ST. MARY'S UNIVERSITY

SCHOOL OF POST GRADUATE STUDIES

DEPARTMENT OF PROJECT MANAGEMENT

THE EFFECTS OF PROJECT COST MANAGEMENT ON THE PERFORMANCE OF DONOR FUNDED HEALTH PROJECT: THE CASE OF ADDIS ABABA HEALTH BUREAU

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ACRONYM	
AIDS	Acquire Immunity Deficiency Syndrome
CBHI	Community-based Health Insurance
ETB	Ethiopian Birr
GDP	Gross Domestic Products
GOE	Government of Ethiopia
HIV	Human Immunodeficiency Virus
HSDPs	Health Sector Development Plan
HSTP	Health Sector Transformation Plan
JCF	Joint Consultative Forum
LICs	Low Income Countries
NGO	Non-Governmental Organizations
OOP	Out-Of-Pocket
PM	Project Management
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institution
SHI	Social Health Insurance
SPSS	Statistical Package for Social Science
UHC	Universal Health Coverage
USD	United State Dollar
WBS	Work Breakdown Structure
WHO	World Health Organization

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ABSTRACT

Cost management in the public health project is critical to the country's long term Socioeconomic and environmental growth, beneficiary ownership, and project continuity. In Africa project performance of public health projects is not guaranteed with most of the projects failed to achieve their long-term goals with numerous costs overrun and schedule delays. This study identified three variables that influence cost management on the performance of donor health projects in Addis Ababa Health Bureau. Specifically, this study looked at Project Cost control, Project Resource planning, Project, and cost budgeting. The target population was 250 professionals working on donor funded health projects where a sample of 115 was drawn. Key respondent in this study were senior managers, project managers, medical officers, and assistances. where 115 questionnaires were administered to them. 80 of the questionnaire were completed & retrieved successfully. The response rate for the study was 70%. The study conducted both explanatory and descriptive statistics. The study found that Project Cost control, Project Resource planning, Project cost budgeting significantly influenced performance of donor funded projects in target organization. The variables explained only by 17.7% of change in performance of donor funded project in target organization. The study recommended more focus should be given for other variables out of cost control, this is because the two variables, resource planning and cost budgeting shows slight effect in determining the project performance.

Keywords: *Cost Management, Project Cost Control, Project Resource Planning, Project Cost Budgeting, Donor Funded Health Projects..*

CHAPTER ONE

INTRODUCTION

Background of the study

A project is a short-term work carried out to create items or services that are different inside a clear ending point and unique ways and are carried out in accordance with the organization's strategic objectives (Ohara, 2015). Projects are carried out in a variety of ways, each differing in terms of size, scope, and industry, and all organizations expect projects to be completed in the shortest time, at the lowest possible cost, but of higher quality (Bradley, 2012). In this sense, good project management procedures are the only way to achieve these results since they lead to improved management of all resources essential for efficient project performance (Kerzner, 2015).

According to Sanal & Nsubuga (2018), Non-Governmental Organizations (NGOs) are entities whose primary focus is on humanitarian activities, rather than commercial activities, and which primarily engage in activities aimed at alleviating the suffering of the underprivileged. Public health projects are implemented to avert diseases and inspire healthy behaviours across the community by preventing outbreaks and spread of infectious diseases, ensuring better nutrition, better water and sanitation, increase family planning contraceptives intake, decrease HIV prevalence and new infections, prevention of Malaria, improving Maternal, Neonatal and Child health. This donor funding is either given as a grant, donation or in-kind.

Most donor funded projects are implemented by non-governmental organizations, which aim at particular social interests through critical focus and advocacy on social, political as well as economic goals which include health, education, environmental protection and even human rights Omollo, E. S. (2017). There are various factors that determine the success of a project where the variation is based on the objectives of the project. Success is an on-going review of the efficiency and importance of a given project, Kitivi, D. M. (2015). Performance management can be used to assess the performance of a worker or teams in a given project hence, a project may be affected negatively due to unequal workloads, poor communication, or lack of co-operation among team members, Kitivi, D. M. (2015). Project cost management can be defined as application of tools, techniques and knowledge in planning, estimating and controlling project costs as well as analysing the possible of risks that may potentially lead to cost overruns, (Ronald, M. A., & Agung, M. 2018).

The identification of project cost management as the inclusion of processes that are involved in planning, estimating, budgeting, financing, funding and controlling costs for the project to be completed within the budget that has been approved, PMI. (2017). Project costs management entails other processes which include: plan cost management, estimate costs, determine budget, and control costs. For effective project cost management, project managers must undertake cost management planning, cost estimation, budgeting and cost control. Government's public health objective is achievement of universal health care for key services such as, malaria, HIV Nutrition, water and sanitation, maternal neonatal and child health. Public health projects have been described to be pro-poor, more so across rural areas. Both International and local development partners provide needed support through funding of projects or donating to funding pools backing several projects. Most of these funds are normally directed through NGOs, this makes it hard to measure the exact amount of money targeted towards public health projects, Wafula, E. F. (2017). Despite various health care finance reforms in Ethiopia, the country's healthcare system has suffered from low healthcare funding and poor resource control. However, comprehensive health care finance evidence is still lacking that can have implications for achieving UHC and designing strategies to address the gaps in health financing in Ethiopia.

1.1 Statement of the Problem

An observation by World Bank 2000 indicated that project sustainability remains a major challenge among NGOs in many developing countries. In Sub Sahara Africa research has shown that projects implemented have always achieved low sustainability (Miki, Kagiri, & Nganga, 2017). The majority of NGO projects face several obstacles that impede project completion (Muli, 2008). Management commitment and a failure to gain the necessary understanding about methods frequently result in poor implementation procedures, resulting in project delays (Lysons & Farrington, 2006). Several projects have experienced project delays and expense overruns. In developing countries, project failure is more alarming (Haughey, 2010). According to Njeri and Were (2019), the following essential project success factors impact project completion and performance: project leadership (80%), funding (80%), stakeholder engagement (85%), and sound planning (92.4 percent). Kerzner (2013) noticed that low morale, demotivation, poorly managed project team interactions, and commitment might cause projects to fail to meet their aims and objectives.

The aim of ODA is to promote economic development and welfare of developing countries (Organization for Economic Cooperation and Development [OECD], 2008). ODA is a type of foreign aid, and assurance of the effectiveness of foreign aid is a major concern for donor

countries and donor organizations (OECD, 2008). According to data from World Source Indicators, the volume of net ODA to the Sub-Saharan Africa (developing countries only) increased from US$40.2 million to US$46.2 million from 2008 to 2012. Despite the increase in the volume of ODA to developing countries, lack of proper project management practices such as inadequate coordination among donor organizations and recipient countries has been one of the challenges to achieving the objectives of ODA. Although financial aid to the developing countries increased over the years, some scholars (Garner, 1995; Pereira & Villota, 2012; Fleisher, Gottret, & Schleber, 2007; Gelb & Sundberg, 2007) argued that these aids to developing countries were not hitting the target. As the number of foreign aid that donors and development partners provide to developing countries increases, the fragmentation of aid increases.

The World Health Organization (WHO, 2004) indicated that poor coordination & effective project management affects the outcome of health care intervention programs. Overlap and fragmentation of efforts occurs among donors, development partners, as well as the government of the recipient country, thus affecting the outcome of the health development aid they provide. Halonen-Akatwijurka (2005) argued that coordination failure among the donors, development partners, and recipient country contributes aid to developing countries. He pointed out that this coordination failure is more among the donors and development partners with relatively similar priorities. The challenges with achieving effectiveness of aid, particularly health aid to developing countries, have been the focus of agenda among the ODA community and other stakeholders in development assistance. Studies revealed that donors, development partners, and recipient country governments failed to achieve coordination, effective project management & leadership challenges in some developing countries in Sub-Saharan Africa (Agbanu, 2010; Custer, 2010; Cheelo, Jönsson, Sundewall, & Tomson, 2010). For example, the stakeholders' collaboration on health program implementation in Ghana has been limited; insufficient information flow between members of the donor organizations & lack of proper project resource utilization inhibited health program implementation and policy formulation (Agbanu, 2010). In Kenya, Lack of proper leadership to manage the project and uncoordinated donor specialization resulted in uneven geographical and sectorial distribution of aid (Custer, 2010). The development aid is clustered in a particular region of the country. Evidence showed that poor project management practice & lack of health aid alignment in other developing countries in Sub-Saharan Africa, such as Tanzania, Namibia, and Uganda, affected the efficiency of health aid

in these countries (Brugha, 2005); however, some developing countries have given a good return of the aid to them.

In Ethiopia's current health landscape, the project funded by the United States Agency for International Development, implemented a series of public–private partnership in health projects from 2004 to 2020 to address several public health priorities, including tuberculosis, malaria, HIV/AIDS, and family planning. The Government of Ethiopia (GOE) developed its Health Sector Transformation Plan (HSTP) for 2015 to 2020 after the Health Sector Development Plans (HSDPs) I to IV that were prepared between 1997 and 2015. The GOE set new goals for the period from 2015 to 2020 in the HSTP. The Joint Consultative Forum (JCF), which is the governance body tasked with overseeing the implementation of the HSTP. Although the HSTP gives increased attention to the health sector engagement, it does not define the composition of the health sector. Ethiopia has had achievements and faced challenges in its mixed delivery system.

There are several studies that have been done in Project management issues related with project cost management, but have focused on other organizations and departments. There is no in-depth study conduct on the impact of cost management on performance of health projects taking Addis Ababa Health Bureau as a centre of study. This study will contribute in minimizing this gap in the literature and thereby establish the basis to understanding of some aspects of the impact of project cost management on the performance of donor funded health projects in Addis Ababa.

1.2 Research Questions

i. What are the effects of project cost control on the performance of donor funded health projects in Addis Ababa?
ii. How project resource planning influences the performance of donor funded health projects in Addis Ababa?
iii. What are the effects of project cost budgeting on the performance of donor funded health projects in Addis Ababa?

1.3 Objectives of the Study

1.3.1 General Objective of the study

The general objective of the study is examination of the influence of project cost management on the performance of donor funded health projects in Addis Ababa Health Bureau

1.3.2 Specific objectives of the study

i. To determine the effects of project cost control on the performance of donor funded health projects in Addis Ababa
ii. To examine the influence of project resource planning on performance of donor funded health projects in Addis Ababa
iii. To investigate the influence of project cost budgeting on performance of donor funded health projects in Addis Ababa

1.4 Significance of the Study

The result of the study is believed to contribute the management of company to have clear information about how much the project cost management issues influence the performance of funded health projects. It will also aid the management of Addis health Bureau to introduced modern schemes for managing different risks including the project costs to meet the challenges from cost overrun & unnecessary waste of resources. It will also be an important reference and a starting point for other fellow researchers interested to conduct further studies in the industry since it is among the few in its kind in funded projects carried out by Addis Ababa Health Bureau. Finally, the study would further serve as a reference guide for the health sectors & other public organizations in developing appropriate cost management strategies.

1.5 Scope & Limitation of the study

The main constraints facing the researcher are time and resource limitations which addressed independently. The other problem was unwillingness of some respondents to give valuable and reliable information. These limitations prohibit the researcher from reviewing adequate published and documented data regarding practices of project cost management practice in the organization and its effect on project success. The study also focusses only on the analysis of the impact of project cost management on the performance of funded health project at the study organization Addis Ababa health Bureau. The survey's respondent will only be health professionals working on different funded projects & the head office.

1.6 Organization of the Study

This study is structured into five chapters; Chapter One gives a brief introduction to the subject of the study. It is mainly focused on the explanation of the effect of cost management practice on donor funded health projects. The background, problem of the statement, objective, significance, scope, and definition of key terms are included under this chapter. Chapter two is where an in-depth theoretical & empirical review on the title will be made, The Third chapter presents the methodology will be used for conducting this research; the

fourth chapter presents results and discussion and finally the fifth chapter presents conclusion & recommendations.

1.7 Definition of Key Terms

Project: A project is a short-term work carried out to create items or services that are different inside a clear ending point and unique ways and are carried out in accordance with the organization's strategic objectives (Ohara, 2015).

Project Management: define as an organized venture for managing projects, involves scientific application of modern tools and techniques in planning, financing, implementing, monitoring, controlling and coordinating unique activities or task produce desirable outputs.

Non-governmental Organization/ NGO: are entities whose primary focus is on humanitarian activities, rather than commercial activities, and which primarily engage in activities aimed at alleviating the suffering of the underprivileged, protecting the environment, providing basic social services to the poor.

Donor Organization: Is an organization which provides, or joins in providing, grants, credits or loans to the government or its agencies.

Health Projects: Is a planned initiatives or program that aims to address specific health issues, improve healthcare delivery, or enhance health outcomes within a defined population or community.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The theoretical basis for the key variables investigated in this research is provided in this chapter, encompassing the areas of interest for this research; the influence of the three targeted Project implementation factors: Project Cost Control, Project Resource Planning, and Project Cost Budgeting on project success or failure. This part of the study contains descriptions and explanations given by different authors and researchers obtained from different documents and research findings of several studies. This review of literature contains about the concepts and dimensions of the effect of project cost management on the performance of donor funded health projects, through which proper project cost management can determine the success of projects in-terms of coat control as well as in efficient utilization of resource.

2.2 Theoretical Literature Review

Project & Project Managements

A project is a temporary and non-repetitive endeavour, characterized by a clear and logical sequence of events, with a beginning, middle, and end, focused on the accomplishment of a clear and defined objective on deadline, with costs, resources, and quality parameters specified (Vargas, 2008). It is also characterized as a difficult, non-routine, one-time endeavour to fulfil client demands that is constrained by time, budget, resources, and performance standards.

Project management is defined as the application of knowledge, skills, tools, and procedures to project activities in order to achieve project requirements (PMI, Inc. 2008). Project management is accomplished through the appropriate application and integration of the project management processes identified for the project. Project management enables organizations to execute projects effectively and efficiently (PMI, 2013). PM is also defined by PMI (2003) as the application and integration of logically grouped processes that are divided into five stages: initiating, planning, executing, monitoring & controlling, and closing, all of which are carried out within a given scope, quality, schedule, budget, resources, and risk.

Project Cost Management: According to the (PMBOK, 2017), Project Cost Management encompasses the activities of determining, forecasting, allotting, obtaining, distributing,

supervising, and regulating expenses to ensure that the project is finished within the authorized budget. It includes the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so the project can be completed within the approved budget. The project cost management encompasses the adherence to cost baseline, which is essential in monitoring and analysing project financial performance. This includes the use of earned value management and other cost control techniques. The objective is to optimize the utilization of resources while delivering quality project outputs within budgetary constraints. It also involves risk assessment and mitigation to avoid additional costs that may arise due to unexpected events. Effective project cost management plays a critical role in ensuring the success of a project by maximizing the value of available resources and reducing waste. (PMI, 2013).

2.3 Project Cost Management Practices

The processes of cost control, cost estimating/ planning, and cost budgeting are all part of project cost management. The primary goal of cost management is to complete the project within the budget that has been approved (PMI, 2004). The project budget is critical and influences all aspects of project planning and execution. It is critical to keep track of total project costs as well as costs for individual work packages.

2.3.1 Project Cost Control

The PMBOK guide identifies the control cost as one of the processes of Project Cost Management. Control cost is that process of monitoring the project status to manage the changes to the cost baseline and update the project costs. Control costs processes include: monitoring of project cost performance to identify the variances; recording of changes; prevention of unauthorized and incorrect changes; communicating authorized changes to stakeholders; and analysis of variances and their effects to the control processes. The project management plan, organizational process assets, and work performance indicators are some of the inputs to control costs process, Jain endrakumar, T. (2015). The output to the process includes but not limited to budget forecasts, change requests, and updates to project management plan, project documents, and organizational process assets Jain endrakumar, T. (2015). Project cost control process answers these questions: what is the planned cost? What is the actual cost? Is there a variance? What can be done about the variance? Donors demands strong internal controls and have imposed regulations on how the funds can be utilized. This has since led to increased demand for cost performance data, to generate these data, project team are required to undertake Earned value Management, (Ronald, M. A., & Agung, M. (2018).

2.3.2 Project Resource Planning

Resource planning is the process where tasks are allocated to project team members based on their skill sets, capacity, and best fit for the job. Resource planning helps project teams monitor progress, track capacity, and keeping projects on budget. Resource planning is used in determining and identification of an approach that will ensure resources are available for effective successful project completion. Effective resource planning should put into consideration and plan for the availability of scarce resources, PMI. (2017). Successful Project cost management is highly dependent on planning processes such as resource allocation and scope management that should be effectively done, Team FME. (2014). without the right resources the project management plan just becomes a mere document with no value and thus unable to deliver products. Project resource management is that process of utilizing resources in achieving project objectives and goals. A project manager must develop a good human resource plan to help in guiding the process of managing the human resources in identification of roles, responsibilities, skills, and reporting relationships. The use of planning tool resources by project manager helps in minimizing time and over utilization of resources which may lead to costly and negative impacts to project success. The work Breakdown Structure (WBS) is one of the recognized planning tools used for estimating resource requirements, total project budget, and work schedule, Pountney, P. J. (2016). However, failure to capture what is in and out of scope results in unnecessary work which results to cost overrun and schedule.

2.3.3 Project Cost budgeting

A project can be considered successful it is completed within the budget. Therefore, project budget management involves the processes followed for the project to be completed within the predetermined budget limits. Project Managers need perform adequately in proper cost estimation, budget determination and cost controlling. Budget management involves both direct costs and the costs that keep cropping up in the course of project implementation, PMI. (2017). Effective implementations of financial management practices lead to improvement in Project performance due to improved ability to track project events from the record system, Pountney, P. J. (2016). Cost budgeting is tool for estimating the costs or the necessary efforts for projects, activities, or work packages in project management. It includes cost estimation, setting a fixed budget, and management and control of actual cost as compared to the estimates. The costs are then allocated to work packages in a project. For a precise cost budgeting, it is essential to carefully implement a resource plan and schedule.

2.4 Relevant Theories

Theories of Constraints

Theory of Constraints was developed by Eliyahu M. Goldratt (1984) an Israeli business management expert in 1997. He again explained this concept in connection with project management in another book “Critical Chain” .This theory has three key assumptions in that an organization resources can be managed throughout, this is the rate at which the system or organization generates “goal units” or resources through its implementation, operational expenses such as cost resource, Labour resource and time resources. Constraints are major determinants of the output to a system whether acknowledged or not. TOC describes the cause of the system constraints and the best way deal with the constraints Ruhl, J. (2011).

The main importance of this theory is that it is simple and easy to understand, this makes it more practical for the project managers in resource allocation. The concept promoted by the theory provides an easy pattern to follow which enables the project team to focus on an area that needs resource consideration. It is also said to be very operative in dynamic project environments as by removing or minimizing resource waste, quick and better resource results can be realized. This theory also increases the results in an instant improvement in the resource efficiency of the relevant project process Goldratt, E. (1984).

Theory of Scheduling

Theory of scheduling originated from Putnam-Norden-Rayleigh Model which was developed by Putnam in 1978 (Moore, 1999). Putnam proposed an analytical formula for scheduling labor cost rates over time for software development projects. Project scheduling theory encompasses the scheduling of project tasks and activities based on the preference or resource limitations Herroelen, W. (2005). This theory is based on three concepts: planning, the dispatching model and the thermostat model. The dispatching model adopts that planned tasks and activities can be implemented by a notification of the start of the task to the project leader. Goldratt, E. (1984) stated that project scheduling procedures are not important since in each case the impact on the lead time of the projects is very small. Herroelen, W. (2005) identify and lighten general misconceptions about project scheduling in a constraint project environment. They claimed that the above type of perceptive invites the project team to become trapped in the critical delusion that looking for the best scheduling procedure does not pay off in practice and has an insignificant impact on the overall project duration. This theory is therefore important to the study since it demonstrates a strong causal relationship between scheduling and the project deliverables Koskela , L., & Howell, G. (2002).

2.5 Empirical Review

African countries are among the biggest beneficiaries in development funding through projects that are aimed at complimenting governments' efforts in improving social economic gaps Hynes & Scott, 2013. With this in mind a glance at the water projects in Africa indicates that over 50,000 water supply projects have since seized operations upon exit of implementing organizations, this represents between 215-350 million USD dollars of donor funds wasted on projects whose benefits have been short lived, Fair water foundation, 2009. The issue of sustainability has impacted negatively on donors since programs incur heavy start-up costs that are injected in projects meaning that while huge expenditures are being incurred in implementing projects, poor sustainability is depriving off the returns expected of these investment Coates et al., 2016.This therefore, goes without saying that project management processes should incorporate measures that ensure sustainability of projects.

Mostafa, A., & Sherif, S. &. (2017). Carried out a study on factors leading to cost overrun occurrence in construction projects. From the study, cost overrun was found to be an indicator of project failure. Situation where projects surpass the estimate is known to be a common universal phenomenon and a good indication of project poor performance. Poor estimation, unskilled human resource, poor design, poor planning, and environmental factors are major of cost overruns.

Porter (1980) and Shank (1992) based on the concept of competitive advantage presented a model of strategic cost management. The model consists of a set of analytical methods that will shape the strategic management insight. Analytical methods are: Analysis of Strategic value chain, Analysis of strategic positioning, Stimulus analysis, and Strategic cost. Accordingly, a company should first analyse the source of the cost and to determine finished cost of product. Second, the company analyses their situation based on its product and selects an appropriate strategy and finally, after determining the proper strategy, the company determines the factors that led to the change cost by analysis of cost stimulus and ultimately follows a strategic approach to reduce.

Another study has been conducted by Pakmaram, and et al (2010), "The factors affecting the application of cost management systems for the petrochemical industry." The purpose of the research is to evaluation of factors affecting the implementation of cost management in the petrochemical industry form analytical view point. Finally, it is found that the variety and complexity of the production process in the petrochemical industry creates limiting factors in the application of cost management and concluded that, due to the complexity of the industry

and its related factories, there is no way to provide a uniform model for cost management system in this industry.

Zinabu and Getachew (2015) conducted a study to identify the top five cost over-run factors and survey is conducted on 140 respondents. The samples were drawn using convenient sampling approach. Primary data is collected using the self-administered questionnaires. While secondary data is collected through reviewing of related materials and the analysis is conducted using SPSS version 20. The study indicated, as per the contractor' response, that the top five factors that causes cost overrun of construction projects were from medium to high. On the other hand, the top five factors as per the response of consultants and clients ranged between high to very high. The contractors outlined the top five factors that causes cost overrun in construction projects are poor planning, fluctuation of price of materials, poor productivity, inflationary pressure and project financing in descending order.

Kirubel (2018) conducted a research that focused on the essential aspects that influence the effectiveness of project execution at an NGO funded projects in Addis Ababa. This study employed survey questionnaires from diverse projects as a research instrument for data collecting and regression analysis, such as frequencies and percentages, to display quantitative data with various data presentation methods. According to the research findings, elements connected to the category of project leadership and management, organizational structures, team, and cost related aspects to the project itself were discovered to be the most success influencing factors of projects performance which are funded by the NGO.

2.6 Research Gap Analysis

There have been several studies conducted on the effect of project cost management on project success, the majority of which seem to agree that project cost management major contributor to success Vasista et al. (2018). The review of the literature shows that there are researches that were carried out mostly from the USA, Malaysia, India, Nigeria, and the like. The few that carried out have focused on the relationship between project cost management & project success only on a different company's perceptive in Ethiopian context (Solomon 2017, Sirgute 2018, and Heron 2018).

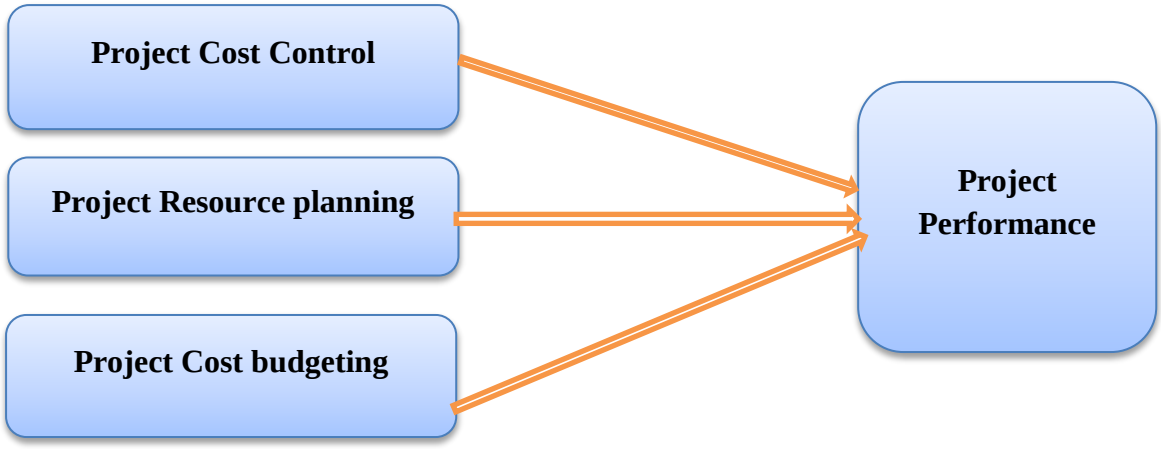
Some studies like (Yemisrach, 2018; Sisay, 2018; Azmach, 2017; Kirubel, 2018; and Samrawit, 2021) focused on project management practices and project performance concerning NGOs have been undertaken in Ethiopia, these studies have also been confined to certain institutions, independent variables, and dependent variables. These studies conducted were mainly focused on examining the challenges of monitoring & evaluation system and

project success factors of project management practices in local NGOs in general. Empirical studies, however, indicate that internal organizational factors such as project management practices, leadership style, human resource factors, organizational culture and resource allocation are determinants of project success (Kraeger, 2011; Yang et al., 2011; Ragasa, 2013; Aninkan & Oyewole, 2014; Thulth & Sayej, 2015; and Oliveira et al., 2012). Therefore, another knowledge gap that will address by this study in an attempt to add to the body of knowledge is to give the research an Ethiopian health sector perspective. The study will try to fill the gap by investigating the factors influencing the performance of projects under donor funded health sector projects in Addis Ababa, Ethiopia.

2.7 Conceptual Framework of the study

In this study, a conceptual framework has been explained the relationship between Project Cost Management & Project performance. Project performance is a dependent variable and Project Cost Managements (Project Cost Control, Project Resource Planning, & Project Cost Budgeting) are independent variable. To this end, this study was guide by the following conceptual framework, which used to explain the interrelationship between the variables.

Figure 2.1: Conceptual framework of the study



Source: Muchelule Yusuf October (2022)

Review of Variables

Project Cost Control: The PMBOK (PMI, 2017) guide identifies the control cost as one of the processes of Project Cost Management. Control cost is that process of monitoring the project status to manage the changes to the cost baseline and update the project costs. Control costs processes include: monitoring of project cost performance to identify the variances; recording of changes; prevention of unauthorized and incorrect changes; communicating

authorized changes to stakeholders; and analysis of variances and their effects to the control processes (Jainendrakumar, T. (2015).

Project Resource Planning: Resource planning is the process where tasks are allocated to project team members based on their skill sets, capacity, and best fit for the job (PMI, 2017). Resource planning helps project teams monitor progress, track capacity, and keeping projects on budget. Effective resource planning should put into consideration and plan for the availability of scarce resources.

Project Cost budgeting: A project can be considered successful it is completed within the budget. Therefore, project budget management involves the processes followed for the project to be completed within the predetermined budget limits. Project Managers need perform adequately in proper cost estimation, budget determination and cost controlling. Budget management involves both direct costs and the costs that keep cropping up in the course of project implementation (PMI, 2017). Effective implementations of financial management practices lead to improvement in Project performance due to improved ability to track project events from the record system.

2.8 Research Hypotheses

Based on the research objectives and prior empirical investigations, the following hypotheses are established.

H1: Project Cost Control factors have statistically positive and significant effect on the performance of projects in Addis Ababa Health bureau.

H2: Project Resource planning factors have statistically positive and significant effect on the performance of projects in Addis Ababa Health bureau.

H3: Project Cost budgeting factors have statistically positive and significant effect on the performance of projects in Addis Ababa Health bureau.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the research methodology is discussed, including the design, approach, and target population, source of data, data collection methods, and method of analysis. This is followed by a presentation of ethical considerations.

3.2 Research Design

In this study, an explanatory research type was employed. Descriptive research as a purposive process of gathering, analysing, classifying, and tabulating data about prevailing conditions, practices, processes, trends, and cause-effect relationships and then making adequate and accurate interpretation about such data with or without or sometimes minimal aid of statistical methods. The choice of this methodology is intended to provide a more comprehensive explanation for the research topic, providing further details and improving understanding of the theme.

3.3 Research Approach

The research approach for this project was a mixed methods design which uses quantitative data collection. Mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks, (Creswell & Creswell, 2018). The research method chosen was appropriate as it will allow for the issue under investigation to be both explored in terms of gaining an understanding of individual's perspectives and analysing the effectiveness of project cost management practices on an organizational level.

3.4 Target Population & Sample

- **Population**

The target population in this study was 250 professionals working donors funded public health projects completed in the past few years within Addis Ababa as captured in the Ministry of Health database of 2020.

- **Sample Size**

For this purpose the researcher was through in the selection of the health departments' to-gather with the focal persons at the top & senior levels managers who are responsible for this particular task. There are therefore 115 individuals of this group will be selected, for a total of 250 target populations. For this research sample size was determined using Yamane Taro's,

1967: 886 sampling formula. The study was applied the sampling error formula of 95% confidence with Z*- value of 1.96 as follows;

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

$$n = \frac{250}{1+250(0.07^2)}$$

$$n = 113 \approx 115$$

- 95% confidence level
- P = .05 Where
- N is the Population size = 250
- e = ± 7% is the level of Precision

➢ **Sampling**

Due to the big size of different health departments under the health bureau, the study prefer to focuses on professionals who have a direct contact with donor funded health projects. Therefore together with the focal person & personnel's under the health bureau the researcher allocate the sample size according to the proportional number of selected departments & professionals working under different donor funded health projects.

3.5 Data Type & Source

In order to achieve the objective of this research, both primary and secondary sources of data will be utilized. The study will have collected and analysed quantitative & qualitative data.

- **Primary Data:** Data collection through questionnaires was distributed to respondents that involve program directors, Managers, Department Managers, Senior Officers, technical experts and operators working on donor funded health projects.
- **Secondary Data:** It will be gathered from varies secondary sources i.e., Interview & Document review. Periodic government body's publications, report of development partners, relevant publications different documents, records and reports of the industry, regulatory organ reports, from web site, books and articles, journals and previous studies will be analysed.

3.6 Data Gathering Tools/ Instrument

With regard to instrument for data collection, the researcher was employed questionnaires; the questionnaire is preferred to other methods of data collection hoping that it may provide an opportunity for obtaining reliable and valid information from the respondents. According to (Sekaran, 2003), questionnaire is a popular method of collecting data because researchers

can gather information fairly easily and questionnaire responses are easily coded. The items of the questionnaire was mainly developed based on the research objectives and research questions, the questions rating was done depending on the type of questions and choices given. Since the target respondent used English & Amharic language as a means of communication; the questionnaire was constructed in English & Amharic language. The questionnaires for respondents were administered by direct contact.

- **Research Unity of Analysis**

The unit of analysis is the major entity and important ideas that analysed in the study. In this particular study we are going to compare the individual donor funded project cost management to the project success based on different measurements, the unit of analysis for this study is an individual firm.

3.7 Data Collection Procedure

For the primary data the researcher take a responsibility to collect and obtain the relevant information at the target respondents. Secondary data sources were also carefully studied and relevant information was extracted. All selected sample population was requested to participate in filling the questionnaire through email and telephone. The quantitative data procedure was done through email and in person; it was collected back within fifteen days' time. The researcher tries to clarify about the questionnaire to the participants by making calls. A day before the scheduled date for returning, the researcher was sent a reminder to all participants for confirmation. Participants were informed about the voluntary character of participation and the possibility to skip the question if they had no clear information about the issues to be raised by the researcher. The participants were guaranteed anonymity. In addition to the oral briefing, participants were obtained written information about the problem statement of the study.

3.8 Measurement Reliability & Ethical Issues

- **Validity & Reliability**

The validity and reliability of the study was considered. For the purpose of this research the researcher was used different data collection techniques in order to ensure validity and reliability of data. The researcher personally conduct pilot test to evaluate the validity of data measuring instruments are accurate and the advisor was involved in consulting and reviewing the validity of the questions used for questionnaire prepared. The literature review will also be used to ensure content validity. The respondents which were selected for the questionnaire are also closely familiar with the areas to be studied. Also, triangulation method was used in order to enhance the validity and reliability of data. Thus, data collection techniques such as

questionnaire, observation were used to fill the gaps of one technique with the others‟ strength.

Reliability estimates the consistency of the measurements or, more simply, the degree of uniformity of the results obtained from repeated measurements. For this purpose, the quality of data was measured, evaluated, and guaranteed using appropriate techniques. According to Taber (2018), Reliability less than 0.6 is considered to be poor, those in the 0.7 range, acceptable, and those above 0.8 are good. Conduct Cronbach's Alpha using a statistical test which helps to examine the internal consistency of the attributes determined for each dimension and obtain 0.651

Table 3.1: Reliability Statistics

Case Processing Summary

		N	%
Cases	Valid	80	100.0
	Excluded	0	.0
	Total	80	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.651	24

- **Ethical Considerations:** In this study all participants and data collected remain anonymous. Moreover, the privacy of all respondents was respected in the reporting of this research. The respondents are assured that their response was remained confidential and was not exposed to other party. These responses are used for this research purpose only. To receive participants' informed consent a cover letter is attached to the questionnaire to explain the purpose of the study and the right to accept or refuse.

3.9 Method of Data Analysis

The data was analysed using explanatory research and descriptive statistics. After gathering all the data from the instrument, the researcher was studied the collected data and edit so that only the data relevant to the research questions and objectives was retained. Data was analysed using descriptive statistics like mean and standard deviation, simple linear regression analysis was used to link Project cost management to project performance. The

results were presented by use of tables and charts. Statistical Package for the Social Sciences (SPSS), Excel etc. tools are used for assessing the data. Whenever the function of data collection is completed the function of sorting, managing, arranging, ordering, analysis and interpretation of those data are done. Regression analysis helps to measure the cause and effect relationship between independent variable and dependent variables can be considered as useful statistical measure for prediction purpose.

CHAPTER-FOUR

DATA PRESENTATION, ANALYSIS & INTERPRETATIONS

This chapter deals with presentations, discussions and interpretations of the data collected through questionnaire analysis and findings of the study as set out in the research methodology. Data will be collected from the professionals working as medical officer & project managers who have a better understanding & experiences which including managers, department managers, senior & junior health officers working in Addis Ababa Health Bureau. The resulting data in the practice side were analysed using descriptive statistics of percentage, frequency, mean and standard division and the challenge side of the data were analysed using the Statistical Package for Social Sciences (SPSS) and the analysis is given below.

4.1 Response rate

Out of the 115 questionnaires distributed, only 80 were completed and retrieved successfully and from the collected questionnaires 35 were rejected as not completed and unreturned, or were not suitable for use in this study. Based on usable responses only, the response rate was 70%. This response rate was accepted, according to Kothari (2004) and Mugenda, (2003) argument that for generalization of findings to the whole population the least acceptable response rate should be 50% response rate is adequate.

4.2 Demographic Characteristics of Respondents

Table below presents the summary statistics for the socioeconomic characteristics of the respondents. With respect to research questions, it was found that the following figures depicted the personal profile of the respondents.

Table 4.1: Demographic Characteristics of the sampled respondents

Description			Frequency	Percentage
1.	Gender	Male	42	60
		Female	28	40
2.	Age	Less than 25	5	7.14
		26 up to 35	30	42.8
		36 up to 45	26	37.14
		46 up to 55	9	12.9
		Above 56	0	0
3.	Job Position	Senior Manager	6	8.57
		Manager	15	21.42
		Officer	36	51.42
		Assistance	10	14.29
		Any other …. Specify	3	4.28
4.	Education Level	Post Graduate (Masters)	33	47.14
		Undergraduate (Degree)	29	41.43
		Diploma	6	8.57
		Certificate	2	2.85
		Any other…. Specify	0	0
5.	Total experience in Addis Inter. bank?	2 Year & below	14	20
		3 up to 6 Years	27	38.57
		7 up to 10 Years	15	21.43
		11 up to 15 Years	10	14.29
		16 years & above	4	5.71

Source: Own survey, 2024

Based on the demographics of the participants, it appears that there is a significant gender disparity among respondents, with 42 (60%) identifying as male and only 28 (40%) as female. It is important to note that gender imbalances can greatly impact research findings, as both men and women have distinct perspectives and experiences. On the other hand, the result indicates females have a great role as professional's expert & decision makers in the health sector responsibilities.

Additionally, the study took into account factors such as age, job position, education, & work experience, which could contribute to a more nuanced analysis of the data. In terms of age, the study reveals that all 30 (42.8%) of the sampled professionals have between 26–35 years

age group and they are actively participated on the filling of questionnaire were categorized under this age groups. The respondents can be grouped into two major groups constituting 82% of them were the young experienced professionals in the age bracket of between 26-45; and a few of them below 25 and above 45 (18%) young and adult professionals. This suggests that the age composition of the area plays a significant role in which young age groups who have better experience on the field & those who are recently graduated from universities in which fully equipped with the theoretical aspect of the profession.

When it comes to job position, the study planned to participate all level professionals from upper senior manager up to the lower-level assistance health professionals. According to the result majority of the respondents belong to the officer level, which includes senior & junior level medical officers, 36 (51.4%), the rest 15 (21.4%), 10 (14.3%), 6 (8.6%), and 3 (4.3%) are managers, assistance, and senior project managers, respectively. The result indicates that medical officers take most of the respondents sampled, which includes senior & junior medical officers and they have enough contact with the profession of all kind of health project practices.

In terms of education, the majority of the respondents held a Master's degree in different types of health fields 33 (47.14%), followed by respondents having Degree 29 (41.43%). Health officer, medical nurses, and project management are some of the disciplines that have been identified as crucial in delivering effective project accomplishment, and a key component of this is having medical & project management with the necessary knowledge and skills. The extensive education of higher and medium level education of the respondents is encouraging, as it increases the reliability of the information provided. And finally, most of the respondents have better understanding on the sectors for investigation.

In terms of experience, we have categorized the work experience in to total work experience in the banking sector and work experience in the specific bank of Addis International. Regarding to the total work experience majority 27 (38.57%) had worked between 3-6 years either as junior health officer, senior nurses, or Doctorate, followed by 15 (21.43%) of the respondents worked 7-10 years as a medical professional in health sector. The remaining about 14 (20%), 10 (14.29%), and 4 (5.71%) of them have an experience of below 2 years and above 11 years either as health officer, medical Doctor and Nurses respectively. Most of the sampled respondents have well theoretical as well as practical experience since they are fresh graduates from the universities in about the practice of health as well as on the medical sectors from different perspectives. These experiences of the respondents have a positive impact on both to filling realistic responses to share the real situation of the study area.

4.3 Descriptive Data Analysis

Adopting the Scott criterion, the data represented by the Likert scale with values 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), and 5 (Strongly Agree) is analysed using the mean value. As per the Scott criteria, mean values up to 2.8 are classified as disagree, mean values between 2.9 to 3.2 are categorized as neutral, and mean values above 3.2 are considered as agree (Scott, 1999).

Mean value

No.	Mean value	Description
1.	1.00 – 1.80	Very low
2.	1.81 – 2.60	Low
3.	2.61 – 3.20	Medium
4.	3.21 – 4.20	High
5.	4.21 – 5.00	Very high

Source: Moidunny 2014

4.3.1 Project Cost Control

The first variable was Project Cost Control which attempted to determine the influence of Project Cost Control on the performance of donor funded Health Projects in target health bureau. From the table no. 1 below, the 1st item with a statement of "Cost management plan describes how project cost will be managed and control" the respondents reacted differently 50 (62.5%) of the respondents selected agree and 8 (10%) of the respondents selected strongly agree. While 7 (8.75%) of the respondents remained neutral. The other 13 (16.25%) of the respondents answered disagree and 2 (2.5%) answered strongly disagree. Majority of the respondents agree that Cost management plan described how project cost was managed and controlled (Mean = 3.61). On the same table subject no.2, 47 (58.75%) of the respondents selected agree and 8 (10%) of the respondents selected strongly agree. While 10 (12.5%) of the respondents remained neutral. The other 13 (16.25%) of the respondents answered disagree and 2 (2.5%) answered strongly disagree. Majority of the respondents agreed that adequate cost control techniques reduced project performance rate (Mean = 3.43).

Further, 43 (53.75%) of the respondent show their agreement on the statement "accurate cost estimation techniques reducing cost overruns", and with an overall (Mean = 3.44) and also 42 (52.5%) of the respondent agreed that daily monitoring reducing cost overruns as well (Mean = 3.44). The study also found agreement from respondents on the 5th statement about the effect of proper change control systems on project performance with (Mean = 3.36) and the final statement concerning project document updating to reflect the changes that occurred

during implementation agreed with (Mean = 3.43). In general Project cost control is always a continuous process and is part of monitoring and control process. The overall Mean of 3.45 indicated some significant statistical evidence to suggest Project Cost Control influences performance of donor funded project in Addis Ababa health bureau.

Table 4.2: The effect of Project Cost Control on Project Performance

No.	Statement	Resp. Opinion	Frequency	%	Mean	SD
1.	Cost management plan describes how project cost will be managed and control	SA	8	10	3.61	0.96
		A	50	62.5		
		N	7	8.75		
		D	13	16.25		
		SD	2	2.5		
2.	Adequate cost control techniques reduce project performance rate	SA	8	10	3.43	1.04
		A	47	58.75		
		N	10	12.5		
		D	13	16.25		
		SD	2	2.5		
3.	Daily cost monitoring reduced to cost overrun	SA	2	2.5	3.44	0.79
		A	43	53.75		
		N	24	30		
		D	10	12.5		
		SD	1	1.25		
4.	There are proper change control systems	SA	5	6.25	3.44	0.92
		A	42	52.5		
		N	18	22.5		
		D	13	16.25		
		SD	2	2.5		
5.	Project documents are updated regularly to capture any change that may occur during the implementation	SA	3	3.75	3.36	0.90
		A	41	51.25		
		N	20	25		
		D	14	17.5		
		SD	2	2.5		
6.	Proper delivery of report based on schedule	SA	8	10	3.43	1.04
		A	41	51.25		
		N	10	12.5		
		D	19	23.75		
		SD	2	2.5		
	Overall mean value = 3.45					

Source: Own computation

4.3.2 Project Resource Planning

According to the table no. 1 below, the 1st statement was "All the routines and methods for performing tasks in the projects feels necessary and are easy to follow and understand" the respondents reacted differently 19 (23.75%) of the respondents selected agree and 2 (2.5%) of the respondents selected strongly agree. While 14 (17.5%) of the respondents remained neutral. The other 40 (50%) of the respondents answered disagree and 5 (6.25%) answered strongly disagree. Majority of the respondents disagree & believe that it is difficult to accept the practice all the routines and methods for performing tasks in the projects feels necessary and are easy to follow and understand.

On the same table subject no.2, for the statement "The result of the work in the projects are rarely characterized by lack of time", 24 (30%) of the respondents selected agree and 2 (2.5%) of the respondents selected strongly agree. While 9 (11.25%) of the respondents remained neutral. The other 40 (50%) of the respondents answered disagree and 5 (6.25%) answered strongly disagree. Majority of the respondents disagree on the context stated under the given statement. On the 3rd statement 33 (41.25%) and 28 (35%) of the respondents disagreed and agreed respectively that the project work breakdown structure, deliverables and acceptance criteria documented in the scope baseline are considered when monitoring and controlling the schedule baseline and the overall (Mean =2.85). Subject no.4 of on the same table, for the statement "Work package are clearly identified and decomposed into schedule activity. ", 34 (42.5%) of the respondents selected agree and 1 (1.25%) of the respondents selected strongly agree. While 19 (23.75%) of the respondents remained neutral. 21 (26.25%) answered disagree and 5 (6.25%) answered strongly disagree. Majority of the respondents agree that work package is clearly identified and decomposed into schedule activity

For the last two statements "estimation techniques for activity duration reducing cost overruns", and "The cost plan is clear and detailed on drawing of specifications" an overall mean value found to be (Mean=3.06) and (Mean=3.14), indicated that there was an agreement from respondents on the 5th and 6th statements.

Resource planning is the process where tasks are allocated to project team members based on their skill sets, capacity, and best fit for the job. Resource planning helps project teams monitor progress, track capacity, and keeping projects on budget. Resource planning is also used in determining and identification of an approach that will ensure resources are available for effective successful project completion. Effective resource planning should put into consideration and plan for the availability of scarce resources. Successful Project cost management is highly dependent on planning processes such as resource allocation and scope

management that should be effectively done. According to the study result it could confirm that there was limitation on the implementation of proper resource planning process, the overall mean score found to be 2.85.

Table 4.3: The effect of Project Resource Planning on Project Performance

No.	Statement	Resp. Opinion	Frequency	%	Mean	SD
1.	All the routines and methods for performing tasks in the projects feels necessary and are easy to follow and understand	SA	2	2.5	2.66	0.99
		A	19	23.75		
		N	14	17.5		
		D	40	50		
		SD	5	6.25		
2.	The result of the work in the projects are rarely characterized by lack of time	SA	2	2.5	2.73	1.043
		A	24	30		
		N	9	11.25		
		D	40	50		
		SD	5	6.25		
3.	Project work breakdown structure, deliverables and acceptance criteria documented in the scope baseline are considered when monitoring and controlling the schedule baseline	SA	2	2.5	2.86	1.052
		A	28	35		
		N	12	15		
		D	33	41.25		
		SD	5	6.25		
4.	Work package is clearly identified and decomposed into schedule activity.	SA	1	1.25	3.06	0.998
		A	34	42.5		
		N	19	23.75		
		D	21	26.25		
		SD	5	6.25		
5.	Estimating activity duration depends on the material availability and financial capabilities of the contractor	SA	1	1.25	3.14	0.951
		A	37	46.25		
		N	16	20		
		D	24	30		
		SD	2	2.5		
6.	The cost plan is clear and detailed on drawing of specifications	SA	2	2.5	2.66	0.99
		A	19	23.75		
		N	14	17.5		
		D	40	50		
		SD	5	6.25		
	Overall mean value = 2.85					

Source: Own Computation

4.3.3 Project Cost Budgeting

The third item examined in the study was the influence of Project Cost Budgeting on the performance of donor funded health projects in the selected office.

Accordingly, this subject provided under table no.3 below, regarding the 1st statement "There is a well- defined project cost baseline", 54 (67.5%) of the respondents selected agree and 2 (2.5%) of the respondents selected strongly agree. While 9 (11.25%) of the respondents remained neutral. 11 (13.75%) answered disagree and 4 (5%) answered strongly disagree. Majority of the respondents agree that the cost baseline is important as it acts as a time-phased budget that is used by the project managers in measuring and monitoring cost performance and provides crucial information for project funding requirements.

The 2nd subject on the same table with a statement of „The method of training used by the organization is relevant to the training objectives", accordingly 66 (82.5%) of the respondents selected agree and 2 (2.5%) of the respondents selected strongly agree. While 4 (5%) of the respondents remained neutral. 6 (7.5%) answered disagree and 2 (2.5%) answered strongly disagree. Majority of the respondents agree that cost budgeting is tool for estimating the costs or the necessary efforts for projects, activities, or work packages in project management.

The 3rd subject under the same table below stated that "The cost aggregate of the project is determined from combined activities from activity level to work package." 30 (37.5%) of the respondents selected agree and 2 (2.5%) of the respondents selected strongly agree. While 12 (15%) of the respondents remained neutral. 34 (42.5%) respondents disagreed with subject and 2 (2.5%) answered strongly disagree. It confirms that the cost aggregate of the project is determined from combined activities from activity level to work package.

The respondents also agreed on whether there is a clear budget for the project or not, accordingly found an overall mean value of (Mean=3.51). The other statement described under the 5th question were about whether the project cost estimates being realistic or not, and found a (Mean =3.35). Project Managers need to conduct cost estimation which the estimates of the resources identified is established. Cost estimation could be top down where the manager uses actual costs of a previous project to estimate the costs of the project to be undertaken an efficient criterion where limited information about the project is not available at hand.

Finally, the respondents also agreed on the 6th statement that funding limit reconciliation was done to ensure minimal variations in the expenditure of the project funds (Mean =2.69). A project budget management involves the processes followed for the project to be completed

within the predetermined budget limits. Project Managers need perform adequately in proper cost estimation, budget determination and cost controlling.

Table 4.4: The effect of Project Cost Budgeting on Project Performance

No.	Statement	Resp. Opinion	Frequency	%	Mean	SD
1.	There is a well- defined project cost baseline	SA	2	2.5	3.49	0.94
		A	54	67.5		
		N	9	11.25		
		D	11	13.75		
		SD	4	5		
2	There is a clear budget for the project	SA	2	2.5	3.75	0.74
		A	66	82.5		
		N	4	5		
		D	6	7.5		
		SD	2	2.5		
3	The cost aggregate of the project is determined from combined activities from activity level to work package.	SA	2	2.5	2.69	0.96
		A	30	37.5		
		N	12	15		
		D	34	42.5		
		SD	2	2.5		
4	There is a clear budget for the project	SA	0	0	3.51	0.75
		A	51	63.5		
		N	21	26.25		
		D	6	7.5		
		SD	2	2.5		
5	The project cost estimates are realistic	SA	0	0	3.35	0.929
		A	50	62.5		
		N	11	13.75		
		D	16	20		
		SD	3	3.75		
6	Funding limit reconciliation is done to ensure minimal variations in the expenditure of the project funds	SA	2	2.5	2.69	0.96
		A	30	37.5		
		N	12	15		
		D	34	42.5		
		SD	2	2.5		
		Overall mean value = 3.24				

Source: Own Computation

4.3.4 Project Performance

As stated on the objective of the study this study focused on the examination of the influence of Project Cost Management on performance of donor funded health projects in Addis Ababa Health Bureau.

Thus, under table 4.5 below, the 1st statement "Project requirements are well captured in requirement management plan". The respond reveals that majority of the respondents representing 62 (77.4%) agreed on the statement referring to project requirements are well captured in requirement management plan, and 3 (3.8%) of the respondents selected strongly agree. While 1 (1.3%) of the respondents remained neutral. The remaining 2 (2.5%) and 12 (15%) respondents disagreed and strongly disagree with the statement respectively. Project performance in terms of cost fully depends on effective and efficient project scheduling, its application and control throughout the project life.

Under the same table the 2nd question provided with the statement of "The project was completed within its budget". Of the respondents 61 (76.2%) responded agree and 3 (3.8%) of the respondents responded strongly agree for the issue. While 1 (1.3%) of the respondents remained neutral. The others 10 (12.5%) and 5 (6.3%) of the respondents disagreed and strongly disagree with the statement that provided in the questionnaire.

Further, the respondents agreed that work performance data are capture at every implementation stage with 63 (78.7%) and (Mean = 3.82). Majority of the respondents 53 (66.2%) of them also agreed that there was cost overrun in project due to effective project cost management, (Mean = 3.98). Lack of ability to prevent cost overruns due to poor cost management skills is a major hindrance to project success. 43 (53.7%) respondents agreed on the statement referring about the existence of well-documented and updated project schedule in target study organization. (Mean = 3.93).

The last statement on project performance was about whether the project documents are updated regularly or not. Majority of the respondent agreed with a (Mean =3.98). According to the result for the analysis there was significance evidence to suggest Project cost Management influence performance of donor funded projects. Project time and cost performances get influenced by project characteristics, procurement system, project team performance, client representation's characteristics, and external conditions.

Table 4.5: The effect of Project Cost Management on Project Performance

No.	Statement	Resp. Opinion	Frequency	%	Mean	SD
1	Project requirements are well captured in requirement management plan	SA	3	3.8	3.52	1.13
		A	62	77.4		
		N	1	1.3		
		D	2	2.5		
		SD	12	15		
2	The project was completed within its budget	SA	3	3.8	3.58	0.977
		A	61	76.2		
		N	1	1.3		
		D	10	12.5		
		SD	5	6.3		
3	Work performance data are capture at every implementation stage	SA	8	10	3.82	0.986
		A	63	78.7		
		N	1	1.3		
		D	3	3.8		
		SD	5	6.3		
4	There is no indication of cost overrun in project due to effective project cost management	SA	17	21.3	3.98	0.819
		A	53	66.2		
		N	3	3.8		
		D	6	7.5		
		SD	1	1.3		
5	There is a well-documented and updated project schedule	SA	19	23.8	3.92	0.854
		A	43	53.7		
		N	11	13.75		
		D	7	8.7		
		SD	0	0		
6	Project documents are updated regularly	SA	17	21.3	3.98	0.818
		A	53	66.2		
		N	3	3.8		
		D	6	7.5		
		SD	1	1.3		
	Overall mean value = 3.8					

Source: Own Computation

4.4 Inferential Statistics

Inferential analysis test hypothesis to determine if observed differences between groups or variables are real or occur simply by chance. It produces new information by making predictions and generalization based on samples. Correlation is the relationship between two or more than two variables. Pearson's correlations analysis was carried out for variables having simple multi option answer. A positive correlation reveals that the direction of the relationship is positive with one increasing in reaction to the other's increase. A negative correlation reveals an inverse of the above; an increase in one when the other decreases.

Table 4.6: Correlation Result

Correlations					
		PROJPERF	COSTCON	RESPLAN	COSTBUDG
Pearson Correlation	PROJPERF	1.000			
	COSTCON	.039	1.000		
	RESPLAN	-.413	.088	1.000	
	COSTBUDG	-.035	-.020	.023	1.000
Sig. (1-tailed)	PROJPERF		.365	.000	.378
	COSTCON	.365		.219	.430
	RESPLAN	.000	.219		.420
	COSTBUDG	.378	.430	.420	
N	PROJPERF	80	80	80	80
	COSTCON	80	80	80	80
	RESPLAN	80	80	80	80
	COSTBUDG	80	80	80	80

Source: Own Computation

To determine the existence and level of association, the study used bivariate correlation from which Pearson's correlation coefficient is considered. Pearson's correlation coefficient falls between -1.0 and +1.0, indicates the strength and direction of association between the two variables (Field, 2005). The Pearson's correlation coefficient (r) was used to conduct the correlation analysis to find the level and direction of the relationships between the dependent and independent variables.

Correlations of 0.30 are regarded to mention worthy (Cohen, 1988). High correlation coefficients illustrate higher level of association between the variables i.e. dependent and independent. According to Cohen (1988), the value of Pearson's correlation is divided into

three areas. A correlation coefficient between 0.10 and 0.29 will indicate a small correlation, a correlation coefficient between 0.30 and 0.49 will indicate a medium correlation, and a correlation coefficient between 0.50 and 1.0 will indicate a strong correlation.

The bivariate correlation of a two-tailed test confirms the presence of statistically significant difference at probability level $p<0.05$ assuming 95% confidence interval on statistical analysis. The Pearson correlation analysis shown in the table above among the independent variables (Cost control) were significantly (statistically) and positively correlated with project performance. The rest are least correlated and negatively correlated.

H1: Project Cost Control factors have statistically positive and significant effect on the performance of projects in Addis Ababa Health bureau.

The Correlation coefficient between project performance and cost control is 0.039. This implies that the two variables are positively correlated. There is a positive coefficient of correlation of 0.039 at 5% significant level.

H2: Project Resource planning factors have statistically positive and significant effect on the performance of projects in Addis Ababa Health bureau.

The Correlation coefficient between project performance and resource planning is -0.035. This implies that the two variables are negatively correlated. There is a negative coefficient of correlation of -0.035 at 5% significant level.

H3: Project Cost budgeting factors have statistically positive and significant effect on the performance of projects in Addis Ababa Health bureau.

The Correlation coefficient between project performance and cost control is 0.039. This implies that the two variables are positively correlated. There is a positive coefficient of correlation of 0.039 at 5% significant level.

4.5 Regression Analyses

4.5.1 Multiple Regression

Regression is a measure of association between two quantitative variables. Regression analysis is a statistical process for estimating the relationship among variables. It includes many techniques for modelling and analysing several variables, when the focus is on the relationship between a dependent variable and independent variables. The general purpose of multiple regressions is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable. Multiple linear regression analysis

is a constructive statistical technique that can be used to analyse the association between a single dependent and several independent variables. The regression line formula developed as follow:

Assumptions of Multiple Regressions

Not only is the basic equation for the least squares regression line the same in multiple regression, but the assumptions are the same as for simple regression:

- Normality of the distribution
- Linear relationship
- Multicollirearity Test

Evaluation of Normality

- Multiple regressions require that the independent variables in the analysis be normally distributed.
- The skewness statistics for all variables presented in the table below are within the acceptable range for normality (-1.0 to +1.0).
- In the same way the kurtosis statistic for the variables is within the accepted range for the normality.
- All variables meet the assumption of normality. A cautionary note should be added to any finding based on this analysis.

4.7: Regression Results

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
COSTCON	80	1.00	4.67	**3.4500**	**.67890**	**-.811**	**.269**	**.696**	**.532**
RESPLAN	80	1.50	4.33	**2.8521**	**.58821**	**.383**	**.269**	**-.243**	**.532**
COSTBUDG	80	1.00	4.20	**3.1975**	**.66332**	**-.738**	**.269**	**.741**	**.532**
PROJPERF	80	1.17	5.00	3.8063	.79354	-1.658	.269	3.035	.532
Valid N (list wise)	80								

Multicollirearity Test

Multicollirearity exists when independent variables in the regression model are more highly correlated with each other than with the dependent variable. And when the independent variables are highly correlated each other, they are basically measuring the same thing (Field, 2006). The most common approach to evaluating multicollinearity is by examining the tolerance score and the variance inflation factor (VIF). Fritz and Morris (2012) stated that multicollinearity exists when Tolerance is below .10 and VIF is greater than 10. On the table

above for this particular study, all of the tolerance values are greater than .10 and the VIF is less than 10. So, we can conclude that Multicollinearity is not a problem.

Based on the above coefficient table the variable with the higher the Beta value indicated that it contributes more. Based on the relation observed on table above the contribution of Cost control 7.6%, Resource planning -41.9%, and Cost budgeting -2.4%. Cost Control has highest contribution for project performance, the rest are slight contribution.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	T	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	5.208	.689		7.564	.000	3.837	6.579					
	COSTCON	.088	.122	.076	.723	.472	-.155	.332	.039	.083	.075	.992	1.008
	RESPLAN	-.566	.141	-.419	-4.013	.000	-.846	-.285	-.413	-.418	-.418	.992	1.008
	COSTBUDG	-.029	.125	-.024	-.234	.816	-.277	.219	-.035	-.027	-.024	.999	1.001

a. Dependent Variable: PROJPERF

Source: Own Computation

Based on the above coefficient table the variable with the higher the Beta value indicated that it contributes more. Based on the relation observed on table above the contribution of training need assessment 39.6%, training designs -27.6%, training implementation 16.3%, and evaluation of training 63.8%). Evaluation of training has highest contribution for employee performance, training need assessment take the second score in the contribution for employee performance. Multicollirearity exists when independent variables in the regression model are more highly correlated with each other than with the dependent variable. And when the independent variables are highly correlated each other, they are basically measuring the same thing (Field, 2006). The most common approach to evaluating multicollinearity is by examining the tolerance score and the variance inflation factor (VIF). Fritz and Morris (2012) stated that multicollinearity exists when Tolerance is below .10 and VIF is greater than 10. On the table above for this particular study, all of the tolerance values are greater than .10 and the VIF is less than 10. So, we can conclude that multicollinearity is not a problem.

From the below model summary table (4.7) it can be seen that R is 0.421 and R square is 0.17. This indicates about 17.7% of the variance is project performance (dependent variable) can be explained by the overall project cost management (independent variable), the

remaining 82.3.9 % of the variance is explained by other variables that are not included in the study

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.421[a]	.177	.145	.73393

a. Predictors: (Constant), COSTBUDG, COSTCON, RESPLAN

b. Dependent Variable: PROJPERF

The F- test result and the P-value in the ANOVA table above, tests whether the overall regression model is good predictor and the probability of this result is occurred by chance or not. For this particular study the F- test result is 5.451 with a significance of less than 0.002, this means, the probability of those results occurs by chance is < 0.05. This shows that model is significant. Therefore, significant number of project performance is influenced by the Project cost management, statistically significant in predicting how cost budgeting, cost control, and resource planning affect employee performance.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.809	3	2.936	5.451	.002[b]
	Residual	40.938	76	.539		
	Total	49.747	79			

a. Dependent Variable: PROJPERF

b. Predictors: (Constant), COSTBUDG, COSTCON, RESPLAN

CHAPTER-FOUR

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Major Findings

The general objective of this study was to assess the effect of training practice on employee job Performance, the case of Addis Ababa City Government Plan and Development Commission. From the study the following finding were observed:

- According to the correlation result action performed on the cost control was highly correlated and has a positive impact on project performance in the selected company.
- Regression result, From the model summary, it can be seen that R is 0.421 and R square is 0.17. This indicates about 17.7% of the variance is project performance (dependent variable) can be explained by the overall project cost management (independent variable), the remaining 82.3.9 % of the variance is explained by other variables that are not included in the study. This indicate that the selected independent variables have slight effect on the dependent variable of project performance.
- The Multicollinearity assumption test result showed that, the tolerance values of all are greater than the acceptable range of 0.10 and all VIF scores were less than 10. This indicates the predicting variables are more related with the dependent variable than among themselves.
- The ANOVA test result showed that, the value of R and obtained under the model summary part was statistically significant at (F=5.451). From the result we can confirm that

5.2 Conclusion

The study concluded that project cost management significantly influence performance of donor funded project in in Addis Ababa Health Bureau. Project cost management entails processes that are involved in planning, budgeting, financing, funding and controlling costs for the project to be completed within the budget that has been approved. The contribution of Cost control takes higher proportion in determining the project cost management, in which other variables have slight effect and contribution to affect the dependent variable. For effective project cost management, project managers must undertake cost management planning, cost budgeting and cost control.

Control cost as one of the processes of Project Cost Management. Control cost is that process of monitoring the project status to manage the changes to the cost baseline and update the project costs. Control costs processes include: monitoring of project cost performance to

identify the variances; recording of changes; prevention of unauthorized and incorrect changes; communicating authorized changes to stakeholders; and analysis of variances and their effects to the control processes. Resource planning is the process where tasks are allocated to project team members based on their skill sets, capacity, and best fit for the job. Project Cost Budgeting is the implementations of financial management practices lead to improvement in Project performance due to improved ability to track project events from the record system. For a precise cost budgeting, it is essential to carefully implement a resource plan and schedule.

5.3 Recommendations

- Results of the descriptive statics verified that Project Cost Management, explained by project cost control, cost budgeting, and resource planning, is found to be an important determinant of project success in selected organization. Project cost budgeting and resource planning did not get attention in the study target. Hence, project sponsors or owners should consider the need for proper project costs management throughout the project life cycle and due attention should have to be given to the activities which are not properly implemented.
- This study focused on one determinant factor of the Project performance, which is Cost. However, to provide comprehensive research finding future studies that incorporate other Success factors like project schedule, scope, and quality using such model recommended. Moreover, other factors which affect Project Cost Management like stake holders and project owners are also not include. So, it is recommended to study including this and other factors also.

Areas for Further Research

This study was confined to Addis Ababa Health Bureau, it is one of the organizations in which numerous non-governmental organizations work in collaboration with. As a result, the study's conclusions cannot be applied to all funded projects by the non-governmental organizations functioning in Ethiopia in general & in Addis Ababa in particular. As a result, the study recommends more research on factors influencing project performance in all the same topic for various organization and funds in Ethiopian. Furthermore, the investigation was restricted to three major factors influences (cost control, resource planning and cost budgeting). As a result, more research on the other effect of the variables on the performance of funded projects from different sources.

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St. Mary's University

Department of Project Management

This study is conducted in partial fulfillment of Degree of Masters in Project Management at St. Mary University.

Dear Respondents, I would like to inform you that, this questionnaire has purely an academic purpose because I am conducting research in partial fulfilment of Degree of Masters in Project Management at St. Mary University. This questionnaire is designed to collect data for a research paper entitled ***"Impact of Project Cost Management on the Performance of Donor Funded Health Project: The case of Addis Ababa Health Bureau''.*** *To this end, your reply will have a real contribution to the accuracy and use-fullness of the study. The information will be used only for the study and will not be given to any other organization, government department or person. All the data gathered will be kept confidential.*

Your responses are vital to the outcome of the study and hence you are kindly requested to spare 15 minutes to objectively answer all questions. Thank you in advance for your indispensable cooperation to spare your time and energy to complete this questionnaire.

Bezawork Sisay

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I. Socio- Demographic characteristics of sample households

1. What is your gender?

   Male [ ] Female [ ]

2. Age:

   Below 25 [ ] 26-35 [ ] 36-45 [ ] 46-55 [ ] Above 56 [ ]

3. What is your job position?

   Senior Manager [ ] Manager [ ] Officer [ ] Assistance [ ] Other (Specify) ___

4. Which of the following is your highest educational level?

   Post graduate [ ] Under graduate [ ] Diploma [ ]

   Certificate [ ] Other (specify) _____

5. How long have you been worked on Health Projects?

   Below 2 year [ ] 3 to 6years [ ] 7 to 10 years [ ]

   11 to15years [ ] Above 16 year [ ]

6. Project cost, time and scope are the major criteria for measuring project success.

   Yes [ ] No [ ]

7. To what extent does project cost, time, and scope influence on successful project Implementation at Health Bureau?

   A very great extent [ ] A very low Extent [ ] A great extent [ ]

   A moderate extent [ ] A low extent [ ]

II. Questions related with Project Cost Management

Please indicate your level of agreement or disagreement with each of the below statements in reference to the following questions. Tick (√) where appropriate in the space provided for each question. Use a rating scale of SD to SA, where: SD= Strongly disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly agree.

A. Project Cost Control statements

No.	Items	SD	D	N	A	SA
1.	Cost management plan describes how project cost will be managed and control					
2.	Adequate cost control techniques reduce project performance rate					
3.	Daily cost monitoring reduced to cost overrun					
4.	There are proper change control systems					
5.	Project documents are updated regularly to capture any change that may occur during the implementation					
6.	Proper delivery of report based on schedule					

B. Project Resource Planning statements

No.	Items	SD	D	N	A	SA
1.	All the routines and methods for performing tasks in the projects feels necessary and are easy to follow and understand					
2.	The result of the work in the projects are rarely characterized by lack of time					
3.	Project work breakdown structure, deliverables and acceptance criteria documented in the scope baseline are considered when monitoring and controlling the schedule baseline					
4.	Work package are clearly identified and decomposed into schedule activity.					
5.	Estimating activity duration depends on the material availability and financial capabilities of the contractor					
6.	The cost plan is clear and detailed on drawing of specifications					

C. Project Cost Budgeting

No.	Items	SD	D	N	A	SA
1.	There is a well- defined project cost baseline					
2.	There is a clear budget for the project					
3.	The cost aggregate of the project is determined from combined activities from activity level to work package.					
4.	There is a clear budget for the project					
5.	The project cost estimates are realistic					
6.	Funding limit reconciliation is done to ensure					

	minimal variations in the expenditure of the project funds					

D. Project Performance

1.	Project requirements are well captured in requirement management plan					
2.	The project was completed within its budget					
3.	Work performance data are capture at every implementation stage					
4.	There is no indication of cost overrun in project due to effective project cost management					
5.	There is a well-documented and updated project schedule					
6.	Project documents are updated regularly					

Thank you for your time!