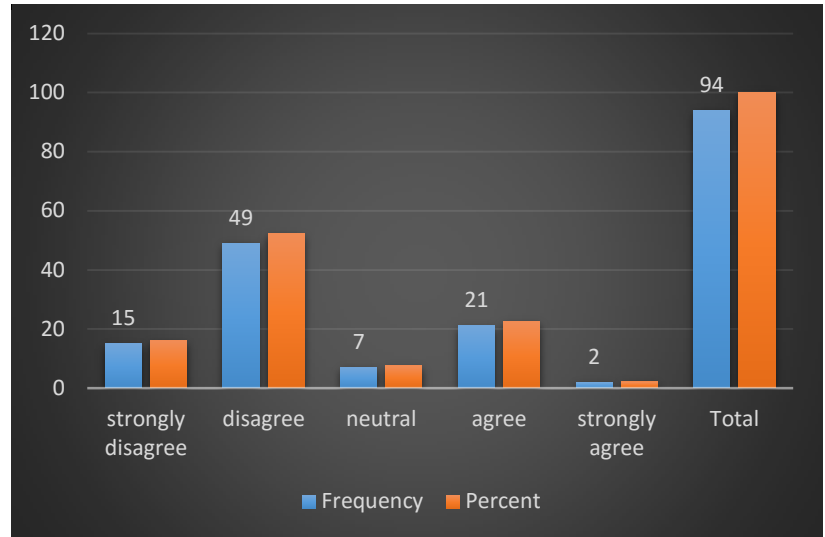
4.5.6 Personnel turnover

Personnel turnover is among the challenge of planning activities. The team member or the planner of project must be permanent until the planning activities are end over.

Table 4.11 Personnel turnover during planning

Figure 4.5.6 personnel

Personnel turnover during planning		
Respondent	Frequency	Percent
strongly disagree	15	16.0
disagree	49	52.1
neutral	7	7.4
agree	21	22.3
strongly agree	2	2.1
Total	94	100.0



turnover

As it could be understood from the above table 68.1% of respondent do not agree about personnel turnover during the planning session of industrial park planning project. Only 24.4% of respondent agree and about 7.4% of neutral. According to the respondent response there was no personnel turnover during planning practice.

4.5.7 The conflict resolution strategy

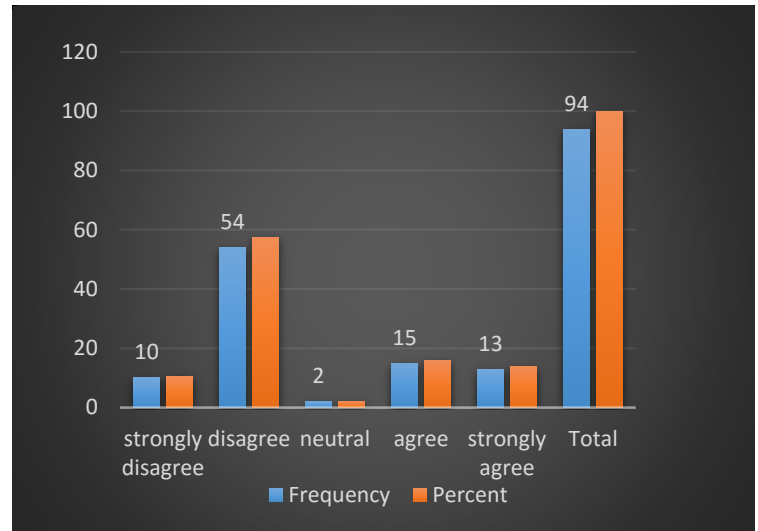
As we discussed in literature review conflict resolution is the method of resolving disagreement of idea among the team member and come up with better idea. The conflict resolution strategy first must be set in the team.

Table 4.12 conflict resolution strategy

Conflict resolution strategy		
Responses	Frequency	Percent
strongly disagree	10	10.6
disagree	54	57.4
neutral	2	2.1
agree	15	16.0
strongly agree	13	13.8
Total	94	100.0

Figure 4.5.7 conflict resolution strategy

Conflict resolution strategy is the mechanism of resolving disagreement



arose among the member of organization and helps to come up with better idea. As we shown from the above table and chart 68% of the respondent did not believe about idea and 29.8% of the respondent agree with the idea. Only 2% of the respondent are had no idea. According to the respondent answer the planning activities of study organization was not set conflict resolution strategy.

In addition to the questionnaire survey, in depth interview were done for challenges of planning activities and benefit of planning process. According to the response of the interviewer all respondents of the interviewer agreed about team members are not prior understood the task and benefit of plan. The industry park project was a new kind of investment in Ethiopia so experienced personnel was hard to find. Even if these was a challenge, the government try to advice international expert towards industrial park plan.

All participants in the depth interview agreed that, the planning process were not done according to the standards of industrial park project plan this was due to lack of experience, lack of financial shortage, lack of information towards feasibility study, political situation and so on.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This study has been conducted the assessment of the project planning and its practice of Jimma industrial park. In this study the researcher tried to see the general project planning practice and the most important components of a good project plan of the study organization, were analyzed. To evaluate 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 planning practice, project management knowledge area, tools, techniques and challenges of planning activities and benefit of planning process. Major conclusions are made regarding these variables.

To measure the project management knowledge area of planning practice of Jimma industry park plan different points are raised and discussed. These include, project integration plan, project scope plan, project time plan, project cost plan, project quality plan, project human resource plan, project communication plan, project risk plan and project procurement plan. Regarding to project quality plan the organization under study had a poor quality planning practices. Based on the data gathered from the sample respondents and the observational check list from the study organization there was no well-organized project quality plan. Project human resource planning was poorly conducted. Preparing a HRM plan is one of the most essential inputs in preparing a good project plan. The process that organize, manage and lead the project team are not well prepared in the planning practices. So there was poor human resource management plan in Jimma industry project planning practices. 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. Interval of activities in the projects is not well determined and as a result it was impossible to determine the actual time needed for each activity and the whole project schedule of completion. So there was a poor time management plan in Jimma industry park plan and, it is an indication of poor project planning practices. Project communication plan was poorly performed under the study organization. Effective project communication plan creates a bridge between diverse stakeholders who may have different cultural and organizational backgrounds, different levels of expertise, and different perspectives and interests, which impact or have an influence upon the project execution or outcome. The result of the analysis approves that the project communication plan of the study organization was not well prepared. Towards project integration plan in the study

organization the respondent agree that there was no as such best integration plan that integrate the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process. So based on the findings of the study the organizations integration planning practice was poorly performed. Regarding to project management risk plan, Jimma industry park project plan had a poor project planned practices. Risks are not appropriately recognized, measured, listed, analyzed and planned. Project procurement plan was the lowest poorly conducted plan. Based on the data gathered from the respondent and reviewed document there was no well-prepared subcontract agreement, outsourcing, administering contractual obligation and purchase order issued by project team member. As a result of this, study organization risk plan was not well prepared. Project scope plan and project cost plan was better practiced relative to other knowledge area under study organization.

According to data obtained and analysis made project planning tools and techniques was not well planned. Properly using project management tools and techniques are best practices for preparing plan. But towards Jimma industry project planning there was poorly performed.

The total project planning practices of the study organization was poorly performed. Among the practiced of plan: lack of experience of team member, lack of experienced project managers, lack of sufficient time for plan and lack of enough feasibility study. There are also some challenges that made the study organization poorly conducted the planning process such as personnel turnover, economic and political instability, lack of determining budget and lack of conflict resolution strategy.

5.2 Recommendation

Based on the research finding the following recommendations are proposed. In order to improve the performance of planning practices it is recommended.

The key recommendation from this study, the study organization should improve its project planning practice by considering and referring the best planning practices. Before planning activities start detail feasibility study should completed. Advanced training should be provided to the project managers and project team members before being assigned to projects planning. Project management knowledge area should have to apply in the best manner. The team member should understand the task and benefits of planning process prior to plan. Economic and political situation should be understand before planning. Advanced project management tools and

techniques appropriately use and also extreme project management software should be use. More effort should be made at the planning stage of the project. Finally this research study is about project planning and its practice in the industrial parks of Ethiopia a case of Jimma industrial park, the researcher recommend to the next researcher study about the project construction implementation and execution of the study organization.

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ANNEXES

**QUESTIONNAIRE
JIMMA UNIVERSITY**

COLLEGE OF BUSINESS AND ECONOMICS

MA in project management and finance

Questionnaire for Research Thesis

Title of the Thesis “Project Planning and its Practice in the Industrial Parks of Ethiopia

A Case of Jimma Industrial park”

Dear respondent

I would like to extend my deep appreciation to your organization and the staff for the willingness and cooperation in undertaking this valuable research.

The purpose of this questionnaire is to collect information for the study on the project planning and its practices in the industrial parks of Ethiopia a case of Jimma industrial park and the information you provide will be used only for academic purpose (only for the study under consideration) and will be kept confidential. I ask for your kind cooperation in answering the questions as truthfully as possible.

Yours Faithfully

Thank you for your assistance

By Nuredin Petros

Phone no. +251976028649

Email address nurepetros@gmail.com

Direction: Please consider the **project planning** and its practice in the **Industrial Parks** of Ethiopia, a **case of Jimma industrial park**. Please also answer all the questions to meet the objectivity of the research thesis.

PART ONE: GENERAL QUESTIONS OF THE RESPONDENT

For each of the questions, please tick (v) in the box and write most suitable answer in the provided space.

1. Sex: Male Female
2. Age 20-30 31-40 41-50 51 and above
3. What is your level of education in field of the study?
Certificate Diploma Degree Masters PHD others specify
4. What is your field of study?
.....
.....
5. Have you received any training in project management planning?
Yes No
6. If your answer in question **no. 4** is yes, specify the type of training you taken.
.....
.....
7. What is your position or role in your organization?
.....
.....
8. How long have you been working with the organization?
0-5years 6-10 years 11-20 years 21-30 years 31 years above
9. Which of the following project management tools and techniques are you familiar with?
Work Breakdown Structure (WBS) Waterfall technique
Gantt chart Classic technique
Critical path method (CPD) agile project management
Program Evaluation and Review Technique (PERT)
Extreme project management (EPM)
10. What is the major challenges of the planning activities of the organization?
.....
.....

11. Your organization gave you a chance to upgrade knowledge towards project management planning? Yes No

PART TWO: Questions on project planning practices of Jimma industrial park

No.	Description	Scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
12	The team members have best knowledge about project					
13	The need and benefit of Project Management, recognized by your organization's management					
14	The planning process take more time					
15	The project managers of your organization have solid knowledge base of project management					
16	The Project managers were well experienced in project planning					
17	Do you believe that general feasibility study are enough for project planning					
18	More attention was given to project planning stage compared to other stage					
19	Resources needed for the project is determined and planned well					

PART THREE: Questions on project planning knowledge areas and tools and techniques

No.	Description	Scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
20	Project integration plan is well prepared					
21	Project management scope plan is well prepared					
22	the project scope was well defined in the planning phase					
23	Is work breakdown structure prepared in defining scope in your project planning					
24	Project time plan are well prepared in planning					
25	Project face additional cost variations due to change in scope, design, money devaluation and politics					
26	Project activity schedule is determined in the planning phase					
27	Project cost is well estimated in the planning phase					

28	Project quality plan and quality assurance process were well prepared planning					
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29	Total Quality Management implemented in your project planning					
30	Is quality control process implemented in your project planning					
31	Project Human Resource Management Plan is prepared during the planning phase					
32	Communication plans and strategies are established during project planning process					
33	Communication channels of projects are determined during project planning process					
34	Project Risk is identified during the planning stage					
35	Project risk analysis is conducted during the planning stage					
36	Risk response planning prepared in the planning stage					
37	Project procurement plan is prepared early in the planning stage					
38	Sourcing of logistics and subcontractors are well prepared in					

	project planning					
39	Project management tools and techniques are appropriately used in project planning					
40	Project management techniques such as work break down structure, program evaluation and review techniques and critical path method were used in project planning					
41	Extreme Project Management Software is used for project planning					

PART FOUR: challenges of planning activities and benefit of planning process

No.	Description	Scale				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
42	Is there a challenge in determining budget in project planning					
42	The task of the planning is well understood prior to planning					
44	Do you believe that there is no financial plan problem in the project planning					
45	Do you think the staff or member of the planner well understood the benefits of planning process					
46	The project plan was detailed and easily understandable by every stakeholder					
47	Economic and Political environment					

	was stable during project planning					
48	Is there a personnel turnover from the organization during the planning of the project					
49	Is there conflict resolution strategy that was put in place, in case of disagreements arose among planning team members					

PART FIVE: The list of interview question

1. What is your name, position and role in the organization?
2. What is your study background personally and professionally?
3. Have you worked in this industry before as manager and how long?
4. The stakeholders, involved in the feasibility study are properly gathered the necessary information used for the project planning process?
5. What was a challenge, limitation and drawback during project planning, and how did you manage it?
6. During the planning process the management follows systematic and scientific way of doing things and follows standards of quality project planning?
7. How did you chosen the staff member participated in project plan and they are well experienced?
8. Are the project management knowledge areas are properly covered in organization during project planning?
9. What kind of project management tools and techniques were used during project planning?
10. As the mayor or vice mayor of Jimma city are you team members of feasibility study of project planning?
11. Is there any stakeholders involved in the city, to project planning of Jimma industrial park?
12. Did you believe that the project planning process fulfill the whole necessary requirement and was done properly?

OBSERVATIONAL CHECK LIST

No	Questions	Yes	No	N/A
1	Project plan Perform scope management in detailed		√	
2	Project plan Using WBS (work breakdown structure) to define the projects scope	√		
3	The plan review or inspect works to ensure or verify that all scope of the work is performed	√		
4	The project plan perform standardized project time management			
5	Base line the project schedule (fixing start and finish date and approving them as a basis for guiding work and comparison of the schedule performance)	√		
6	Project plan perform formal project integration plan	√		
7	The project integration plan were detailed			
8	The planed project integration fit according to standard procedures			
9	The plan use network scheduling method (such as CPM, or PERT)	√		
10	The project plan prepare estimate of resources (materials, people, equipment) needed to take them in to account in the schedule preparation.			
11	The study organization use the historical data in estimating activity duration and required resources		√	
12	The project plan perform detailed project cost management		√	
13	The plan prepare a detailed estimate cost of labor, material, and machinery separately	√		
14	Project plan tracking all costs of labor, equipment, and material, separately	√		
15	The plan perform project quality management	√		

16	The project plan prepare and implement quality management policies, procedures and guidelines		√	
17	The project planning implement TQM (Total Quality Management)		√	
18	The organization hire/assign a quality department or employees specializing In quality plan		√	
19	The plan perform detailed project human resource management		√	
20	The project defining details in the staffing plan such as desired minimum experience, skill set, when to acquire and when to release project team members from the project plan	√		
21	The project plan track performance of team members regularly and providing feedback		√	
22	The plan developing an appropriate system for collecting and distributing project information	√		
23	The project plan performing Project Communication requirement analysis			
24	The project plan exert continuous effort to communicate and work with stakeholders to influence their expectation, address their concern and resolve issues		√	
25	The plan use SWOT analysis (Strength, Weakness, Opportunity and Threat analysis) in the identification or planning of risk according to standards		√	
26	The project plan perform formal project risk management	√		
27	The plan continuously updating the risk response plan and strategy		√	
28	The project plan identify major and/or special supply items (such as: those required in large quantity, or those requiring special manufacturing or long lead-time etc.) and giving special attention		√	
29	The project plan use standard procurement documents (such as standard purchase order, standard sub contract / supplier agreement)		√	

30	The project plan use preferred supplier/subcontractor or pre-qualifying them		v	
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