Effect of Project Management on Road Project Performance in Jimma Town Municipality



BY

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DECLARATION

I hereby declare that this thesis entitled "Effect of Project Management on Road Project **Performance in JIMMA Town Municipality**" was composed by myself with the guidance of my advisor that the work contained herein is my own expect where my explicitly stated otherwise in the text, and that this work has not been submitted, in whole or in part, for any other degree of professional qualification. All sources of material used for the thesis have been duly acknowledged.

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Certificate

This is to certify that the thesis prepared by Mengistu Feye Balcha entitled "Effect of Project Management on Road Project Performance in Jimma Town Municipality" and submitted in fulfillment of the requirement for the degree on Masters of project management and finance complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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Acronyms/List of Abbreviation

- ANOVA=Analysis of variance
- APM =Association Project Management
- ERA = Ethiopian Roads Authority
- GDP = Growth Domestic Product
- GNP= Growth National Product
- KPI = Key Performance Indicator
- ORA = OROMIA Roads Authority
- PMBOK= Project Management body of knowledge
- PMI = Project Management Institution
- PMO = Project Management organization
- RSDP =Road sector development program sector
- SPSS = statistical package for social science

Abstract

The main object of this study is designed to assess effect of project management on road project performance in Jimma Town municipality. A descriptive survey research design by followed correlational research design with both quantitative and qualitative data collection and analysis approach was employed due to the nature of the data. The cross-sectional type survey was used since it involves collecting data at one point in time regarding people opinions and beliefs. The sampling of the respondents was carried out through simple random sampling and purposive sampling techniques depending on the nature and on size of respondents. Hence, from total one hundred eight (108) respondents, eight five (85) respondents were selected by using simple random sampling technique followed lottery method. Next, three (3) key informants (road authority team leaders) were selected purposively. The data was analyzed using descriptive and inferential statistical analysis. Hence, tables, frequency counts, percentages, mean scores and standard deviations, correlation and regression were used to analyze the quantitative data whereas the qualitative data were analyzed through narrations. The possible to major findings that poor project sponsorship management was practiced at study area, project effectiveness and efficiency management is not based on quality project performance and the community were not satisfied to the performance of projects in Jimma municipality, project performance is a strong relationship with project management ($p=.873^{**}$), project management practice in the study area has an effect up to 93.1% as indicated by the adjusted R Square. Thus 93.1%, of the variances in project performance can be explained by combined effect of the predictor/independent variables. Based on the study findings, it is concluded that the project management practice in Jimma municipality is not well practiced. It is recommended to establish Jimma municipality of road authority proper and continuous training programs for team leaders and for employees to improve their capacity and it is preferred to develop and improve the managerial skills of person in order to improve performance of road projects. Moreover, Jimma municipality roads project authority is recommended focus on how to improving communication & coordinating of project information management systems to know the project report status and all managerial levels should be participated with sensitive and important decision-making, through project management in order to solve problems of project performance.

Key words: Project, Management, project management, project performance, project sponsorship management, project effectiveness, and efficiency management, and project disclosure and reporting management.

CHAPTER ONE

This chapter includes: background, statement of the problem, objectives, significance, scope and limitation of the study and structure of the thesis.

1.1. Background of the study

The success of projects has a direct effect on the success of the business. Project management is defined as the framework, functions, and processes that guide project performance activities in order to create a unique product, service, or result and meet organizational strategic and operational goals and always includes consideration of scope, cost, time, and technical performances (PMI, 2016). Project management is the process by which projects are defined, planned, monitored, controlled and delivered so that agreed benefits are realized(APM, 2004).

Project performance plays a major role in development and achievement of the goals of society. Road project performance is one of the largest industries and contributes to about 10% of the gross national product (GNP) in industrialized countries (Navon, 2005). Project management has complexity in its nature because it contains different parties as sponsorship management; project management effectiveness, and efficiency; project disclosure and reporting. The performance of the road projectis affected by national economies (Navon, 2005).

In Ethiopia like other countries, Road project performance industry is one of major industry contributing significantly in the growth of socio-economic development. The Road project performance industry in Ethiopia has been developing tremendously since 2001. Studies by Zewdu & Aregaw, (2015) indicated that the GDP contribution of the industry has been raised to 5.6% and approaches to the sub Saharan average (6%).

According to Berhanu, (2018) road project performance is truly the engine of national economy through which the total of physical development is achieved. The Road project performance is a vital element of the economy and has a significant effect on the efficiency and productivity of other industry sectors. One cannot think of widespread investment in manufacturing, agriculture, or service sectors unless the Road project performance industry results of infrastructure facilities

are in place. Three perspectives can explain why road project performance has been a domain of the state in Ethiopia:

First, from an economic perspective, road infrastructure is a classic example of a public good that is characterized by non-excludability. As a consequence, the private sector has no interest in providing roads Becker/Demissie (2006). Hence, road construction has been a domain of the Ethiopian state throughout its history.

Second, from political perspectives, road infrastructure and accessibility of peripheral rural areas of crucial importance for the state's monopoly on the legitimate use of physical force in the territory.

Third, in the context of Ethiopia's geography, patterns of settlement and economic activity, road transport plays a vital role in facilitating economic development as 95% of the movement of people and goods are still carried out by road transport. Road transport provides the means for the movement of peoples and agricultural products from rural to urban areas and movement of industrial goods, modern agricultural inputs and peoples from urban areas to rural areas. Road transport also provides a means for the utilization of land and natural resources, improved agricultural production and marketing, access to social services, and opportunities for sustainable growth ERA, (2014).

In Ethiopia the result of midterm and final reviews of the RSDP (Road sector development program) shows, despite the improvement seen in performance and productivity within the sector, there are problems of delay and cost overrun in almost all road projects performance. It is also identified that there is a need for further strengthening of institutional capacity, adoption of new project performance technologies and modern project management principles, and additional regulatory reforms in order to maximize the efficiency of the Ethiopian road construction industry. Midterm review, RSDP II,(2005). Still, the success rate of projects remained low as evidenced by several surveys and studies. Due to Poor project management, road project performance (Lo et al, (2006). The causes of these problems have attracted the attention of project management practitioners and researchers. For several decades, researchers and practitioners have attempted to improve project performance by focusing on

project-based management and the competence of project team members as well as developing new project management tools and techniques (e.g., Besner and Hobbs, 2012; Crawfordet al., 2008; Flyvbjerg et al., 2003; Hebert and Deckro, 2011;Packendorff, 1995; Sauer and Reich, 2009).

Meng (2012) showed that most studies have divided the causes of poor road project performance into external and internal causes. He notes that external causes, which are beyond the control of the project team, may include adverse weather conditions, unforeseen site conditions, market fluctuation, and regulatory changes. Internal causes of poor road project performance may be generated by the project management, the designer, the contractor, the consultant and various suppliers who provide labour, materials and equipment. The failure of any road project is mainly related to the problems and failure in project performance. Cost, time, and quality are used to measure the project performance and success. Generally, the performance of a project is defined by accomplishing it within specified cost, time and quality. There are many road projects fail in time performance, others fail in cost performance and others fail in other performance indicators. Road projects performance problem appears in many aspects in Ethiopia and as well as in Oromia. There are several factors that are contributing to the performance problem of road project. This research attempts to identify the effect of Project management on road project performance in Jimma Town Municipality.

1.2. Statements of the Problem

Successful road project performance industry plays an important role for a country's economic development. The road project performance industry plays significant role in the economy of developing countries. For example, in many developing countries, major road project performance activities account for about 80% of the total capital assets, 10 % of their GDP, and more than 50% of the wealth invested in fixed assets. In addition, road project performance industry provides high employment opportunity(Achuenu, 2013). Despite the road project performance industry's significant contribution to the economy of developing countries and the critical role it plays in those countries development, the performance of the road project industry still remains generally low.

As Ofori, (2006) concluded, the project industry in developing countries failed to meet expectations of governments, clients and society as a whole. Similar to the case with other developing countries, the Ethiopian road project industry shares many of the problems and challenges; industry is facing in other developing countries, perhaps with greater severity. Given the critical role the project industry plays in Ethiopia and other developing countries, and the poor level of performance of the industry in those countries, improving the performance of the industry ought to be a priority action. Completion of a project is considered as the most important factors of successful projects, which help to decrease problems for all parties and give new chances to construct other related projects. It also helps to increase the profits and development of construction industry.

Becker and Behailu, (2006) also ascertained that the projects were not completed on time, within budget, and desired quality causing loss of project's profit, increasing cost and leading to technical and managerial problems between project's parties. Cost overrun is also considered another big problem, which hinders project's progress, since it decreases the contractor profit leading to huge losses leaving the project in a big trouble. Roads projects performance faces different challenges, among other problems, the main problem of roads projects are project management & performance problem. ERA, Road Sector Development Program 16 Years Performance Assessment, October 2014, mentioned that a delay in work projects leads to cost increases and delay in benefit of the project to the economy. Most projects are suffering from cost and time overrun and there are various reasons for this.

As Marco (2013) recommended the road projects need to set clearly roles and responsibilities among various parties that they should be set regarding time, cost and quality issues. In addition the Government should deliberately take necessary steps on the pre-project planning, project sponsorship, and projects implementation. Their low performance would have a negative influence on the growth and development of the road project industry as whole and affects the effective and efficient use of resources. The problem is many in roads projects performance which are constructed by Oromia Roads Construction Enterprise have not been completing according to schedule, scope, with contract cost as well as per the required quality. Oromia Roads Authority (2017) also reported that many roads construction projects were not completed on time, within the given budget and with required quality.

According to Wogderes, (2019)many road projects in Jimma municipality experience extensive less effectiveness and efficiency, less quality and delays there by exceeds initial time, cost estimate. The documented annual report of the municipality shows that 55.26% of the projects are delayed a minimum of 2 months to maximum of 3 years even those projects are not completed yet. On the other hand, with respect to the initial signed cost agreement of the project, the financial expenditure report indicated that more than 90% of the projects were not completed with the initial cost. The analysis result of citizen satisfaction on the project quality also showed there is a high quality problems in the road projects performance and it becomes out of use with in short period of time which was always raised in annual reports of Jimma municipality.

However, the issue of road projects and project performance are not investigated particularly at study area. Hence, the issue of road projects and project performance is not adequately available yet Jimma municipality. In light of this, the study would be a modest contribution to potential attempts made to fill this gap in the literature across different sectors in Jimma municipality.

Additionally, road projects and project performance are an issue that has rarely engaged the attention of both academics and practitioners in Jimma municipality despite the perennial search for a more responsive and effective project performance and curiously enough, no detailed, scholarly and systematic study of the phenomenon has been carried out. Therefore, this study attempted to address the following three basic questions.

- 1. Is there a significant relationship between project management and project performances?
- 2. How does project management affect road project performance in Jimma town municipality?
- 3. What are the major dimensions of project management that makes to super project performance?

1.3. Objective of the Study

1.3.1. General objective

The general objective this study is to assess effect of project management on road project performance in Jimma Town municipality.

1.3.2. Specific Objectives

- (i) To examine a significant relationship between project management and project performance.
- (ii) To assess how does project management affect road project performance in Jimma town municipality.
- (iii) To identify the major dimensions of project management that makes to super project performance.

1.4. Significance of the study

This study can be used as background study for future researches on effect of project management on road project performance in Jimma town municipality. Findings from this study can be used by road project performance managers as a spring board of where they are standing in terms of identifying factors that affecting performance of road con- projects. The employees of road project that is involved in this study will be benefited more than other roads project managers. This is due to the fact that the research findings are more or less mirrors of where it is standing. In addition to this, recommendation forwarded in the study can serve the project managers to improve their project performance.

1.5. Scope of the study

Due to the nature of project management and project performance complexity, resource ,data manageability ,time limit, cost constraint and quality performance ,this study was intend to took only into jimma town municipality road project performance . it was conducted by taking samples from Jimma town municipality road project office employees through simple random sampling techniques by followed of lottery method. The study also focus on independent

variables likes; project sponsorship management effect, project effectiveness and efficiency management effect, and project disclosures and reporting management effect on dependent variables which means that; project performance in the study areas were the scope of the study.

1.6. Limitation of the Study

As in other social researches, this study had encountered certain limitations and challenges. Hence, the limitations that the researcher came across include lack of adequate local literatures Related to the topic and lack of organization data about road project performance, that some of the respondents did not give values to the questionnaire and a few respondents did not return it totally. Besides this, respondents had in a tight work, and thus some were not as such willing to fill the questionnaire. Lastly, data collection was a bit difficult mainly because most of the employees were not in office because of their nature of work. Therefore, these conditions might not affect the quality of the paper to some extents, because since more than required questionnaire were distributed, the required number was achieved and the researcher solved these problems effectively and giving more attention for the problems and addresses these problems.

1.7. Organization of the study

This thesis is composed of five chapters. The first chapter deals with the statements the problem and its approach with clear background. The second chapter is all about review of related literature. Research methodology which is the third chapter emphasis on: which data source are used, what technique of sampling are the most appropriate and how the gathered data are presented and analyzed. Chapter four contains the major parts of this research paper which are data presentation and data analysis. Chapter five is the last and it includes all findings of the study followed by conclusions and recommendations.

1.8. Definition of Key Terms

Project: It is a temporary endeavor undertaken to create a unique product, services, or result PMI, (2013: p.3).

Management: is consists of the interlocking functions of creating corporate policy and planning, organizing, controlling, and directing an organization's resources in order to achieve the objectives of that policy.

Project management

According to oxford dictionary Project Management is one concept of general management which apply in Project concepts; project evaluation; team building and training; communication; project start-up; risk analysis and allocation; quality assurance; project systems; project planning; project methods; tools and techniques; resources, cost and time allocation; estimating and tendering; scheduling; monitoring, updating and control; contracts; contract law; project finance; project management software; motivation and incentives; resolution of disputes; procurement methods; organization systems; decision making processes; investment appraisal (the PMBOK).

Project sponsorship Management

In PMBOK Guide (2013), the sponsor was defined as "the person or group that provides the financial resources, in cash or in kind, for the project." APM (2011), the organization who defined project sponsorship as one of the dimensions of project management, described project sponsorship as the important link between the organization's senior management level and the management of the project with decision making, directing, and representational accountability. A project sponsor typically functions both as an advocate for project objectives and as a middleman or mediator between the project manager and upper management.

Project effectiveness and efficiency management

The efficiency focuses on the benefit of projects, because many project managers brought the business concepts of efficiency and productivity into their projects. The central objective of project effectiveness and efficiency management is how can balance effectiveness and efficiency of project during project performance through in the right amounts, and in the right timing.(APM, 2004).

Project Disclosure and reporting Management

According to APM (2011), this dimension ensured that the project reports were available in a timely fashion and contained relevant and reliable information that supported the organization's decision making processes. All project stakeholders who had a legitimate interest in project

information should have access to all necessary reports (APM, 2011). Effective reporting required a culture of open and honest disclosure (APM, 2011).

Performance: is the degree to which an operation fulfills primary measures (performance objectives) in order to meet the needs of customers and it is measured by using Key performance indicators (KPIs), time, cost and quality.

Project performance

The success of project management is usually measured by achieving the scope, time, and cost criteria, which was known as the triple constraint or the iron triangle (Atkinson, 1999; Larson and Gray, 2013; Schwalbe, 2010)

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Theories and Definitions project management and project performance

This section provides a literature review of the two constructs (project management and project performance).

2.1.1. Project Definition

A Project is a temporary endeavor under to create a unique product or services. A project is a group of tasks, performed in a definite time period, in order to meet a specific set of objectives. It is likely to be a one-time, has a life cycle with a specific start and end date, and it has budget and likely to require the use of multiple resources, most of which may be scarce and have to be shared among others PMI,(2013:P.3).

Perkins, Peterson and Smith (2003) defined that a project as a group of activities undertaken to meet one or more specific objectives. The project objectives could include solving a problem of potholes in the roads. Projects are often divided into smaller components or activities, usually based on technical and functional disciplines Perkins et al, (2003). Sometimes it can be associated with a launching of a product or a service by government departments, example for this can be associated with road safety campaign. Such activities are aimed to have a positive effect at the end of a project.

2.1.2. Management definition

Is consists of the interlocking functions of creating corporate policy and planning, organizing, controlling ,and directing an organization's resources in order to achieve the objectives of that policy.

2.1.3. Project Management Definition

According to oxford dictionary Project Management is one concept of general management which apply in Project concepts; project evaluation; team building and training; communication; project start-up; risk analysis and allocation; quality assurance; project systems; project planning; project methods; tools and techniques; resources, cost and time allocation; estimating and tendering; scheduling; monitoring, updating and control; contracts; contract law; project finance; project management software; motivation and incentives; resolution of disputes; procurement methods; organization systems; decision making processes; investment appraisal :PMBOK guide (5th ed.). Kerzner(2009) defines Project management as planning, staffing, organizing, directing, and controlling a project to develop an information system at a minimum cost, within a specified time frame, and with acceptable quality. Inherent in the process of project management are the general management skills that allow the project manager to complete the project with some level of efficiency and control. Many of the foundations that hold up project management today. The pharaohs built the pyramids of Egypt around 2500 BC, and to this day we aren't certain how they accomplished such as vast task. But records do show that there were managers, even back then, who were responsible for each of the four faces of the Great Pyramid.

In 208 BC the Great Wall of China was constructed, but there are records that indicate the planning went back even further. Historical data reveals that the workforce for this large project was organized into groups. There were three that we know of: soldiers, common people and criminals. Millions were ordered to complete the project.

More recently, the need for a more pronounced structure in construction, manufacturing and transportation in the 19th century lead to the birth of project management as we recognize it today. Examples include the building of the Transcontinental Railroad and the rebuilding of the southern states after the devastation of the American Civil War.

While there might not have been task management, scope or workload considerations at the time, there was certainly leadership at play, and there must have been some budget, even if open-

ended, and scheduling of some sort. But with practice came process and refinement, as we shall see moving forwards.

The term project management has been used in various areas in project management contexts (Bekker and Steyn, 2007). Bekker and Steyn (2007) used a Delphi technique to obtain a formal definition for project management where thirteen practitioners and two academics participated. Project management is the practice of applying knowledge, skills, tools, and techniques to complete a project according to specific requirements. It comes down to identifying the problem, creating a plan to solve the problem, and then executing on that plan until the problem has been solved. That may sound simple, but there is a lot that goes into it at every stage of the process. The roots of project management can be traced as far back as the building of the Pyramids in Giza and the Great Wall of China. However, the modern development of project management began in the 19th century when railway companies purchased tons of raw materials and employed thousands of people to work on the transcontinental railroad. By the early 20th century, Frederick Taylor applied concepts of project management to the work day, developing strategies for working smarter and improving inefficiencies, rather than demanding laborers work harder and longer. Henry Gantt, an associate of Taylor's, took those concepts and used bars and charts to graph when certain tasks, or a series of tasks were completed, creating a new way to visualize project management. During World War II, military and industrial leaders were employing even more detailed management strategies, eventually leading to more standardized processes like the critical path method. These practices grew in popularity across industries, and in 1965 and 1969, the International Project Management Association and Project Management Institute were founded, respectively. In 2001, Agile project management methodologies were codified by the creation of the Agile Manifesto.

The field of project management continues to shift as an increasingly competitive landscape, the need to deliver change fast, and new technologies (automation, AI, etc...) enter the marketplace. Their results confirmed that no formal definition existed and defined project management as "a set of management systems, rules, protocols, relationships and structures that provide the framework within which decisions are made for project development and implementation to achieve the intended business or strategic motivation" (Bekker and Steyn,2007). Liu and

Yetton(2004) stated the main purpose of project management was to control projects and eventually achieve business objectives.

Turner and Keegan (1999) suggested that project management was the means to acquire order and then the stakeholders could recognize the common interests among underlying threats and chances. Recently, Project Management Institute (2016) published management of Portfolios, Programs, and Projects: A Practice Guide to advance the topic of portfolio, program, and project management. According to different argument from different project researchers and professional; Project management is defined as "the framework, functions, and processes that guide project performance activities in order to create a unique product, service ,or result and meet organizational strategic and operational goals" (PMI, 2016).Global projects involve team members from various cultures and organizations, spread in locations across countries and time zones, and speaking different native languages. Each of these dimensions can contribute to the success of the team and the quality of the project deliverables, while adding challenges to project and program managers, PMOs, and the team members. Global project dimension are; location of the project, organization of the project, cultures time zone and language are the common.

Project management, as one of the management structures, provided a clear link between the project outputs and the organization's business strategy (Too and Weaver, 2014). Project success can be measured in many ways including if it was completed on time, on or under budget, if it resulted in more sales, improved customer service or increased efficiencies, and a combination of these or other factors. It's imperative at the outset to decide for each project what good performance means and what success looks like.

APM (2011) defined project management as "a concern of the areas in corporate management that are particularly related to project activities." With APM's (2011) definition of project management, refer to corporate management as an organizational strategy and project performance as an operational strategy in which a good alignment of each other is expected in order to achieve better organization performance Originally, APM (2004).

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2.1.4. Project sponsorship Management definition

Several studies showed the importance of top management support of a project (Baker et al., 1988; Cooke-Davies, 2002; Crawfordet al., 2008; Zimmerer and Yasin, 1998) though project Sponsors play a vital role in projects, and even though some project managers may disagree, every project needs a project sponsor. Sponsorship in a small business is, however, often significantly different from sponsorship in a large business or a corporation. Unlike a large business, in which a sponsor can be any one of a number of different individuals, in a small business, the sponsor is most often the business owner. Because of the roles and responsibilities of a sponsor and a project manager run parallel, but are different from each other, it's important to know both what project sponsorship is and what it is not. Senior management and sponsors played an important role in all kinds of management. For project management, these people ensured that management requirements were met and any necessary support was provided to projects (Crawford et al., 2008).

Project sponsorship was mentioned several times in project management standards documents such as A Guide to the Project Management Body ofKnowledge (PMBOK Guide), 5th Edition, published by Project Management Institute (2013) and Directing Change: A Guide tool Project Management, 2nd Edition, published by the Association for Project Management (APM), 2011. A project sponsor typically functions both as an advocate for project objectives and as a middleman or mediator between the project manager and upper management. Advocacy comes from the authority and influence a sponsor holds to protect the project, make key decisions and deal with problems or issues outside the project manager's authority. A project sponsor, for example, helps gather and retain support for the project, works to overcome resistance to changes the end product will produce, and secures the resources necessary to complete the project within scope, cost, quality, and on time.

In PMBOK Guide (2013), the sponsor was defined as "the person or group that provides the financial resources, in cash or in kind, for the project." APM (2011), the organization who defined project sponsorship as one of the three dimensions of project management, described project sponsorship as the important link between the organization's senior management level

and the management of the project with decision making, directing, and representational accountability and involved with identifying who will be effected by the project and managing relationships with them, including strategies for collaborating with stakeholders on project direction and execution.

2.1.5. Project management effectiveness and efficiency definition

This dimension will ensure that the projects employee the project teams capable of achieving the project objectives. The efficiency focuses on the benefit of projects, because many project managers brought the business concepts of efficiency and productivity into their projects. The central objective of project management effectiveness and efficiency is how can balance effectiveness and efficiency of project during project performance through in the right amounts, and in the right timing, (APM, 2004). APM (2004) mentioned that project team capability depended on several factors, such as the skills and experience of project leaders, the resources available to them, and the tools and processes they have access.

Hyvari (2006)suggested that technical project management tools and techniques were well developed and used that now it is time to emphasize on developing leadership skills. Curran et al. (2009) surveyed 84 biotechnological projects and found that the requirement for a stronger project leader relied heavily upon the degree of trust among team members and the administrative activity. Their findings suggested that not only were effective resources and instruments required but human factors were also important to success in project management (Curran et al., 2009).

Besner and Hobbs(2012) surveyed 2339 practitioners and indicated that practices, tools, and techniques (referred to as toolsets) were used in clusters or groups and there were significant differences in the extent to which tools were employed among practitioners working on different types of projects.

2.1.6. Project Disclosure and reporting definition

According to APM (2011), this dimension ensured that the project reports were available in a timely fashion and contained relevant and reliable information that supported the organization's

decision making processes. All project stakeholders who had a legitimate interest in project information should have access to all necessary reports (APM, 2011).

Effective reporting required a culture of open and honest disclosure (APM, 2011). Some seriously difficult situations might threaten the effectiveness of reports and disclosure processes. A project member's reluctance to report the actual status of a troubled project was recognized as an important contributor to project failure (Park et al., 2008). Park et al. (2008) found that fault responsibility and time urgency had significant effects on an individual's willingness to disclose bad news. Snow and Keil (2002) suggested that executives should be skeptical of favorable status reports. Independent verification of information might be required for improving the accuracy of project reporting (APM, 2011). In this paper, project management is measured in three main dimensions:, project sponsorship, project management effectiveness & efficiency, and project disclosure & reporting.

Project management as a new paradigm of management was required to help improve project performance (Altshuler & Luberoff, 2003; Crawford et al., 2008).Klakegg et al, 2008) mentioned that project management should flow from the top level management down to the project level. By definition, project management was a subset of corporate management (Garland, 2009; Weaver, 2007). However, Bekker and Steyn (2007) stated that corporate management failed to address the shortcomings surrounding public accountability on projects because of the focus on shareholder protection. This implies that corporate management itself is not sufficient. While prior research suggested the project management helps to improve project performance, such studies fell short of actual empirical measurement of the nature of the effect that project management had on project performance. Thus, this paper was investigated the effect of project management on project performance and the alignment between project management and with project performance.

2.1.7. Performance Definition

Is the degree to which an operation fulfills primary measures (performance objectives) in order to meet the needs of customers and it is measured by using Key performance indicators (KPIs), time, cost and quality of project performance.

2.1.8. Project Performance Definition

The success of project management is usually measured by achieving the scope, time, and cost criteria, which was known as the triple constraint or the iron triangle (Atkinson, 1999; Larson and Gray, 2013; Schwalbe, 2010). Chitkara (2005) describes construction projects' as high value, time bound, and special construction missions with predetermined performance objectives. In this research, the researchers were affirm this triple constraint and were utilized it as project performance criteria, in terms of success and failure factors that will effect project performance.

According to the Standish Group (1995) published a list of project success/failure factors in the CHAOS Report. The three major success factors were user involvement (16%), executive management support (14%), and a clear statement of requirements (13%).

Recently in 2015, the Standish Group reported a similar list of project success/failure factors. The three major success factors were executive support (15%), user involvement (15%), and emotional maturity which are defined as the collection of basic behaviors of how people work together (15%) and executive support became the leading reason for project success or failure by 2000. It was people who deliver projects, not systems or processes.

According to Cooke-Davies (2002) explained that it might be because the study focused on what people and teams did, not on the quality of their human interactions or decision-making processes. Project teams were comprised of members from various specialties with different knowledge bases and experience that needed to be coordinated or governed (Bosch-Sijtsema and Postma, 2010). Thompson et al. (2007) examined the relationship between reporting quality (one aspect of the project management) and project performance. The researcher use in this study will be based on the project scope, quality, efficient, schedule and budget for the purpose of project performance measures.

Successful project industry plays an important role for a country's economic development. The construction industry plays significant role in the economy of developing countries. For example, in many developing countries, major project activities account for about 80% of the total capital assets, 10 % of their GDP, and more than 50% of the wealth invested in fixed assets. In addition,

the industry provides high employment opportunity, probably next after agriculture E. Achuenu,(2013). Despite the project industry's significant contribution to the economy of developing countries and the critical role it plays in those countries development, the performance of the industry still remains generally low.

As Ofori, (2006) concluded, the project industry in developing countries failed to meet expectations of governments, clients and society as a whole. Similar to the case with other developing countries, the Ethiopian project industry shares many of the problems and challenges; industry is facing in other developing countries, perhaps with greater severity. Given the critical role the construction industry plays in Ethiopia and other developing countries, and the poor level of performance of the industry in those countries, improving the performance of the industry ought to be a priority action.

Wakjira (2011) identified the major factors that causes cost overrun in Ethiopian Federal road construction projects, material price escalation and Claims due to late removal of constructions, failure to give possession of site, late issue of drawings, widening of road section at some towns and change in alignment, scope change, changes in quantity (inaccurate quantities), unforeseen ground condition, construction of additional length and additions (variations).

Turkey, also identified that, price escalation /price adjustment, variations, right of way, claims and design problems (design risk) are identified as major factors leading to cost overrun. It was also noted that consequential delays related to design modification has contributed to excessive cost overrun, the costs being quantified as time extension cost. Most of the factors such as variations, scope changes, design problems and unforeseen ground conditions are related to lack of clarity and comprehensiveness of documents (survey, design, tender and contract documents) used in the process and poor planning.

Zerfu (2009) also stated that poor design and technical specifications were among the major factors for the challenges faced by the Ethiopian Roads Authority (ERA) in road construction projects. The other factors such price escalation; claims, right of way problem and failure to give possession of site are related to economic factor and improper planning respectively. Hence it is essential to address the issues related to right of way before mobilization of the contractor to the

site and taking into account factors such as price escalation, location of the project, material and labor availability during the engineering estimate and properly forecast the escalation trend.

Roads projects performance faces different challenges, among other problems, the main problem of roads construction projects is performance problem. ERA, Road Sector Development Program 16 Years Performance Assessment, October 2014, mentioned that a delay in work projects leads to cost increases and delay in benefit of the project to the economy. Most projects are suffering from cost and time overrun and there are various reasons for this. Their low performance would have a negative effect on the growth and development of the road construction industry as whole and affects the effective and efficient use of resources. The problem is many in roads construction projects which are constructed by Oromia Roads Construction Enterprise have not been completing according to time schedule, with contract cost as well as per the required quality. Oromia Roads Authority (2017) also reported that many roads construction projects were not completed on time, within the given budget and with required quality.

Various researchers Altshuler and Luberoff(2003);Crawford(2008) suggested that project management be a new paradigm of manage to help improve project performance. Therefore, in this research, project management wasbe empirically investigated as to its effect on project performance.

2.1.9. Key Performance Indicators

A wide variety of Key Performance Indicators (KPI) have identified and used to measure the success of construction projects, Langston, (2012). These include indicators of client satisfaction, stakeholder engagement, service delivery, investment return, defect minimization, dispute avoidance, safety and standard. The most commonly cited KPIs are time, cost and quality. Time, cost and quality necessarily interact. It was well understood in the industry and in the literature that trade off-occurs between optimizing performance for any of these KPIs. For example, accelerating completion of a project will usually involve extra cost, reducing cost will tend to lower quality, and increasing quality standards will take more time to deliver.

Meng (2012), found that projects performance often suffer from poor performance in terms of time delays, cost overruns and quality defects, and from an analysis of previous research findings concluded that time, cost and quality are the three most important indicators to measure road project performance. Brown and Adams (2000) undertook case studies derived from UK data, and found that project management as implemented in the UK failed to perform as expected in relation to the three predominant performance evaluation criteria of time, cost and quality. In fact they showed that project management had little effect on time performance, no effect on cost performance, and a strong yet negative effect on quality performance.

2.2. Agency Theory

The Agency theory explains how to best organize relationships in which one party determines the work while another party does the work. The theoretical basis for the performance outcomes of project management was founded on the agency theory. The theory adequately explains the relationship between the two parties in project management and conflicts that arise between the project performance professional and hiring entity, in this case Government which finally affect the performance of road construction projects targets the goal of constructing high quality roads, less cost and less time efforts, on the contrary, the project want to maximize profits out of the projects performance, which leads them to do substandard work through minimizing inputs to maximize gains.

According to Lician and Jesse (2004), the agency theory occurs when one person is able to make decisions on behalf of, or that effect another person or entity Government or the principal. This dilemma exists in circumstances where the agent is motivated to act in his own best interest, which are centrally to those of principals (timely delivery, quality of work, customer satisfaction), and is an example of moral hazard Eisenhardt (1989), indicated that the agency problem arises where the two parties have different interests and asymmetric information (the agent having more information) such that the principal cannot directly ensure that the agent is acting in his interest particularly when activities that are useful to the principal and costly to the agent (enough quantity and desired road quality materials), and where elements of what the agent does are costly for the principal to observe (monitoring intensity, evaluation, and risk management). The deviations from the principal's interests (efficiency and effectiveness, timely

delivery, customer satisfaction) by the agent are called the agency costs. Various mechanisms may be used to align the interest of the agent with those of the principal. The principal may use piece rate (commissions, performance measurement, or the threat of termination of employment to align workers (project performance) interest with their own. However, the theory does not show the relationship between the interest of the principal and the agent to the elements observed by the principal to minimize the costs. Cooper (1996), indicated that as managers identify stakeholder values, they also need to identify the tools, resources, and constraints that define the range of action they might take in delivering services (risk management, evaluation, and monitoring in the study). The project performance industry in Ethiopia has been developing tremendously since 2001. Recent studies by Zewdu & Aregaw 2015) indicated that the GDP contribution of the industry has been raised to 5.6% and approaches to the sub Saharan average (6%).

2.3. Empirical Review

2.3.1. Performance Problem in Project Industry

The failure of any construction project was mainly related to the problems and failure in project management performance. Moreover, there were many reasons and factors which attribute to such problem. Ogunlana et al, (1996) stated that the project industry performance problems in developing economies can be classified in three layers: problems of shortages or inadequacies in industry infrastructure (mainly supply of resources), problems caused by clients and consultants and problems caused by contractor incompetence/inadequacies.

Kessing, (2003) mentioned that stakeholder's play a very important role in design related delays as they are in charge of the design process in conjunction with the owner of the project. On the other hand, the government plays the most important role in code-related delays. Project managers have the major responsibility for delays in project-related delays.

According to Long (2008), mistakes in design or poor design are caused by the low competence designer. The approved design or drawing process becomes low quality and ineffective, especially for those with government funded projects. The unrealistic design which found after the start of the construction projects has to change and it could lead to cost overrun.

Ashenafi (2006) stated that a number of unexpected problems and changes from original design arise during the construction phase, leading to problems in cost and time performance. It is found that poor site management, unforeseen ground conditions and low speed of decision making involving all project teams are the three most significant factors causing delays and problems of cost performance in construction projects.

The prime variables of cost overruns have been commonly identified as: unpredictable weather, inflationary material cost, inaccurate materials estimates, complexity of the project, contractor's lack of geographical experience, contractor's lack of project type experience, and non-familiarity with local regulations (Kaming ,et.al, 1997).

According to Frimpong (2003) stated that improper planning and management experience limitation causes cost overrun. Poor site supervision and management and poor project management assistance contribute to the problem of cost overrun in construction projects. Poor site management reflects the weakness and incompetency of contractors. Skills and experience human resource is insufficient in site management (Long,2008).

Chimwaso (2001) has identified 9 critical factors, as incomplete design at the time of tender, Additional work at the owner's request, changes in owner's brief, lack of cost planning/monitoring during pre-and-post contract stages, site/poor soil conditions, adjustment of prime cost and provisional sums, re measurement of provisional works, logistics due to site location and lack of cost reports during construction stage.

Reviewing literature for potential factors that affect quality performance, Arditi & Gunaydin, (1998) identifies among other factors; lack of management commitment to continual quality improvement; lack of quality training of staff; management leadership; efficient team work among stakeholders as generic factors that affect the quality process.

Projects are considered as overrun in time, which are completed beyond the date of completion specified in a project performance, or beyond the date that the parties agreed upon for delivery of a project. It is a project slipping over its planned schedule Aftab (2014). Many studies have been conducted in different countries to identify the factors affecting time overrun in construction projects. Aftab(2011) identified in his study: delay in progress payment, poor site management

and supervision, design changes by owner or agent during performance, late delivery of materials, change orders, Right of way problem, delay in approving design documents, poor communication and coordination, unforeseen ground condition, low speed of decision making, and lack of good project management professional.

2.3.1.1. The Extent of the Problem in Some Developing Countries

A study on cost and time overrun Rahman, Memon, Nagapan, Latif, and Azis (2012) in Malaysia indicated that the Malaysian project industry is characterized by poor performance leading to failure in achieving effective time and cost performance. The findings of this study revealed that 92% of projects performances were time overrun and only 8% of project could achieve completion within project duration. In terms of cost performance only 11% of respondents mentioned that normally their projects are finished within budgeted costwhile 89% of respondents agreed that their projects were facing the problem of timeand cost overrun in the range of 5-10% of project. Another study by Endut, Akintoye, and Kelly (2005) in Malaysia on the other hand concluded that only 46.8% and 37.2% of public sector and private sector projects respectively are completed within the budget. The study by Jong, Gunn, and Walker (2004) also contends the same idea: 9 out of 10 transportation infrastructure projects costs are underestimated and that for all project types, the actual costs are on average 28% higher than estimated costs. The situation seems to be worse in India where studies on project performance, found that more than 60% of projects experienced up to 200% time overrun and 750% cost overrun Rwakarehe and Mfinanga, (2014). Aftab (2014) studied time overrun factor in the construction industry in Malaysia and concluded that the major causative factors contributing to construction time overrun are frequent design changes, change in the scope of the project, financial difficulties of owner, delays in decisions making and unforeseen ground condition.

2.3.1.2. The Extent of the Problem in Some Selected African Countries

Most of these challenges are also observed in many African countries, the following are the problem in some African countries such as: Nigeria, Ghana, Kenya and Zambia.

a. Problem in the Nigerian project performance Industry

The Nigerian project industry is still struggling with a lot of intrinsic challenges, ranging from inadequate technical and managerial know-how to insufficient financial, material and equipment

capital base (Jimoh, &Achuenu, 2013). A study on evaluation of management challenges facing the Nigerian construction industry also revealed that time; cost, quality, and safety remain the top management challenges facing construction managers in Nigeria (Okoye, Ngwu, &Ugochukwu, 2015).There are several factors which affect the project cost and various studies have been conducted to address these factors. Okpala and Aniekwu, (1988) studied the reasons of cost overrun in Nigeria Construction projects and found out that the price fluctuations, additional works, delays, fraudulent practices, shortening of the contract period, inaccurate estimates, were the main causes of cost overrun. Therefore, the authors concluded that the three main reasons for cost overruns were: Increase of material's prices due to fast growth of inflation, inflation increase make difficult for contractors to produce products at its official price, and delays caused by changes in design specification and financial problems.

b. Problem in the Ghanaian project performance Industry

Tsegay (2016) identify lack of technical and professional expertise and resources to perform task, lack of employee commitment and understanding, lack of education and training to drive the improvement process when he studied the quality assurance practices of some selected construction firms in the Kumasi metropolis in Ghana. Another study that had similar results was the research done by Frimpong, et al.(2003), who wanted to find the causes of delay and cost overruns in the construction of groundwater projects in Ghana. The results pointed out that the main factors that caused overruns in Ghana are similar to those in other developing countries. These factors were: the increase of cost of the materials, poor contractor management, and problems with agencies' payments, poor technical performance and inaccurate estimation of costs (Frimpong, et al., 2003).

c. Problem in the Kenyan project performance Industry

The case in Kenya is also not different with other most of African countries. The industry is facing lots of challenges such as the expenditure exceeding the budget, delay to complete the project in time, the building defects and over-reliance on foreign workers. Most construction projects especially road infrastructure in Kenya are exposed to extreme cost escalation to the extent that it calls not only for extra funding but also specialized expertise hence leading to technical and project managerial conflicts between project's parties A. O. Gwaya, S. M. Masu,

and G.Wanyona, (2014). For a number of reasons, the performance of construction projectshas not been as impressive. There are many realistic reasons such as closures, amendment of drawings and amendment of the design and delayed payment release. In Kenya, there are many construction projects that fail in performance. In addition, performance measurement systems are not effective or efficient to overcome this problem. Construction projects performance problem appears in many aspects in the Kenya Weil, (2005). There are many constructed projects that fail in cost performance and others fail in other performance factors. In (2009) there were many projects which were finished with poor performance because of many evidential reasons such as: obstacles by client, non-availability of materials, road closure, amendment of the design and drawing, additional works, waiting the decision, handing over, variation order, amendments in Bill of Quantity (B.O.Q) and delay of receiving drawings Strenman, (2012).

d. Problem in the Zambian project performance Industry

Kaliba, (2009) concluded from their study that the major causes of delay in road performance projects in Zambia were delayed payments, financial deficiencies on the project stakeholder's are; contract modification, economic problems, material procurement, changes in design drawings, staffing problems, equipment unavailability, poor supervision, construction mistakes, poor coordination on site, changes in specifications, labour disputes, and strikes. It can therefore be concluded that the most important factors vary from one region to another.

2.4. Review of Road project performance in Ethiopian.

Road projects performance sector in Ethiopia have an influence on the development strategies of the country. The development strategies of a country achieved through successful road projects intended to improve accessibility of the rural area; lower costs associated with transport maintenance and open more areas for development activities. Road projects, involving large amount of capital, also contribute to the total economy through job creation and in a ripple effect to other business activities. Rahel Kassay, (2016)According to Rahel, (2016) despite the improvement seen in performance and productivity within the sector, there still remain problems of delay, cost overrun and poor quality of road project performance. It is also identified that there is a need for further strengthening of institutional capacity, adoption of new construction

technologies and modern project management principles, and additional regulatory reforms in order to maximize the efficiency of the Ethiopian road project industry. To this end the industry is expected to refine its processes for efficient delivery of projects in terms of time, quality and cost.

2.4.1. Performance of roads project in Ethiopia

Wakjira (2011) identified the major factors that causes cost overrun in Ethiopian Federal road construction projects, material price escalation. Claims due to late removal of obstructions, failure to give possession of site, late issue of drawings, widening of road section at some towns and change in alignment, scope change, changes in quantity (inaccurate quantities), unforeseen ground condition, performance of additional length and additions (variations). Turkey, also identified that, price escalation /price adjustment, variations, right of way, claims and design problems(design risk) are identified as major factors leading to cost overrun. It was also noted that consequential delays related to design modification has contributed to excessive cost overrun, the costs being quantified as time extension cost. Most of the factors such as variations, scope changes, design problems and unforeseen ground conditions are related to lack of clarity and comprehensiveness of documents (survey, design, tender and contract documents) used in the process and poor planning. Zerfu (2009) also stated that poor design and technical specifications were among the major factors for the challenges faced by the Ethiopian Roads Authority (ERA) in road projects performance. The other factors such price escalation; claims, right of way problem and failure to give possession of site are related to economic factor and improper planning respectively. Hence it is essential to address the issues related to right of way before mobilization of the contractor to the site and taking into account factors such as price escalation, location of the project, material and labor availability during the engineering estimate and properly forecast the escalation trend.

Turkey Wakjira (2012), in his study of the risk factors leading to cost overrun in Ethiopia federal road construction projects and its consequences, examined the effects of cost on the delivery of construction projects in the country. The result of the desk study indicated that out of 30 upgrading and rehabilitation road construction projects investigated, 24 projects (80%) suffered cost overrun in their execution. The average rate of cost overrun in these projects was 26.95% of
the contract amount. And 100% of the respondents to the questionnaire have recognized cost overrun as one of the major problems in Federal road construction projects. Unexpected inflation/ material price escalation, delays on completion time, scope changes, and unstable cost of manufactured materials, inadequate site investigation and right of way problems (access to site and quarry) are identified as major factors leading to cost overrun. The problem of projects delay and cost overruns can nearly be noticed in every project in Ethiopia road construction indicating that this problem didn't receive enough attention by both researches and responsible authorities. The accomplishment of the first 10 years Road Sector Development Program reveals that the execution of most of the Federal road projects resulted in cost and time overruns.

2.5. Review of Road project performance Oromia Regions

Road projects performance sector in Ethiopia have an influence on the development strategies of the country. The development strategies of a country achieved through successful road projects intended to improve accessibility of the rural area; lower costs associated with transport maintenance and open more areas for development activities. Road projects, involving large amount of capital, also contribute to the total economy through job creation and in a ripple effect to other business activities. Rahel Kassay, (2016) According to Rahel, (2016) despite the improvement seen in performance and productivity within the sector, there still remain problems of delay, cost overrun and poor quality of road project performance. It is also identified that there is a need for further strengthening of institutional capacity, adoption of new construction technologies and modern project management principles, and additional regulatory reforms in order to maximize the efficiency of the Ethiopian road project industry. To this end the industry is expected to refine its processes for efficient delivery of projects in terms of time, quality and cost.

2.5.1. Performance of roads project in Oromia regions

Birhanu Bayi(2018)identified the on an assessment of factors affecting performance Oromia road projects.in OROMIA Regions, road construction projects, material price escalation. Claims due to late removal of obstructions, failure to give possession of site, late issue of drawings, widening of road section at some towns and change in alignment, scope change, changes in quantity

(inaccurate quantities), unforeseen ground condition, performance of additional length and additions (variations)are cause road project delay. BirhanuBayi,(2018); identifies different factors of OROMIA road project; Delay in decision making by owner and consultant, Change in scope/variation order, delay in payment from owner to contractor, poor coordination and communication between parties ,right of way problem, improper planning and scheduling of work poor site management and super vision, waiting time for approval of test and inspection preparation and approval of drawings, inaccurate contract quantity, design problem, lack of construction material, late delivery of material and equipment & material price escalation, design change, delay in inspection and approval of completed works unforeseen ground condition ,lack of management leadership, lack of quality control &lack of quality training to staff and lack of efficient team work among stakeholders.

2.6. Research Gap

Tsega (2016) found out on evaluation of project performance in selected Federal road construction projects in Ethiopian. Abubeker, (2015) carried out study on factors affecting time and cost overrun in Addis Ababa city road projects. Even if few researches are made in project performance in Ethiopia, these researches are focused mainly on federal and Addis Ababa city road projects. BerhanuBayi (2018) carried out the factors affecting Performance of roads construction Projects in Oromia roads project performance enterprise. Since JIMMA is a largest city and there is numbers of road project performance, there should be a research on an assessment effect of project management on road project performance of of JIMMA Municipality road projects. On the other hand, road Performance problem in road project performance in Ethiopia and Oromia is one of the most significant in the field of Project management. Research and studies in this field in Ethiopia and Oromia are few compared to the problem. This shows that, despite the importance and the significant of the project Management sector in Ethiopia, performance problem didn't receive enough attention by both researchers and responsible authorities/the parties of project (Project sponsorship management, Project effectiveness & efficiency management, and Project disclosures & reporting management). By taking this in to consideration this thesis mainly on filling these research gaps. In this regard, it focuses on effect of project management on road project performance in JIMMA road Project and to recommend possible solutions.

2.7. Conceptual framework

The study attempts to identify effect of project management on road projects performance of Jimma municipality. From the related literature reviewed for the purpose of this study in relation to project management and project performance, project management effect on project performance and the major dimensions of project management that makes super project performance in the study areas. so, the researcher had prepared the following conceptual framework:

Figure 2.1: Conceptual framework



Independent variables and Dependent Variable

Source: Develop by the researcher, 2020

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter consists of research design, source of data, sample and sampling techniques, instruments of data collection, method of data analysis, reliability and validity of the data and ethical considerations of the study.

3.1. Research Design

In this study descriptive survey research design by followed correlation research design with both quantitative and qualitative data collection and analysis approach was employed due to the nature of the data. The cross-sectional type survey was used since it involves collecting data at one point in time regarding people opinions and beliefs (Creswell, 2011).

3.2. Sources of Data

The data for this study was obtained from primary sources. Primary source of data were obtained from the Jimma municipality road authority employees that involves on the project management through the use of questioner and personal interview.

3.3. Target population of the study

The target populations of the study were road project performance of Jimma town municipality employees that directly involved in road project performance through project sponsorship management, project effectiveness and efficiency management, project disclosure and reporting management, and project team leader were included. Therefore; a total of 108 populations were the target population of the study.

3.4. Sample Size and Sampling Techniques

The sampling of the respondents was carried out through simple random sampling and purposive sampling techniques depending on the nature and on size of respondents. Hence, from total one hundred eight (108) respondents, eight five (85) respondents were selected by using simple

random sampling technique followed lottery method. Becouse, if a total number of the target population were above 100 (hundred) we can use sampling techniques. But, if a total number of the target population of the study were less than hundred (<100) we can use all of the population of the study according sampling techniques rule, Yemane (1967).Because, this method is more appropriate for answering the basic close end questions of the study. Next, key informants (of road authority team leaders) were selected purposively. Because this key informants' have more detail knowledge about road authority other than others employees.

The sample size to collect data through questionnaire was determined by using Yamane (1967) formula:

$$n=\frac{N}{1+N(e^2)}$$

Where: n = required the sample size (85)

N=the study population (108)

e = the level of precision (0.05)

1 = designates the probability of the event occurring

Therefore: $n = \frac{108}{1+108(0.05)^2 = 1.2700} \approx 85$

In general, simple random sampling techniques were precisely summarized in Table 3 below.

Table 3.1: Sampling techniques of respondents

	Employees of municipality road authority		Team leaders	
Municipality Road Authority	Total	Sample	Total	Sample
	108	85	6	3
Sampling Technique	Simple ratechniqu	andom sampling e	purposive san	npling technique

Data Source: Own survey data of (2020)

3.5. Instruments of Data Collection

In this study a questionnaire was prepared in terms of closed- ended items for municipality road authority in Jimma town. A semi structured interview used to collect from team leaders'

municipality road authority. Questionnaires are enabling to gather information from a large size of respondents with in a manageable time, and it provides a wide coverage of data (Creswell, 2011). Semi-structured interview was conducted in order to get in depth information, to cross check and supplement the information collected through the questionnaire. These instruments of data collection are discussed as follow:

3.5.1. Questionnaire

The form of the questionnaire was used closed ended questions. The questionnaires were constructed in English language because it was not a major problem for respondents for permanent employees of road authority and most of respondents have 1st degree, second degree, diploma and no less than diploma level of education. A structured questionnaire of this study is developed from Park and Blenkinsopp (2011). The questionnaire was consisted of 30 items were designed to measure the study topic. These items were rated on 5-point licker-type scale ranging from strongly disagree =1 to strongly agree = 5and very low=1 to very high=5.As Creswell (2012) interpreting the results for the Liker question; the mean value (M) \leq 2.00=strongly disagree/ very low/, 2.01-2.99 =disagreed/low/, 3.00-3.50 = undecided or moderate, 3.51-4.50 =agree/high/ and \geq 4.51 = strongly agree /very high/ level of Liker scale point.

3.5.2. Interview

A Semi structured interview was conducted so as to elicit in-depth information about the participant's point of view, thoughts, reasoning and feelings about the issues under the study. Hence, interview held key informants for road authority in municipality of Jimma town.

3.6. Methods of Data analysis

The data gathered from the respondents through questionnaire was analyzed by using descriptive statistics such as frequency counts, percent, mean, standard deviation and inferential statistics such as; correlation and regression by it was using SPSS software version 23. The data gathered from the key informants through interview and document was analyzed by describing the effects of road project on project performance road authority in municipality of Jimma town.

3.7. **Reliability and Validity of the Data**

The reliability of the instruments was determined by computing Cronbach's alpha coefficient. It was conducted on the effects of road project on project performance road authority in municipality of Jimma town. Hence, nine (9) respondents which were not including at the main study and filled the questionnaire and returned it. Based on this the questionnaire decoded to the computer in order to compute the reliability test. The reliability of each variable was computed and tested. Therefore, Cronbach's alpha results of the study (inter- reliability coefficient alpha) was ranges from 0.74 to 0.84. Hence, this result is greater than 0.70 so it is acceptable in assumptions of social researches (Creswell, 2012), based on this, the researcher proceeded to main study. On the other hand, to test the validity of the questions, the questionnaires were distributed to four team leaders and my advisors to comment on the clarity of the language, the inclusiveness of the questions and to identify irrelevant questions. Based on comments from these experts and main and co- advisor to comment language usages for some questions were modified. The interreliability Cornbrash's alpha results are listed in the Table 2 here under.

Table 3.2: Inter-reliability Cronbach's alpha results

No	Items	Number of items	Cronbach's alpha results
1	project sponsorship management	9	0.75
2			
	project effectiveness and efficiency management,	6	0.85
3			
	project disclosure and reporting management	6	0.84
4			
	Project Performance	9	0.79
	Tatal	20	0.91

Source: Own survey data of 2020

3.8. Ethical considerations of the Study

In conducting this study, emphasis was given to every important ethical issue. A formal letter requesting permission to conduct research was received from project and finance department. A similar procedure was followed on the road authority of Jimma municipality to get permission. Likewise, informed consent was obtained to get participants full permission, and every effort was made to keep their anonymous of a person not identified by name and confidentiality. Moreover, the researcher had been governed by the research code of ethics in maintaining privacy and confidentiality and or other related values. The researcher had also promised to the participants of the study that the information which were collected from the respondents should not be transferred to third party or it was not be exploited for undertaking other than the purpose of the research study.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSIONS OF THE DATA

In this chapter, presents the results, analysis and discussion data that were gathered from primary source through questionnaires and interview. To gain an understanding on the effect of project management on road project performance of jimma town municipality. A survey was conducted on jimma town road project performance and also carrying out from different department of jimma town municipality road project performance. From atotal 108 population, 85 number of respondent were selected through simple random sampling techniques followed lottery method. A total 94 questionnaires were distributed to the respondents by adding 10% considering none response of respondents. Hence, 85 respondents were clearly filled and returned, where as only 9(10%)of respondents were not returned the questionnaires. The respondents" opinion were analyzed and presented through tables, frequency, percentage , mean value, standard deviation , correlation and regression by followed SPSS Soft ware version 23.

Total population	Sample	Distributed Adding 10	l by %	Collected		Un collected	
108	85	No	%	No	%	No	%
		94	110%	85	100%	9	10%

 Table 4.1: Questionnaire Response Rate

Source: Own survey, 2020

No	Variat	ble with category	Frequency	Percent
1	Gender	Male	62	72.9
		Female	23	27.1
		Total	85	100
2	Age	Below 30 years	12	14.1
		31-40 years	43	50.6
		41-50 years	25	29.4
		51-60 years	5	5.9
		Above 60 years	0	0
		Total	85	100
3	Experience	1-4	10	11.8
		5-8	13	14.4
		9-12	42	46.7
		Above 12	20	22.2
		Total	85	100
4	Lovel of Education	Diploma	14	16.5
	Level of Education	First Degree	64	75.3
		Second Degree	7	8.2
		Total	85	100.00
5				
	Marital Status	Married	75	88.2
		Unmarried	7	8.2
		Divorced	3	3.5
		Total	85	100

Table 4.2: Socio-demographic characteristics of the respondents

Source: Own survey, 2020

As it presented in Table 4, the majority of the respondents 62(72.9%) were male and relatively less number of respondents 23(27.1%) were female. This indicates that male respondents are the highest proportion of the respondents participated in this study. This result also indicates that gender equity among the respondents was not realized in this study. Concerning age wise, the age category of 31-40 years respondents are relatively the highest numbers of respondents, which was 43(50.6%) followed by the age category of 41-50, which was 25 (29.4%). On the other hand, 12(14.2%) and 5(5.9%) are the age group of below 30 years old and 51-60 years old are less number of respondents respectively. This result indicated that majority of the respondents in the active or matured age 31-40 years old levels, which seems that people in this age category are actively engaged at work than people in 51-60 years old age categories.

Concerning work experience in the current sector, most of the respondents 42(46.7%) had 9-12 years' work experience and the next relatively higher number of respondents 20(22.2%) have above12 years of work experiences. The respondents having 1-4 years 10(11.8% and 5-8 years 13(14.4%) of work experience of respondents' were relatively small proportion of respondents. This data might indicate circumstances work experience 9-12 years was the most of the respondents 'age category are participated.

Regarding levels of education, the majority of 64(72.5%) respondents have first degree, 7(8.2%) have second degree about14 (16.5%) have diploma. None of the respondents had no less than diploma level of education. Accordingly, it is possible for them to fill self-administered questionnaire easily.

Regarding marital status, the highest proportion 75(88.2%) of the respondents were married and about 7(8.2%) are unmarried and the reaming respondents 3(3.5%) are divorced respondents. The data on marital status of the study participants indicated that most of the respondents are single and the relatively married and the smallest proportions of the respondents were unmarried and divorced. This information is expected to contribute in order to provide responsible information for the study.

4.1. Project Sponsorship Management related effect

Project sponsorship management is the first dimension of project management. Under this variable how the municipality identify project sponsorship management to provide how the

project was evaluated, depends on the respondents answer. So the following table shows the summary result of the respondents on the project sponsorship management context.

NO	Effects of Project sponsorship management related	Ν	Mean	Standard deviation
				deviation
	Lack of good contribution of project sponsorship Management	85	3.90	1.10
1	in municipality.			
2	Compared with previous projects, the most recently completed	85	3.50	1.20
	project had no a stronger project leader.			
3	Lack of project requires a high amount of management activity.	85	3.60	1.20
4	Lack of previous performances of the project management are	85	3.64	1.20
	used as criteria to project sponsorship management			
5	Lack of good project planning and scheduling in municipality.	85	3.60	1.24
6	Lack of project management competence in municipality	85	3.70	1.90
7	Lack of good site management and supervision	85	3.58	1.27
8	Lack of good project quality management in municipality	85	3.50	1.23
9	Poor project financial/cost management in municipality	85	3.40	1.29
	Average Mean	85	3.6	1.29

Table 4.3: Respondent response on project sponsorship management

Source: *Survey result* (2020)

Note. N=number of respondents, and Mean value (M) ≤ 2.00 = very low, 2.01-2.99 = low level, 3.00-3.50 = moderate/somehow / level, 3.51-4.50 = high level and ≥ 4.51 = very high level of Likert scale point.

As it was pointed out in in Table 5, according to the mean score shown that (M=3.90; SD=1.10) high lack of good contribution of project sponsorship management in municipality, as the mean value of (M=3.5; SD=1.20) shown the project sponsorship management is not based on strong leader, lack of project requires a high amount of management activity was found to be high (M=3.60; SD=1.20), which means project sponsorship management were not based on capacity of project management, in order to contribute to project performance, lack of previous performances of the project management are used as criteria to project sponsorship management also found to be high (M=3.64; SD=1.20), Lack of good project planning and scheduling in municipality was found to be high (M=3.60; SD=1.24), lack project management competence in municipality (M=3.70; SD=1.90), lack good site management and supervision(M=3.58; SD=1.27), lack of good project quality management in municipality (M=3.50; SD=1.23) and Poor project financial/cost management in municipality of Jimma town.

The average mean value M=3.6 with the standard deviation (1.29) shown poor project sponsorship management was practiced at study area.

The result from key informant interviewees supported the above quantitative findings i.e. the participants of the key informant interview said that "lack of good contribution of project sponsorship management in municipality, lack of good project planning and scheduling in municipality, lack of good project quality management in municipality and poor project financial/cost management in municipality in Jimma town, those things have negative implementation due to different challenges". The established project sponsorship management was not adequately practiced at study area.

In general, this proves that the project management practices of developing countries have a great problem in project sponsorship management. Then one can be concluded that project sponsorship management was not practiced as per the standard of project management process framework. Those finding implies the developing criteria to objectively evaluate, select the best in terms of cost, quality and time, no organizational conflict of interest, use previous performance, capacity of project, efficiency and least cost and adequate technical skill were not clearly prepared and used for the project sponsorship management. The problems observed in Project sponsorship management enabled the municipality faced challenges and fail in a meaning full way to improve project performance.

The study findings of the project management practice specifically project sponsorship management practice is not in line with agency theory and literature Project Management Institute (PMI, 2013).

4.2. Project effectiveness and efficiency management related effect

Project effectiveness and efficiency management is the other dimension of project management. Under this variable how the municipalities identify project effectiveness and efficiency to provide how the project was evaluated, depends on the respondents answer. So the following table shows the summary result of the respondents on the project sponsorship management context.

	Items	N	Mean	Standard
				deviation
1	Lack of good project management in right time at right place in	85	3.52	1.15
2	Lack of good project performance in municipality	85	3.9	1.04
3	Lack of good project duration services	85	3.96	1.05
4	Lack of quality project performance in municipality	85	3.56	1.3
5	Lack of project finished within a given time in municipality	85	3.7	1.17
6	Lack of complete project does gives good services for a long period of	85	3.4	1.22
	Average Mean	85	3.67	1.16

Table 4.4: Respondent response on project effectiveness and efficiency management

Source: Survey result (2020)

Note. N=number of respondents, and Mean value (M) ≤ 2.00 = very low, 2.01-2.99 = low level, 3.00-3.50 = moderate level, 3.51-4.50 = high level and ≥ 4.51 = very high level of Likert scale point

As it presented in Table 6, according to mean value (M=3.52;SD=1.15) indicated that good project management in right time at right place in municipality criteria was not well developed, as the mean value (M=3.90;SD=1.04) shown the project effectiveness and efficiency management is not based on good project performance, this is also supported by the interview founded that the Project effectiveness and efficiency management was not more focused on good project performance, according to mean value result(M=3.96;SD=1.05)shown that project effectiveness and efficiency management were not based on capacity of project management in order to contribute to project performance, the mean value (M=3.56;SD=1.30) result shown that the Project effectiveness and efficiency management is not based on quality project performance, as the result (M=3.70;SD=1.17) revealed that project management are not brought the expected result. Finally the mean value of(M=3.40; SD=1.22) result shown that project management is not brought expected result.

The average mean (3.67) with the standard deviation of (1.16) shown that project effectiveness and efficiency management have poorly implemented.

The result from interviewees supported the above quantitative findings. Hence, lack of good project management in right time at right place in municipality, lack of quality project performance in municipality, and lack of project finished within a given time in municipality in municipality in Jimma town, those things have poor implementation due these different challenges. They clearly indicated that the established project effectiveness and efficiency management was not adequately practiced also at study area. The study findings of project effectiveness and efficiency management practice in the study area is not in line with agency theory and literature as Hyvari (2006) suggested that technical project management tools and techniques were well developed and used that now it is time to emphasize on developing leadership skills.

4.3. Project disclosure & reporting management related effect

According to APM (2011), this dimension ensured that the project reports were available in a timely fashion and contained relevant and reliable information that supported the organization's decision making processes.

NO	Items	N	Mean	Standard deviation
1	Lack of good communication and coordination	85	3.11	1.32
2	Lack of communication employees from the team members is timely taken out	85	3.39	1.24
3	Lack of communication you receive from the team members is accurate.	85	3.49	1.19
4	Lack of communication you receive from the team members is adequate	85	3.69	1.18
5	Lack of communication you receive from the team members is complete	85	3.50	1.19
6	Lack of communication you receive from the team members is credible	85	3.54	1.24
	Average Mean	85	3.45	1.23

Table 4.5: Respondent response on project disclosure and reporting management

Source: Survey result (2020)

Note. N=number of respondents, and Mean value (M) ≤ 2.00 = very low, 2.01-2.99 = low level, 3.00-3.50 = moderate level, 3.51-4.50 = high level and ≥ 4.51 = very high level of Likert scale

point

As it presented Table 7, according result (M=3.11; SD=1.32) indicated the way to develop the good communication and coordination in municipality criteria was not well developed. as the mean value result (M=3.39; SD=1.24) shown that project disclosure reporting management is not based on the communication receive from the team members is timely. As the mean value (M=3.49; SD=1.19) shown that project disclosure and reporting management were not based on capacity of project management in order to contribute to project performance. Similarly, as the mean value of (M=3.69; SD=1.18) shown Project disclosure reporting management is not based on the communication receive from the team members (regarding the status of the project) is adequate. According to the result of (M=3.50; SD=1.19) show that project management are not considered to the best practice. Finally, as the mean value (3.54 M=3.54; SD=1.24) shown communication employees receive from the team members was not credible.

The average mean (3.45) with the standard deviation (1.23) showed that poor project disclosure and reporting management at study area. These findings implies not obtain all necessary signatures on the project before work begins, not ensuring funds before work begins, the lack of good communication & coordination regarding to project performance status.

As interviewees stated that "The municipality was not effectively used project disclosures and reporting management. They also emphasized that the existing project disclosures and reporting management response practiced in the study area was not significantly contributing to the improvement of project performance".

The findings of the study that project disclosure & reporting management practice in the study area is not in line with agency theory and literature as Snow and Keil (2002) are suggested that executives should be doubtful of favorable status of reports.

4.4. Project performances related response

Project performances hold many activities that show the level at which project performances is implemented or not. So, the following table shows how project performances were improved by the practice of project management.

No	Items	N	Mean	Standard deviation
1	Lack of good feeling of the people on project performance	85	3.6	1.24
2	Lack of training was imparted to the workers in order to develop a positive attitude and also to enable them to apply the right method of work	85	3.55	1.70
3	Lack of the municipalities that confirm that the projects are completed in adequate technical quality.	85	3.55	1.20
4	Lack of the Municipality secured the needed project fund on time.	85	3.53	1.25
5	Lack of the road project completed within the initial cost of the project.	85	3.49	1.24
6	Lack of original design and cost took place in the road project during construction phase.	85	3.36	1.28
7	Lacks of the needed resources are timely fulfilled by the client and contractors.	85	3.54	1.26
8	Lack of a clear time plan was formulated to complete the Project	85	3.5	1.20
9	Lacks of the provided projects were completed in the original time schedule of the agreement.	85	3.69	1.25
	Average mean	85	3.53	1.15

Table 4.6: The respondent's response on the project performances in the study area

Source: Survey result (2020)

Note. N=number of respondents, and Mean value (M) ≤ 2.00 = very low, 2.01-2.99 = low level, 3.00-3.50 = moderate level, 3.51-4.50 = high level and ≥ 4.51 = very high level of Likert scale point

As result presented intable 8,as mean value result (M=3.6; SD=1.24) shown that the society is not feeling good in the project performance, according to result (M=3.55; SD=1.70) indicated that appropriate training was not provided to improve performance of the project implementer, as mean value (M=3.55; SD=1.20) shown the quality related project performance in the study area are not significantly improved, according to result (M=3.53; SD=1.24) revealed that project fund are not available on time. Furthermore for the accomplishment of projects on the initial cost, as mean value (M=3.49; SD=1.24)) indicated that projects were not completed at the initial cost. On the same table as the mean value of (M=3.36; SD=1.28) indicated that poor original design and cost took place in the road project during construction phase. With respect to the necessary project resources as the mean value (M=3.54; SD=1.26) shown that necessary resources are not fulfilled on time. Similarly, as the result (M=3.50; SD=1.20) indicated that time schedule was not clearly planned. Finally, as result (M=3.69; SD=1.25) indicated the lacks of the provided projects were completed in the original time schedule of the agreement.

The average mean result (3.53) with standard deviation (1.15) shown that there is a great problem in project performances of Jimma municipality; the community were not satisfied to the performance of projects.

Therefore the overall result of the respondents showed that the project management practiced was not meaningfully improving the project performance. The interview conducted with key informants also indicated that the project management practiced was not effective in improving project performance because of different problems related to project sponsorship management, project effectiveness & efficiency management and project disclosures & reporting management.

This finding is supported by different studies that most projects in developing countries are poor in their performance World Bank (2017). The success of project management is usually measured by achieving the scope, time, and cost criteria, which was known as the triple constraint or the iron triangle (Atkinson, 1999; Larson and Gray, 2013; Schwalbe, 2010). Chitkara (2005) describes construction projects' as high value, time bound, and special construction missions with predetermined performance objectives. In this research, the researchers were affirm this triple constraint and were utilized it as project performance criteria, in terms of success and failure factors that was effect project performance. As Kaliba (2009) poor supervision and coordination on site, and construction mistakes can leads to low project performance with respect to Scope ,cost, quality,& time. On the other hand, problems in construction projects can best solved through the improvement in the practices of project management dimension. However, the finding of this study shown that there is a poor project management practices were at study area.

	Person's Correlations							
No	Item	1	2	3	4			
1	Project performance	1						
2	Project sponsorship management	.841**						
3	Project efficiency & effectiveness management	.795**	1					
4	Project disclosure& reporting management	.863**	.828**	1				
5	project management	.873**	.773**	.876**	1			

Table 4.7: Pearson's correlation coefficient project management with project performance

Source: Survey result (2020)

**Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis revealed that significantly strong positive correlation is found to exist between project performance and project sponsorship management ($p=.841^{**}$), project efficiency & effectiveness management ($p=.795^{**}$), project disclosure& reporting management(p=.863), are significant at the 0.01 level. Moreover, project performance is a strong relationship with project management ($p=.873^{**}$). All independent variables have significant correlation with code of conduct of civil servant ethics (p<0.01). This implies that when with project management are practically implemented, project performances to be more advance.

 Table 4.8: Multi-collinearitytest

Independent variables	Collinearity Statistics		
	Tolerance	VIF	
PSM	.303	3.305	
PEEM	.256	3.902	
PDRM	.118	5.328	
Total	0.677	12.535	

Source: Survey result (2020)

As it presented in Table 10, multi-collinearity test to check the dependency of predictor variables with one another and the fitness of the model and has the least tolerance of .118 and the greatest VIF of 5.328 thus, there is no existence of multicollinearity problem among the independent variables as tolerance values are greater than 0.1 and VIF values less than 10. Based on assumptions of Keith (2006) and Shieh, (2010) multicollinearity refers when a predictor

variable has a strong linear association with other predictor variables, the associated VIF is large and is evidence of multi collinearity. The rule for a large VIF value is ten. Small values for tolerance and large VIF values show the presence of multicollinearity.



Figure 4.1: The normality of data

As depicted in the figure above; which is an example of a histogram with a normal distribution from the SPSS software, there is no normality problem on the data used for this study. Normality refers to the normal distributions of the residuals about the predicted dependent variable scores. Normality can be checked through histograms of the standardized residuals (Stevens, 2009). Histograms are bar graphs of the residuals with a superimposed normal curve that show distribution.

Source: own survey data (2020)

4.5. Analysis of Multiple Linear Regressions

In addition, the researcher conducted a regression analysis to establish the consolidated effects of the independent variables project sponsorship management, project effectiveness & efficiency management, and project disclosures & reporting management on the dependent variable project performance. The findings are presented here under.

Table 4.9: Summary of regression analysis between dependent and independent variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F change
1	.967 ^a	.935	.931	.549	.000

Source: own survey data of 2020

As it depicted in table 11, model summary shown regression analysis between independent variables of project sponsorship management, project effectiveness & efficiency management, project disclosures & reporting management, dependent variable namely project performance. These findings show that project management practice in the study area has an effect up to 93.1% as indicated by the adjusted R Square. Thus 93.1 %, of the variances in project performance can be explained by combined effect of the predictor/independent variables.

The remaining variances on the dependent variable could be explained by other explanatory variables not included in this study.

Model	Unstandardized coefficient		Standardized coefficient	t	Sig.
	В	Stand. Error	Beta		
(Constant)	2.823	.345		8.186	.000
PSM	.099	.031	.166	3.179	.002
PEEM	.286	.076	.214	3.780	.000
PDRM	.338	.058	.383	5.787	.000
Dependent variable: PP					

 Table 4.10: Coefficient of Regression Analysis

Source: own survey data of 2020

 $Yi = β_0 + β_i X_i + e_i$ PP = β_0 + β_{1PSM} + β_{2PEEM} + β_{3PDRM} + € Therefore, **Y** = **2.823** + (**.099**)(**PSM**) + (**.286**)(**PEEM**) + (**.338**)(**PDRM**) +€

As it depicted in Table 12,the findings from the study showed that all the variables were significant as their significance values were less than 0.05. From the model, taking all independent variables constant at zero, project performance had an autonomous of 2.823. The data findings also showed that a unit increase in project sponsorship management leads to increase on project performance by .099 a unit increase in the way of project effectiveness & efficiency management leads to an increase in project performance by .286; while, a unit increased in project disclosures & reporting management leads to increase project performance by .338. Generally, the study findings show that how much project management practice jointly has an effect on project performance. This implies that improvement in each project management practice has a positive significant effect on project performance.

CHAPTER FIVE

FINDINGS, CONCLUSION AND RECOMMENDATIONS

The chapter presents the summary of findings, conclusion drawn from the data findings and recommendations of the study.

5.1. Major Summary of Findings

The summary of the finding is based on the four study objectives that included: project sponsorship management, Project effectiveness & efficiency management, project disclosures and reporting management, and project performance key indicators practices in Jimma municipality.

Regarding project sponsorship management: as findings revealed project sponsorship management are not in place, the context of project sponsorship management showed that it is not clearly prepared and in a position that makes the project sponsorship management activities organized and exercised by the municipality. According result (M=3.90; SD=1.10) high lack of good contribution of project sponsorship management in municipality, according to result (M=3.5; SD=1.20) sponsorship management is not based on strong leader, lack of project requires a high amount of management activity (M=3.60; SD=1.20), which means project sponsorship management were not based on capacity of project management in order to contribute to project performance, lack of previous performances of the project management are used as criteria to project sponsorship management(M=3.64; SD=1.20), lack of good project planning and scheduling in municipality (M=3.60; SD=1.24), lack project management competence in municipality (M=3.70; SD=1.90), poor site management and supervision (M=3.58;SD=1.27), poor good project quality management in municipality (M=3.50; SD=1.23) and poor project financial/cost management in municipality (M=3.40; SD=1.29) in Jimma road project management in municipality of Jimma town in general, The average mean value (3.6) with the standard deviation (1.29) shown that poor project sponsorship management was practiced at study area.

Regarding, the project effectiveness and efficiency management: according result (M=3.52;SD=1.15) indicated that good project management in right time at right place in municipality criteria was not well developed, as result (M=3.90;SD=1.04) shown the project effectiveness and efficiency management is not based on good project performance, this is also supported by the interview founded that the project effectiveness and efficiency management was not more focused on good project performance, according result(M=3.96;SD=1.05) shown that project effectiveness and efficiency management were not based on capacity of project management in order to contribute to project performance, as result (M=3.56;SD=1.30) shown that project effectiveness and efficiency management is not based on quality project performance, as the result (M=3.70;SD=1.17) revealed that project management are not brought the expected result. Finally the mean value of (M=3.40; SD=1.22) result shown that project management is not brought expected result. As average mean (3.67) with the standard deviation (1.16) shown that project effectiveness and efficiency management have poorly implemented at study area.

Regarding project disclosures and reporting management according result (M=3.11; SD=1.32) indicated the way to develop the good communication and coordination in municipality criteria was not well developed. as the mean value result (M=3.39; SD=1.24) shown that project disclosure& reporting management is not based on the communication receive from the team members is timely. As the mean value (M=3.49; SD=1.19) shown that project disclosure and reporting management were not based on capacity of project management in order to contribute to project performance. Similarly, as the mean value of (M=3.69; SD=1.18) shown Project disclosure& reporting management is not based on the communication receive from the team members (regarding the status of the project) is adequate. According to the result of (M=3.50; SD=1.19) show that project management are not considered to the best practice. Finally, as the mean value (M=3.54; SD=1.24) shown communication employees receive from the team members was not credible.

Regarding project performance: according to result (M=3.6; SD=1.24) shown that the society is not feeling good in the project performance, according to result (M=3.55; SD=1.70) indicated that appropriate training was not provided to improve performance of the project implementer, as result (M=3.55; SD=1.20) shown that quality related project performance in the study area are not significantly improved, according to result (M=3.53; SD=1.24) revealed that project fund are not available on time. Furthermore for the accomplishment of projects on the initial cost, as mean value (M=3.49; SD=1.24)) indicated that projects were not completed at the initial cost. Similarly, as result (M=3.36; SD=1.28) indicated that poor original design and cost took place in the road project during construction phase. With respect to the necessary project resources as the result (M=3.54; SD=1.26) shown that necessary resources are not fulfilled on time. Similarly, as the result (M=3.50; SD=1.20) indicated that time schedule was not clearly planned. Finally, as result (M=3.69; SD=1.25) indicated the lacks of the provided projects were completed in the original time schedule of the agreement.

The average mean result (3.53) with standard deviation (1.15) shown that there is a great problem in project performances that means the community were not satisfied to the performance of projects in Jimma municipality.

Regarding correlation result: The correlation result revealed that significantly strong positive correlation is found to exist between project performance and project sponsorship management $(p=.841^{**})$, project efficiency & effectiveness management $(p=.795^{**})$, project disclosure& reporting management (p=.863), are significant at the 0.01 level. Moreover, project performance is a strong relationship with project management $(p=.873^{**})$. All independent variables have significant correlation with code of conduct of civil servant ethics (p<0.01). This implies that when with project management are practically implemented, project performance is to be more advance.

As model summary shown regression analysis between independent variables of project sponsorship management, project effectiveness & efficiency management, project disclosures & reporting management, dependent variable namely project performance. These findings show that project management practice in the study area has an effect up to 93.1% as indicated by the adjusted R Square. Thus 93.1 %, of the variances in project performance can be explained by combined effect of the predictor/independent variables.

5.2. Conclusions

The study revealed that project management practice in Jimma municipality is not well practiced. It is less performance project management practice, which is not in a position to save the project performance from problems related to project management. The project sponsorship management is not sufficient enough to identify the best project performance for the project performance. This leads to poor project performance of municipality. With regard to project effectiveness & efficiency management practice do not include roles and responsibility of project management is not used project performance in right time at right place and recommended solution which leads the area not benefit from using of it.

The final conclusion indicates that project disclosures & reporting management practiced were not meaningfully contributing to the project performance. It shows that Project disclosures & reporting management is not exercised in a manner that contribute to the municipality project performance. Then it can be conclude a municipality cannot practiced project disclosures & reporting management based on the project management standard. Those findings implies not obtain all necessary signatures on the project before work begins, not ensuring funds before work begins, the lack of good communication & coordination regarding to project performance status. It can be concluded that the municipality were not effectively used Project disclosures & reporting management. So the existing Project disclosures & reporting management response practiced in the study area was not significantly contributing to the improvement of project performance. The overall indication of the study point out most of the component of project management dimension are not well practiced or the project management practice in the study area was poor in its actual Project performance in order to have a positive effect on project performance.

5.3. Recommendations

Based on findings and conclusions the following recommendations are forwarded:

- It is suggested to establish Jimma municipality of road authority proper and continuous training programs for team leaders and for employees to improve their capacity. These programs can update their knowledge and can assist them to be more familiar with project management techniques and processes. In addition, it is preferred to develop and improve the managerial skills of person in order to improve performance of road projects. All of that it will be implemented by offering effective and efficient training courses in scheduling, time, cost, and quality and information systems.
- Roads project authority of Jimma municipality endorsed giving more attention to quality of project performance roads project authority and it is better to give sufficient time for project management analysis such as developing &managing the direction of the project implementation.

Jimma municipality roads project authority is recommended to facilitate effectively resourced & managing relationships with a wide range of groups & including all the project contribution to over comes road project performance problems recommended focusing on how to improving communication & coordinating of project information management systems to know the project report status and all managerial levels should be participated with sensitive and important decision-making, through project management in order to solve problems of project performance.

- For the success and a positive effect of project management practice on project performance, Jimma town municipality are advised to improve project sponsorship management in a clear way by including develop criteria objectively to evaluate the project management through helps gather and retain support for the project works to overcome resistance to changes the end product will produce, and secures the resources necessary to complete the project within scope, cost, quality ,and on time as to improve project performance.
- Project effectiveness & efficiency management is endorsed to improve late delivery of material and equipment in the different activities of the project and also improve equipment efficiency, resulting time and cost overruns.

- Project effectiveness & efficiency managements recommended to have a good site management supervision system in the different activities of the project so as to avoid any mistakes that may lead to rework of activities, resulting time and cost overruns.
- Project disclosures & reporting management should recommended to have strong coordination and communication with other stake holders to solve problems related to project performance which are affecting, quality, time and cost performance of the projects.
- Project disclosures & reporting managements suggested to be receives project information system through timely, accurate, adequate, complete and credible to minimize project delay, scope creep, quality and cost overrun.
- The project management sector so as to develop the performance of the professionals. In addition, government has to initiate intellectuals to do researches regarding causes of poor projects' performance.
- Finally, researchers should focus on the project document based research which enables to have more reliable and huge amount of data than collecting data through questionnaire and interview and it is need for further research to examine the partnerships between different infrastructure projects implementing agencies and the strategies they utilize to enhance performance of construction projects management.

References

- Arditi, D., &Gunaydin, H. M.," Factors that affect process quality in the lifecycleof building projects," Journal of Construction Engineering and Management, ASCE, 1998.
- AftabHameedMemon, I. a., "Construction & Property Time Overrun in Construction Projects from the Perspective of Project Management Consultant (PMC)," Journal of Surveying, 2011. Vol. 2.
- AshenafiKirrosssociation for Project Management, 2004.Directing Change: A Guide to Governance of Project Management.Ibis House, Regent Park, UK.
- Association for Project Management, 2011.Directing Change: A Guide to Governance of Project Management. second ed. Ibis House, Regent Park, UK.
- Atkinson, R., 1999. Project management: cost, time and quality, two besguesses and a phenomenon, it's time to accept other success criteria. Int. J. Proj. Manag. 17 (6), 337
- Altshuler, A., Luberoff, D., 2003. Mega-Projects: The Changing Politics of Urban Public Investment. Brookings Institution Press, Washington, DC.
- Babbie, E. (1990) Survey Research Methods. 2nd Edition.
- Baker, B.N., Murphy, D.C., Fisher, D.(1988). Factors affecting project success.
- Becker H. J. and BehailuDemissie, "Public Private Partnership in Road Projects in Ethiopia," Thesis, Department for Integrated Transport Planning, Technical University of Berlin, German, 2006.
- Bekker, M.C., Steyn, H., 2007. Defining "project governance" for large capital projects.South African. J. Ind. Eng. 20 (2), 81–92.
- **Besner, C., Hobbs, B., 2012.** An empirical identification of project management Toolsets and a comparison among project types. Proj. Manag. J. 43 (5), 24–46.
- Biesenthal, C., Wilden, R.(2014). Multi-level project governance: trends and opportunities. Int. J. Proj.Manag. 32, 1291–1308. Search ResultsWeb results
- **BirhanuBayi**,(2018); identified the on an assessment of factors affecting performance Oromia road projects.
- Boone, H.N. and Boone, D.A. (2012) Analyzing LikertData.
- Brown, A. and Adams, J., "Measuring the effect of project management on construction outputs: a new approach," International Journal of Project Management, 2000.

- Cooke-Davies, T., 2002. The "real" success factors on projects. Int. J. Proj. Manag. 20 (3), 185–190.
- Cooper, D.R., Schindler, P., 1998. Business Research Methods. Irwin/McGraw Hill, NJ.
- Crawford, L., Cooke-Davies, T., Hobbs, B., Labuschagne, L., Remington, K., Chen, P., 2008. Governance and support in the sponsoring of projects and programs. Proj.Manag. J. 39 (S1), S43–S55.
- Creswell, J. (2012). Educational Research (4th ed.). New York: pearson Education.
- Curran, C., Niedergassel, B., Picker, S., Leker, J., 2009. Project leadership skills in cooperative projects. Manag. Res. News 32 (5), 458–468
- Eisenhardt, K.M., 1989. Agency theory: an assessment and review. Acad.
- Manag. Rev. 14 (1), 57–74
- Gerbing, D.W., Anderson, J.C., 1988. An updated paradigm for scale development incorporating unidimensionality and its assessment. J. Mark Res. 25 (2), 186–192.
- G. Ofori, "Revaluing Construction in Developing Countries: A Research Agenda," J. Constr. Dev. Ctries, 2006
- Harvey, M., "Project Management, the Nature and Context of Project Management, Strategy and Project Management," Financial Time Prentice Hall. 1999.
- Keith, T. (2006). Multiple regression and beyond. PEARSON Allyn & Bacon.
- Killen, C.P., Hunt, R.A., Kleinschmidt, E.J., 2008. Project portfolio management for product innovation. Int. J. Qual. Reliab. Manag. 25 (1), 24–38.
- Klakegg, O.J., Williams, T., Magnussen, O.M., Glasspool, H., 2008. Governance frameworks for public project development and estimation. Proj. Manag. J. 39 (S1), S27–S42.
- Kothari, C. R. (2004), Research Methodology: Methods and Techniques, (Second Edition), New AgeInternational Publishers.
- Larson, E.W., Gray, C.F., 2013. Project Management: The Managerial Process sixth ed. McGraw-Hill, New York.
- Liu, L., Yetton, P., 2004. The Contingent Effect of Project Governance Mechanisms on Project Delivery Capability and the Level of Control—Evidence From the Construction and IT Services Industries. Paper presented at the PMI Research Conference, London, UK.
- Naoum, S. G., "Dissertation writing for construction students Oxford Butterworth," 1998.

- NavonRonie, "Automated project performance control of construction projects," Automation in Construction, 2005.
- **Osborne, J., & Waters**, E. (2002). Four assumptions of multiple regression that researchers should always test. Practical Assessment, Research & Evaluation, 8(2).
- **Ogunlana Stephen O, PromkuntongKrit and JearkjirmVithool,** "Construction delays in a fast growing economy: comparing Thailand with other economies," International Journal of Project Management, 1996.
- Park, C.W., Im, G., Keil, M., 2008. Overcoming the mum effect in IT project reporting: effects of fault responsibility and time urgency. (In English) J. Assoc. Inf. Syst. 9 (7), 409–431
- **Perkins, T. Peterson, R.E., and Smith, L.,** "Overview of Project Management," Condensed GSAM Handbook.Cross talk.The Journal of Defense Software Engineering, 2003.
- Project Management Institute (Ed.), 2013. A Guide to the Project Management Body of Knowledge (PMBOK Guide), fifth ed. Project Management Institute, PA
- PMBOK, "A guide to the project management body of knowledge: PMBOK guide (5th Ed.). Project Management Institute Newton Square, 2013.
- RahelKassaye, "Assessments of cause and effect of local contractors, Time and cost performance in ERA projects," Addis Ababa University, 2016
- Schwalbe, K., 2010. Information Technology Project Management.seventhed. Cengag Learning, Boston
- The Standish Group, 1995. The Chaos Report (Published electronicall
- Stevens, J. P. (2009). Applied multivariate statistics for the social sciences (5th ed.). New York, NY: Routledge
- Tadese .A,zekaria. D, zoubeir.L (2011) Assessment on Performance and Challenges of Ethiopian

 Construction Industry, Ethiopian Institute of Architecture, Addis Ababa University, Ethiopia
- Too, E.G., Weaver, P., 2014. Themanagement of project management: a conceptual framework for project governance. Int. J. Proj. Manag. 32, 1382–1394.

Organization: roles of the broker and steward. Eur.Manag. J. 19 (3), 254–267.

Tsega Haile, "Comparative Evaluation of project performance between Domestic and chines contractors in selected Federal Road projects in Ethiopia," Thesis, Addis Ababa University, school of Technology, Addis Ababa, Ethiopia, 2016.

- Ullman, J.B., Bentler, P.M., 2001. Structural equation modeling.Handbook ofPsychology, second ed. John Wiley & Sons, Inc., New York.Van Grembergen, W., 2003.Int
- **Wogderes,(2019)***the effect of contract administration on projects performance of Jimma municipality.*
- Zewdu and G. T. Aregaw, (2015) "Causes of Contractor Cost Overrun in Construction ProjectThe Case of Ethiopian Construction Sector," Int. J. Bus.Econ. Res., vol. 4, no. 4,pp.18191

APPENDIXES

JIMMA UNIVERSITY

COLLAGE OF BUSINESS AND ECONOMICS DEPARTMENT OF PROJECT MANAGEMENT AND FINANCE

Dear respondents,

This questionnaire is prepared to obtain information from key informants. The information is required for the academic research entitled "Effect of project management on road project performance in case of Jimma municipality", which is being conducted as partial fulfillment of MBA in project management and finance. The main objective this study is to assess the Effect of project management on road project performance; the case of Jimma municipality and make recommendations based on the findings. The questionnaire consists of two sections. Section one consisted of general organization information and Section two contains Effect of project management on road project performance in case of Jimma municipality. At the end there is a space that is left for general comments regarding the research topic. Your response, in this regard, is highly valuable and contributory to the outcome of the research. All feedback will be kept strictly confidential, and utilized for this academic research only.

Note: 1. Writing your name is not mandatory

2. Indicate your Answer by ticking ($\sqrt{}$) on space provided

Thank you for your participation!!!

Section A: General Organizational Information

- 1. The name of organization:
- 2. State type of the department you are working for:

Project sponsorship management project effectiveness & efficiency management

Project disclosure & reporting management

3. Sex of the Respondent:

Male

4. Age of the Respondent:

Age;-blow 31 31-40 41-50 51-60 above 60
5. Marital status: Unmarried Married Divorced
6. Yours' religion : Muslim Christian protestant others
7. Academic backgrounds:
Diploma First Degree Master's Degree and above
8. Working experiences in Jimma municipality road project performance (Years):
1-4 5-8 9-12 Above 12

9. The position of you work in your organization : Top managers middle managers lower managers

Section B: Closed Ended Questions

For the close ended questions in table forms, Please use the following Keywords to answer and put a ticking mark ($\sqrt{}$) on the space provided.

S.D.A = Strongly Dis agree (1) N = Neutral (3)

$$D.A = Dis Agree (2)$$
 $A = Agree (4)$

S.A = Strongly Agree (5)

No	Effectors	S.D.A	D.A	Ν	Α	S.A	
Ι	Project sponsorship management						
1	Lack of good contribution of project sponsorship Management in municipality						
2	Lack ofCompared with previous projects, the most recently completed project						
	had a stronger project leader					I	
3	TheLack of project requires a high amount of management activity.						
4	Lack of Previous performances of the project management are used as criteria to						
5	project sponsorship Management						
5	Lack orgood project planning and scheduling in municipanty.						
6	Lack ofproject management competence in municipality						
7	Lack ofgood site management and supervision.						
8	Poor project quality management in municipality.						
9	Lack ofgood project financial/cost management in municipality.						
II	Project efficiency & effectiveness management related effect						
1.	Lack ofgood project management in right time at right place						
2.	Lack ofgood project performance						
3.	Lack ofgood project duration services						
4.	Lack ofquality project performance in municipality						
5.	Lack of Project finished within a given time in municipality						
6.	Lack ofcomplete project does gives good services for a long period of time						
III	Project disclosure& reporting management related effect						
1.	Lack ofgood communication and coordination						
2.	Lack ofgood communication you receive from the team members						
	(regarding the status of the project) is timely						
3.	The lack good of communication you receive from the team members					1	

	(regarding the status of the project) is accurate.			
4.	The lack ofgood communication you receive from the team members			
	(regarding the status of the project) is adequate			
5.	Lack ofgood communication you receive from the team members			
	(regarding the status of the project) is complete			
6.	The lack of good communication you receive from the team members(regarding			
	the status of the project) is credible			
IV	Projects performance			
1.	The lack of right material was used for the construction work.			
2.	Lack of good training was imparted to the workers in order to develop a positive			
	attitude and also to enable them to apply the right method of work.			
3.	The lack of municipalities confirm that the projects are completed in adequate			
	technical quality.			
4.	The lack of Municipality secured the needed project fund on time.			
5.	TheLack of road project completed within the initial cost of the project.			
6.	Lack of original design and cost took place in the road project during construction			
	phase.			
7.	The Lack ofneeded resources are timely fulfilled by the client and contractors.			
8.	Lack of a clear time plan was formulated to complete the project.			
9	The lack of provided projects were completed in the original time schedule of the			
 .	There is provided projects were completed in the original time schedule of the			
	agreement.			

- 1. What are the different problems you observed in Jimmatwon roads projects performance? Please state/list the problems with their causes as much as you can._____
- 2. What are the reasons for existence of road project performance problem in Jimmatwon?

Please state/list causes of the problems as much as you can._____
Section B: Interview Questions

1. what are the main factors affecting of project performance in your organization?_____

2. What mitigating method did you think implemented to solve project the factor's affecting project in your organization.

3. Please, forward any additional comments (ideas) that you have on the road project performance in Jimma municipality.

Thank You!