



ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF BUSINESS ADMINISTRATION

**THE EFFECT OF PROJECT CONSTRAINTS MANAGEMENT
ON PROJECT SUCCESS IN THE CASE OF CATHOLIC RELIEF
SERVICES ETHIOPIA**

BY – MIHRET TSEGAYE
ADVISOR: DEJENE TULU (PHD)

June, 2025
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**A THESIS SUBMITTED ADDIS BABA UNIVERSITY, COLLEGE OF
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Declaration

I, undersigned, declared that this thesis entitled “The effect of Project constraint Management in the case of catholic Relief Services Ethiopia” is my original work under the guidance and supervision of Dejene Tulu (PHD) and has not been presented for a degree or master program in any other university or institution and all sources of materials used for this thesis have been duly acknowledged.

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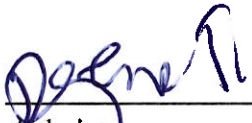
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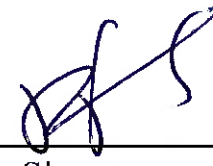
CERTIFICATE

This is to certify that the thesis entitles “The Effect of Project Constraints Management on Project Success in the case of Catholic Relief Services Ethiopia”, submitted to Addis Ababa University College of business and economics for the award of the Degree of Master of Business Administration (MBA) and is a record of research work carried out by Miss Mihret Tsegaye, under my guidance and supervision.

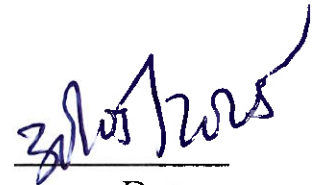
Therefore, I hereby declare that no part of this thesis has been submitted to any other university or institution for the award of any degree or diploma.



Advisor



Signature



Date

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INGOs – International Non-Governmental Organizations

NGO – Non-Governmental Organization

CRS – Catholic Relief Services

PMI – Project Management Institute

PMBOK - Project Management Book of Knowledge

VIF -Variable Inflation Factors

Abstract

Project success is a critical concern for non-governmental organizations (NGOs), particularly in resource-constrained environments where effective management of project constraints time, cost, and scope is essential. This study investigates the effect of project constraints management on project success in the case of Catholic Relief Services Ethiopia. The objective is to assess how the management of these key constraints influences the achievement of project goals in terms of Project Cost, Time and Scope.

The research method used was the quantitative research method and the research design was descriptive and explanatory research design. The primary data was obtained using structured questionnaires that were administered to 183 project and Finance staff by CRS at Ethiopia. The outstanding valid responses were 171 and are analyzed based on descriptive statistics as well as Pearson correlation and multiple linear regression as a way of assessing relations between the independent variables (time, cost, and scope management) and the dependent variable (project success).

The results indicate that the three project constraints which are; time, cost and scope affect the project success positively and significantly. Of these, scope management yielded the most results implying that focusing on how best to specify a project and have it managed has more implication in successful project deliverable than time and cost management process. The second most influential factor was the cost management and the third was time management. These findings demonstrate the relevance of combined constraint management to enhance the work of projects in the NGO environments.

In line with its findings, the study suggests that CRS improves its strength in project planning, definition of scope, budgeting, and monitoring so that it could deal with the constraints to ensure better project outcomes. A further duration of putting resources into staff preparation and institutionalized project management methods will carve out a working future of the organization with successful tasks. Future studies can take the view of a larger scope involving numerous NGOs to get a wider generalizability of the study.

Key Words: Project success, Project Constraint Management, time management, cost management, scope management, Non-Governmental Organizations.

Chapter One: Introduction

1.1 Background of study

Understanding project success is crucial for both practice and research since successful projects significantly improve the performance of the company. (Love et al., 2012; Crosetto and Regner, 2018; Gil and Pinto, 2018).

Many projects involve several stakeholders, each with varying expectations on the project's goals and purpose (Lyytinen & Hirschheim, 1987). In International Non-Government Organizations, the main stakeholders include employees, donors, beneficiaries, and partners. This INGOs participate in different areas such as emergency responses, disaster relief, agriculture, water supply, health and education, women's and children's development and they invest billions of dollars to achieve their aim. So, it is obvious that the importance of INGOs especially for the third world countries especially for our country Ethiopia.

Projects are essential for the existence and development of NGOs, which is obvious. Projects are a major building block for the implementation of organizational strategies, according to Meskendahl 2010.

A project is a one-time or a brief non-repetitive undertaking in which a clear beginning and ending is established. This is the Project Management Body of Knowledge (PMBOK) accepted definition of a project. (Project Management Institute, 2021). The success of a project can be determined by its timeline, financial constraints, and deliverables. (Flaman and Gallagher, 2001). A project is only considered successful, according to (Anthill,1974), if it is finished on schedule, within budget, fulfills the initial deliverables, and is approved and utilized by the intended audience. A project usually needs a specific amount of resources in order to succeed. It is typical for projects to be completed in accordance with detailed plans that take limitations and outside influences into account.

Companies are concerned with a project's overall benefits and value in addition to the iron triangle goals of scope, time, and cost, according to Silvius and Schipper (2014). The success or failure of the projects highly depends on management and achievement of their goals (Lehtonen and Martinsuo, 2006; Kivilä et al., 2017).

With respect to project constraints, PMI (2017) characterizes them as aspects that narrow down the choices available to the project team. These are the restrictions on how the project can be conducted and are useful in defining what the project is all about and what it must deliver. As stated by PMI these constraints are said to be dependent on each other meaning that if one of them changes, the other or others can also change. Lowell et al. (2007) argue that meeting project objectives also requires management of the contradictions posed by the above interdependent constraints or factors. It may be possible for them to ensure that activities are completed on time, within cost and within scope by understanding and effectively managing the constraints of the project. The quality of the outcomes and the general satisfaction of stakeholders can also be impacted by project constraints. (Shou and Yao (2002).

According to PMI (2017), A project time management is a process of identification of activities, their sequence and relations, visualization the needed resources and time, and creating feasible task timetable. But it is important to state that excessive stress on time in a project can make people work under pressure and do not meet the perfection they ought to do. On the contrary, excessive leniency of schedule deadlines may yield carelessness, haste in any assigned tasks and failure to meet ethical obligations where they exist.

Cost constraints of a project are terms of limitations put on the financing of the project. Such financial incumbrances usually limit the project team members in issues regarding the purchase of materials required for the project, the hiring of experts to work on the projects, or the use of creative ideas to solve problems. As per the assertions from Kerzner (2017), for any project to be successful, cost overruns needed to be managed, this erases all financial uncertainty risks associated with resource allocation Cost overruns are a worrying factor in most projects and when they are not addressed do create tension among stakeholders and in some instances leads to project cancellation.

A Project Scope constraint describe the limits of the project in terms of what will be delivered, characteristics and goals. As stated by PMI (2017) Effective scope management is essential to keep a project within the initiated boundaries and avoid incurring more costs and time delays, than planned. On the other hand, ambiguously defined or rolling scope is one of the reasons why requirements are constantly added to the scope of the project during its life cycle, scope creep.

This can lead to increased costs, delays, and confusion among team members about project priorities.

In order for NGOs' initiatives to significantly improve the well-being of the community, they must be successfully completed, claims Kirubel (2018). All pertinent parties, including the government, donors, the organization itself, and its employees, are expected to set goals for them to accomplish. Effectively managing and navigating these constraints is critical to the success of the project.

Project success can be severely impacted by ineffectively managing constraints. Project Scope extends because of limitations on time, budget, and resources which in turn leads to project cost increases and time delays. To extend project success, it is vital especially for project managers to review and strategize on factors that will limit the project to its success (Mahmood et al., 2014).

The study will emphasize on the organization Catholic Relief Services (CRS). Which operated in Ethiopia since 1958. When it comes to helping Ethiopia's most vulnerable communities recover from natural and man-made disasters, CRS has taken the lead. CRS maintains strict standards of efficiency, accountability, and transparency: 92% of their expenditures go directly to programs like Emergency Response and Recovery, Agriculture, Health, Peace building, water security, Partnership and capacity Building. so the primary goal of this study is to ascertain how project constraints, when solely taking into account the triple constraints management, affect the project's success at CRS.

1.2 Statement of the problem

According to (Beleiu, Crisan & Nistor 2015) A project is successful when its goals and outcomes are achieved within the constraints of current performance, cost, and time constraints.

The primary success criteria of meeting project scope and budgetary constraints are outlined by (Project Management Institute [PMI], 2004). A project's ability to meet its overall goals, scope, budget, and time is what defines its success in project management. On the contrary, the consistent development of the project goals is the underlying basis to determine the project success (Cooke-Davies, 2002).

Therefore, project success has been a concern of interest within project management literature, (Handfield, 2015). A project is deemed successful when it has maintained its defined technical

factors that include; quality, cost and time as per the schedule and within the projected budget although it has already been completed (Frimpong, 2003).

The imposition of project constraints also negatively affects the project success rate (Haq, 2017). Additionally, projects may be constrained by other limitations such as time, which may affect the outcome of the project and may result to poor project outcomes, poor stakeholder relationships and may bring about disgrace to the project management team. In most cases, projects fail mainly due to inadequate planning, constant changes in the project scope, budget overrun, and completion of the project beyond the due date.

The nature of organizations like INGOs, they are expected to apply Project management widely. Especially for NGOs mainly who works on humanitarian Aid, their mission are achieved and their strength measured with their projects success. And not meeting a required specification by donors lead them to lose their projects. A scope change is a major contributing factor for project failure in most projects. (Kaliba et al., 2009; Liu et al., 2011).

Whereas several research papers have researched on the idea of connection between project constraints and project success, within the public or private sectors, little research has been conducted based only on International Non-Governmental Organizations (INGOs) established in Ethiopia. Besides, majority of the previous research are inclined to pursue such relationships in construction projects or infrastructure projects but not in humanitarian projects or development projects. This creates a puzzle on contextual and empirical correlation between management of cost, time and scope, and project success to organizations such as Catholic Relief Services (CRS) involved in the management of multi-sectoral projects in the dynamic and limited-resource environment. The relevance of this gap is that it can close the knowledge gap in academia and it can also enhance donor-funded interventions in the area of concern.

Considering the theoretical understanding of project management, some of the well knowing planning functions are determining the availability of needed resources, budgeting, and the allocation of specific tasks. these planning stage have a direct impact on the variables cost, time and scope as a factor for the success of the project, this study is proposed to analyze the effect of the project constraints management on the on the project's success in CRS Ethiopia.

1.3 Research Questions

1. What is the effect of Project cost management in project success?
2. What is the effect of Project scope management in project success?
3. What is the effect of project time management in project success?

1.4 General objective

The overall aim of this study is to analyze the effect of Project Constraints on Project Success in Catholic Relief Services Ethiopia.

1.5 Specific Objective

1. To examine the effect of cost management in project success.
2. To examine the effect of scope management in project success.
3. To examine the effect of time management in project success.

1.6 Definition of key terms

Project – is launched in pursuit of the production of a particular good, service or outcome. Projects are usually limited by starting and ending dates as well as factors like scope, cost and duration. Projects are not the same as day-to-day activities but are often created to perform particular tasks or meet objectives within a limited period of time.

Project Management - is defined as a process of issuing instructions and incorporating participants, ensuring appropriate distribution of roles and responsibilities with an end goal of delivering the defined project requirements. All these activities can be named as project management – applying processes, benefits management, and project management methods so that the different characteristics of the project scope, time or schedule, cost and budget, quality, risk, and people are optimized. Project management provides a means of ensuring that the intended work is completed to an acceptable standard, within the prescribed time and at an agreed upon cost.

Project Constraint - are parameters, which can either be constraints or restrictions as to project implementation.

Project Success - Project success is essentially fulfilling the stated objectives and goals of the project from conception to completion in time, at a cost and with the scope specified. However, project success does not always have an exact definition and often it is an individual assessment depending on the project participants' as well as ends.

A Project time can be interpreted as a behavior pattern that seeks to optimize the use of time in the course of the performance of certain task-oriented activities (Claessens, 2007)”

Project costs are the funds necessary for the realization of the project, and they are some of the basic factors of management (Jovanovic, 2003)

Project scope is the process whereby a project is defined and prepared for execution (Mohammed K. Fageha*, Ajibade A. Aibinu, 2013).

1.7 Significance of the Study

This research will greatly benefit a number of stakeholders including CRS and other NGOs, donor agencies, project managers, future research and academics students. The results of this study will be important for the management of CRS to understand and measure their success. Also, it will be necessary to determine to mitigate strategies to address the constraints.

Determining the elements that influence the success of projects would also help monitoring and evaluating teams, to know which areas to focus on when monitoring and evaluating projects. In the future, researchers and academics will benefit from the study because it identifies areas that need further research to develop the question of variables that influence the implementation of citizen projects.

1.8 Scope of the study

The current study is limited to the constraints of time, scope, and cost. CRS Ethiopia Program is handling Twenty-Five active projects, from these projects this research scope is limited to only on the Fifteen Projects which are being funded by external donors. The Fifteen projects are actively working on the areas of health, emergency, development, Wash, Peace building, Agriculture and Livelihoods.

1.9 Limitation of the study

Catholic Relief Services Ethiopia Program was the subject of this study, and because of the uniqueness of projects and the wide range of project success areas, the conclusions from this study determined only by scope, time and cost.

Chapter Two: Related Literature Review

2.1 Theoretical Review

2.1.1 Introduction

The chapter examines past research on the effect of project constraints on project success. It presents insights from existing literature by scholars and researchers in this area, organized according to specified objectives for relevance. It establishes theoretical foundations for the research. Additionally, it outlines a conceptual framework, delineating independent and dependent variables.

2.1.2 The Role of Project Constraints in Project Management

The Project Management Institute (PMI) defines project constraints as elements that inhibit the options available to the project and its results (PMI, 2021). The so-called constraints arise in the project management triangle with three main factors: scope, time and cost (Kerzner, 2017). However, other things would include quality and risk and resources as well, which current scholars in the field of project management do encourage treating as one of the several top of the line project constraints (Schwalbe, 2018).

Cost Management: Control of a budget in a project has been found to be an action that has a correlation with the achievement of project objectives (Zhao et al. 2021). The constraints that deficiencies might lead to are well known in building development projects and therefore will affect the implementation of the project in scenario (Kwak & Anbari, 2009).

Scope Management: Scope management is the process of defining and controlling what work is or is not included in the project. Scope management studies show that ‘scope creep’ or unregulated scope changes in projects, is one of the project risk factors for which (Wang and Gibson 2020) used the Prevention through Design strategy.

Time Management: All project objectives are achievable if time is adequately controlled. According to research conducted by (Shenhar and Dvir 2007), deadlines have a significant impact on project execution performance. Schedule slippages give rise to cost overruns and poor-quality work, which negatively affects project success. Integrated Approach to Constraints Management

An example of a project performance metric consists of integrating and simultaneously working within the defined project constraints. Based on the study conducted by (Zwikael and Smyrk 2011) project performance could be improved by developing an integrative concept encompassing several types of constraints. Their research indicates that better performance of projects is achieved with a reasonable compromise on scope, time, cost, quality, risk and resources management.

2.1.3 Understanding Project Constraints and Their Impact

The research on the control of constraints carried by Mir and (Pinnington 2014) proves that effective management of project constraints plays a crucial role in success of project management. For example, in situations where international NGOs have scarce resources, effective constraints on the projects are necessary so that the projects achieve their benefits in terms of time and budget (Kaliba et al 2009). The work of (Muriithi and Crawford 2003) discusses the problems in NGOs specific to controlling these constraints and how these problems are solved, which translates into how well a project is performs.

2.1.4 Project Success

According to (Baker, Murphy, and Fisher 1988), a project's perceived success is subjective, and it is most likely to be viewed as a "overall success. (Cooke-Davies 2002) made a distinction between the success of projects and project management. To put it simply, a project is successful when it meets its business objectives, and a project management project is successful when it is completed on schedule, within budget, and with acceptable quality or performance. Given the large percentage of unsuccessful projects more than one-third of them fail to meet their goals the success of a project's link to success is even more crucial (PMI, 2013). acknowledging that achievement varies from person to person (Shenhar et al, 2001).

Since projects are temporary in nature, the PMBOK Guide states that completing the project within the agreed-upon parameters of scope, time, money, quality, resources, and risk by the project managers and senior management constitutes a successful project. Project managers and their teams can execute the project in accordance with their plans only if they have a clear understanding of the requirements from the beginning. This can only be achieved through project planning, which provides the necessary guidance (Nader, Abdollahi, 2011).

According to (Kagiri's 2005) examination of time and cost overruns, delays and cost overruns in Kenyan projects were caused by subpar vendor performance as well as inadequate project planning and resource allocation. The study also discovered that government bureaucracy and ineffective risk distribution were factors in delays and cost overruns. Karimi (2008) identifies five elements that contribute to cost overruns: infrastructure, project specification, project management, project organization, and project organization. Mwangi (2006) investigated the crucial factors that affect project management in the area using a case study from the local community. The inefficiency of project management was caused by weak monitoring and control systems, poor communication, and unskilled project managers.

The authors (Mir and Pinnington, 2014) explained that the measure of project success is not only about delivering a rigorous schedule within budget constraints but ultimately on how well it satisfies stakeholder expectations. Todorović et al. Based on the three areas, Luego & Tucker (2015) as a key challenges and relevant success criteria of them can improve project management performance greatly. Regularly Updating and Maintaining Project Plans Is Key to Success. They will also argue repeatedly that for a project plan. It all comes back to the true achievement or failure of a project with its projects scope and objectives leading in deciding whether it achieved success. Having an established well-defined set of goals at the onset is imperative, as this act lends itself valuable for performance measurement.

2.1.5 Project Success Criteria

According to Cooke-Davies (2002) there are some new approaches in management corresponding to the project-economics-restorative, in which any undertaking requires viewing its value in relation to the strategic concern of the company. This helps in execution of projects to ensure that the resultant outcomes are in sync with the overarching objectives of the institutions in which such projects are undertaken and that go beyond the immediate outcomes of the project as a stand-alone.

Jugdev and Muller (2005) mentioned that success factors are the factors to achieve established goals and objectives. Further, Jugdev and Muller's (2005) retrospective study of the concept of success factors indicated that during the 1960's and the 1980's, the literature on success factors is largely limited to time, cost, specification, and some extent client satisfaction. During 1980-90's the stress was much on a project being a success or failure. Mid 90's saw some publications

involving stakeholder satisfaction. During 1990's- 2000's, there are contributions in the form of integrated frameworks. Now during 21st century, the concept took a rationale on the agreement on CSF's before start of the work and empowerment of the project manager to achieve goals (Jugdev and Muller, 2005).

2.1.6 The Iron Triangle

Across industries, the Iron Triangle criteria are the most cited measures of project success (Bryde, 2008). In a study of project manager's experience of projects, White and Fortune (2002) found that, most project managers reported using the Iron Triangle as their primary way of defining project success.

The Iron Triangle is a representation of the most basic criteria by which project success is measured, namely, whether the project is delivered by the due date, within budget, and to some agreed level of quality, performance, or scope. The Iron Triangle has become the standard for routinely assessing project performance (Pinto, 2010, p. 35).

As per different scholars One popular interpretation is to replace Quality with Scope in the iron triangle (Badewi, 2016; van Wyngaard et al., 2013). van Wyngaard et al. (2012, p. 1991) stated that "Although the triple constraint theme has various interpretations, the literature shows a general agreement that project scope, time and cost comprise the three key triple constraint variables and these authors argued that it would be more useful to include Scope, than Quality, as one of the vertices in the Iron Triangle. Mokoena et al. (2013) also took this position, defining that Scope in the Iron Triangle is made up of three aspects. Atkinson (1999) proposed that information systems and organizational and stakeholder benefits should be added to the Iron Triangle, transforming it into a "square root". Others have adapted this idea, such as Schwalbe (2009) who suggested that the criteria should be Scope, Time, Cost and Quality. Pinto (2010) advocated for the addition of client acceptance as a fourth essential constraint in the Iron Triangle. The literature generally agrees that project scope, time, and cost are the three main triple constraint variables despite the fact that the triple constraint theme is interpreted differently. These authors contended that it would be more beneficial to include scope as one of the Iron Triangle's vertices rather than quality. Mokoena et al. (2013) adopted a similar stance, stating that the three components of scope in the

Iron Triangle are specifications, standards, and quality. Other options that have been proposed are Performance and Requirements.

Adding more criteria is another way that authors have responded to their concerns with Quality as a third criterion. Schwalbe (2009) proposed that scope, time, cost, and quality be the criteria. Pinto (2010) argued that the Iron Triangle should include customer acceptance as a fourth necessary constraint. In a similar vein, Williams et al. (2015) noted that other factors pertaining to client relationships, such as customer satisfaction, had to be included when evaluating the success of a project. Similar to this, Kliem and Ludin (1992) proposed adding human or soft features to the Iron Triangle as a fourth dimension. The successful completion of a project is decided with the beginning and end of project dates, together with the budget and reliability Woramol, Muhammad, Shujahat, M Javid and Sonia (2023)

2.1.7 Project Monitoring and Evaluation

An additional useful feature of the Building Learning Foundations Program is monitoring and evaluation, which, when applied appropriately, should offer ongoing input on how the project is being carried out and help identify potential obstacles and successes so that prompt decisions can be made. Regretfully, this has a poorly understood role in many initiatives, which has a detrimental effect on the projects (Bosibori & Otieno, 2021).

Research has indicated that programs with inadequate or nonexistent monitoring and assessment procedures typically have low performance ratings in terms of scope, timeliness, and resource usage. Successful programs are able to continue even after the donor leaves (de Bruin, Mikhail, Noel, & Barron, 2019).

To satisfy a wide range of stakeholders, aid agencies must adhere to strict project reporting criteria. Project monitoring and evaluation (M&E) is often a financial requirement, with the belief that it helps with reporting. (Shenhar & Levy, 1997; Bryce & Crawford, 2003). Another instrument for project planning and evaluation that is frequently utilized in the aid sector is the logical framework approach (LFA). (Baccarini, 1999)

2.1.8 Theory of Constraints

Based on the notion of system thinking and constraint management, managers can successfully manage organizations by applying the theory of constraints (Gupta & Tionson, 2018). Construction projects require a multi-party working environment, which presents needs and restrictions that complicate project management (Lau and Kong, 2006). As a result, managing constraints is essential to good project management. Most projects are challenging to manage because they entail uncertainty and three conflicting commitments: content, budget, and deadline. This is according to Jacob and McClelland (2011). Project success is measured by the triple constraints criteria (time, scope, and cost) that are widely recognized in project management.

2.2 Empirical Literature Review

Ullah, Nazim et.al (2023) on their research after performing a systematic literature review to gather relevant articles related to the effects of triple constraints on project management ranging from 2010 to 2023 the study concludes that the quality of the project is highly depended on the time and budget. However, inadequate management, stakeholders' involvement are also play crucial roles towards project success. Research studied in Tanzania, Chiguru, J. (2019) also argues that triple constraints contributed 53.5% in project management success while other factors contributed 46.5%.

(Frimpong, 2003) on his study in the case of Ghana it indicates that factors such as project cost, scope, and time play crucial roles in project success. Effective project planning, controlling, and monitoring are essential to minimize or avoid delay and cost problems in groundwater construction projects. By addressing issues related to project cost, scope, and time, project managers can enhance project performance and reduce the likelihood of delays and cost overruns.

On the study The Effects of Project Triple Constraint on Malaysia Building Projects by Hassan, Adeleke, and Taofeeq (2019) The findings clearly showed that the project triple constraint (time, cost, and quality) had a positive relationship with the construction companies. Mokonea (2013) in his research also support Lack of understanding and poor management of the triple constraint (time, cost and scope) elements contribute to project failures.

Another study by Muringo (2012) discovered that project manager competencies affect the successful execution of donor-funded projects. It was found that as compared to technical and academic qualifications, project manager self-presentation and emotional competency skills affected the projects success more positively.

Isensi (2006) studied the factors that contribute to project failure in Kenya, focusing on participation and argued that poor project design, inadequate methodologies, lack of expertise, underestimation of the project time, and lack of proper cost estimation were responsible.

Mullay 2003 identified the lack of clarity in scope as one of the key reasons why projects fail to achieve the expected results within time, cost and the required quality.

2.3 Research Hypothesis

H₁: Effective project cost management positively impacts project success.

H₀: Effective project cost management doesn't have a positive impact on project success.

H₂: Effective project scope management positively impacts project success.

H₀: Effective project scope management doesn't have a positive impact on project success.

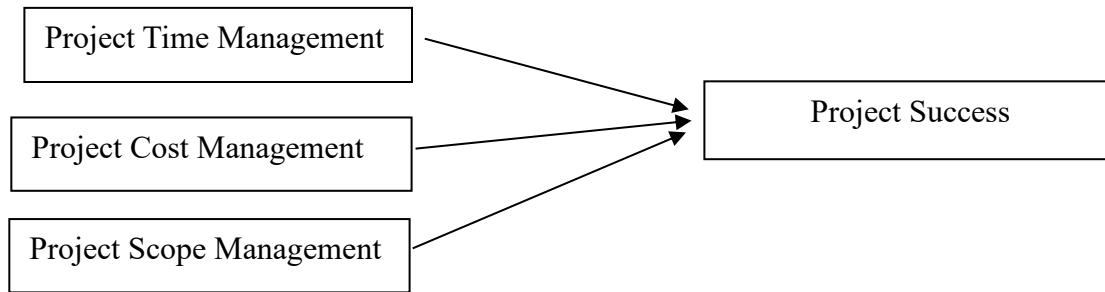
H₃: Effective project time management positively impacts project success.

H₀: Effective project time management doesn't have a positive impact on project success.

2.4 Conceptual Framework

This research work tries to assess the effect of Project Cost Management, Project Time management and Project Scope Management on the Project success. Based on the above literature review the below conceptual framework is developed.

Figure 1 Conceptual Framework



Source – (based on the above theoretical Review, 2025)

Chapter Three: Research Methodology

3.1 Research Design

According to Saunders, Lewis, & Thornhill (2019) Explanatory research is about cause-and-effect relationships between variables, trying to test a hypothesis based on data, usually using quantitative methods such as experiments or surveys. This study uses an explanatory research design that explores relationships between two or more variables and provides explanations of underlying structures and influence. Data will be interpreted, and hypotheses tested through descriptive analysis. This method is suitable for parsing the organizational scenario and providing insight into the lived experiences and perspectives of CRS staff in finance and program roles.

3.2 Research Approach

Quantitative research approach will be used to analyze a number and systematize the test hypothesis. Based on statistical methodology, this method allows it to be used to explore relations between variables in order to derive data-driven insights. According to Watson (2014) quantitative research entails measurement and presumes that the phenomena of study can be computable. It aims to analyses data for trends, relationships and confirm the measurements recorded. The research will use secondary data from reviewed literature and organizational records for interpretation of results. Respondents will be selected based on purposive sampling, targeting staff within the finance and program departments who possess relevant expertise and insights.

3.3 Data type and source

This research will involve both primary and secondary data sources. The primary data will be collected through survey questionnaires, while secondary data will be gathered from literature, reports, and organizational records. For the primary data structured questionnaires will be distributed to finance and program staff at CRS, capturing their insights on various study variables and for the secondary data relevant literature and internal reports will provide additional context and help frame the findings within existing research.

3.4 Study Population

The study population comprises all 183 CRS staff members within the finance and program departments, specifically including 31 finance and 152 program staff, according to Human Resources data. To achieve a representative sample, a stratified sampling method will be used, ensuring proportionate representation of both departments. This approach minimizes sampling bias and allows generalizing results across the study population.

3.5 Data Collection Method

Data collection will involve a structured questionnaire designed to measure variables across dimensions such as perceptions, experiences, and outcomes related to staff roles. The questionnaire will have Likert-scale questions to capture varying levels of agreement or perception, enabling ordinal-level measurement. Prior to administration, a pilot test will be conducted with a small subset of staff to ensure the clarity, relevance, and reliability of the questions, with adjustments made based on feedback. Once finalized, the questionnaire will be distributed electronically via email, with follow-up reminders sent to maximize response rates.

3.6 Data Analysis Method

The data analysis will follow a structured approach, beginning with data cleaning and preparation, where incomplete or invalid responses will be excluded. Next, descriptive statistics, including means, standard deviations, and frequencies, will be generated using SPSS to summarize demographic data and provide an overview of respondent characteristics. Hypothesis testing will then be conducted using statistical methods like correlation or regression analysis to explore relationships between variables. Finally, findings will be interpreted and visualized through tables, charts, and graphs for clear communication of results. SPSS is chosen for its robust ability to handle large datasets and perform advanced statistical analyses, ensuring a thorough evaluation of variable relationships.

3.7 Ethical Issues

All data will be collected in compliance with ethical standards, ensuring confidentiality and anonymity for respondents. Respondents will be informed about the study's purpose, and their participation will be voluntary. Collected data will be securely stored, accessible only to authorized

researchers. Any additional information relevant to the research will be clarified with respondents before data collection. It will be emphasized to participants that none of the information gathered during the study will be used to compromise their organizations welfare.

3.8 Validity and Reliability

To distinguish those variables (questions) which reflect different underlying variables the overall reliability and validity test will be checked. Cronbach's alpha is a coefficient that is used to measure reliability or internal consistency of items; it indicates how closely the items are related to each other, and how free they are from bias (Sekaran & Bougie, 2009). If Cronbach's alpha value is more than 70% for all variables, then reliability is assumed. The questionnaire involved the three dimensions from an organizational perspective to the effect of Project Constraints management on Project Success in Catholic Relief Services. The questionnaire consisted of 19 items in which five points rating scale was used. George and Mallery (2003) provide the following rules of thumb while interpreting reliability, coefficients: $\geq .9$ --Excellent, $\geq .8$ -- Good, $\geq .7$ --- Acceptable, $\geq .6$ - Questionable, $\geq .5$ -- Poor and $.5 \leq$ – Unacceptable. Thus the reliability for the scale was found to be good.

Table 1 Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.778	19

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Evaluating Project cost estimation is important in project management success	66.43	74.681	.354	.768
Regularly we monitor budget performance during the project life cycle	66.19	74.604	.317	.770

Almost all the projects that are completed within budget are mostly able to achieve their set targets.	66.14	77.615	.156	.779
According to my experience, the exceptionally high costs incurred over projections of a project are one of the greatest contributors to project failure	66.36	72.021	.408	.764
The management of budget is one of the main reasons for the success of the stakeholders.	66.33	73.576	.324	.770
Practicing or having a strict cost management system helps to increase the rate of success of projects	66.38	78.308	.104	.783
The organization incorporate risk mitigation strategies to prevent cost overruns	66.56	72.201	.396	.765
Clarity on project scope requirements is also important when it comes to the success of the project.	66.92	67.958	.623	.748
Scope changes (or scope creep) have a very high potential of overrunning the project's term and may even delay the whole project	67.02	67.152	.613	.747

Tracking and controlling the project scope on a regular basis contributes to the achievements of the objectives of the projects	67.14	66.557	.731	.740
Every one of the stakeholders should be able to know the scope of the project so as to make it successful	67.22	65.444	.696	.740
Projects have turned out to have better outcome when the scope of the projects has been closely adhered to the defined scope.	66.58	69.363	.644	.749
frequenry project scope changes occurs in our project	67.67	83.518	-.187	.809
Working within the time set for a certain project is one of the critical aspects of project management	67.84	81.240	-.088	.802
Time is a precious again and if used effectively, it helps to relieve team stress thus enhances the team's performance	66.13	78.305	.139	.780
Time overruns negatively impact the success of my projects	66.35	73.759	.348	.768
Regularly updating the project schedule is crucial for successful time management	66.94	66.919	.733	.741

Projects that consistently meet their time targets are more successful.	66.65	70.263	.516	.756
Frequently delays caused by external factors beyond the project team's control	67.56	81.624	-.100	.794

Source: (The researcher's Survey data, 2025)

Chapter Four: Data Analysis, Interpretation and Discussion

4.1 Introduction

The purpose of this paper is to examine the effect of Project Constraints on Project Success in Catholic Relief Services Ethiopia. To achieve this purpose, relevant literature was reviewed, and methodology was set in chapter two and three respectively. This chapter outlines the result of data analysis obtained from data collected from respondents. The information gathered is analyzed, the results are presented, and the result of testing hypothesis in the following sections.

4.2 Response Rate of the Respondents

A total of 183 questionnaires were distributed, out of which 171 (93 .4%) were returned on time and hence used in the analysis process, while 12 (6.6%) of the respondents did not return for various reasons.

4.3 Demographic Profile of the Respondents

This aspect of the analysis dealt with the basic data on the respondents of the questionnaires sent to them. The demographic information comprised of the respondents' job role, size of the project and the number of years spent with the Catholic Relief Services.

4.3.1 Period of respondent has been working with CRS

The respondent were also requested to indicate how long they have working with CRS.

Table 2 Respondents work experience

		Frequency	Percent
Valid	1-3 years of experience	54	31.6
	4-6 years of experience	57	33.3
	7-10 years of experience	47	27.5
	more than 10 years of experience	12	7.0
	5	1	.6
	Total	171	100.0

(Source: The researcher's Survey data, 2025)

The available data shows project management or the finance sector indicates a diverse range of expertise among respondents. The majority, 33.3% (57 respondents), have 4-6 years of experience, making this the most common experience level. This is closely followed by 31.6% (54 respondents) with 1-3 years of experience. Additionally, 27.5% (47 respondents) have 7-10 years of experience, while a smaller group of 7.0% (12 respondents) has more than 10 years of experience at CRS. These statistics indicate that most employees possess sufficient duration at CRS to deliver trustworthy and precise observations regarding the research topic.

4.3.2 Respondent typical size of the projects manage in CRS

The respondents were requested to indicate their project size which they involved.

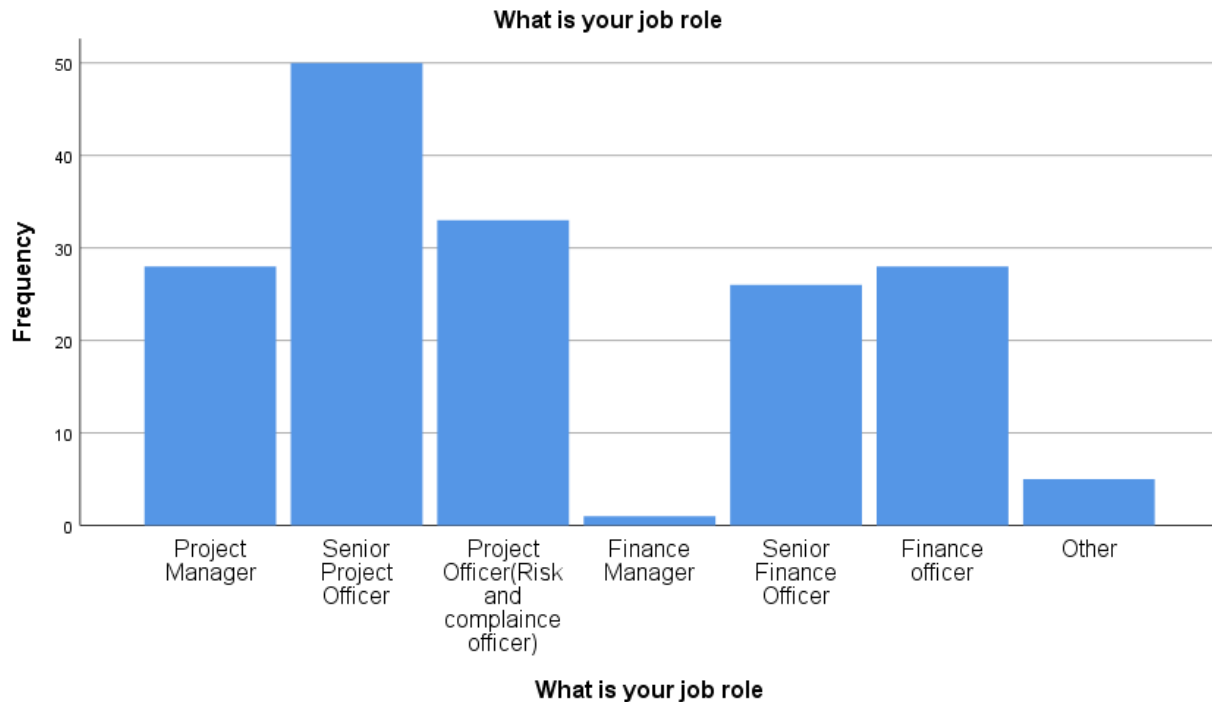
Table 3 Project Size

		Frequency	Percent
Valid	Small (less than \$500,000 - \$1 million) Small (less than \$500,000 - \$1 million)	29	17.0
	Medium (1million - \$5 million)	48	28.1
	Large (more than \$5 million)	94	55.0
	Total	171	100.0

(Source: The researcher's Survey data, 2025)

From the study finding 55% of the respondents involves in large size projects in Catholic Relief Services, 28.10% of the respondents involves in a medium size the projects at in Catholic Relief Services and 17 % of the respondent involved in a small size projects. This shows that majorities respondent manage or involved in a large size Projects at catholic relief services which is long enough to comprehend and give reliable and accurate information on the study.

Figure 2 Respondent job role in CRS



(Source: The researcher's Survey data, 2025)

From the study finding 50 (29.2%) of the respondents were senior project officer, 33 (19.3%) of the respondents were project office, 28 (16.4%) of the respondents were project managers, 28 (16.4%) of the respondents were finance officer, 26 (15.2) of the respondents were senior finance officer, 1 (0.6%) of the respondent was a finance manager and 5 (2.9%) of the respondents were included in others (chief of party, Technical advisors and Project assistants) at catholic relief services.

4.4 Descriptive Statistics

In this section various statistical data analysis tools such as mean, standard deviation, frequency and percentile are used to analyze the collected data. The summary of descriptive statistics of all variables that are evaluated based on a 5-point Likert scale ("1" being "strongly disagreed" to "5" being "strongly agreed").

According to Zaidaton & Bagheri (2009) the mean (M) score between 4.21-5.00 is considered as the respondents strongly agreed (SA), if the respondents score between 3.41-4.20 means they agreed (A), the score between 2.61-3.40 is considered as the respondents are neutral (N), the respondents score between 1.81-2.60 shows that they disagreed and if the respondents score

between 1-1.80 shows that they strongly disagreed Thus, detail of the analysis is presented as follows:

4.4.1 Assessing of Project Constraints on Project Success in Catholic Relief Services.

In order to see the general perception of the respondents regarding the selected dimensions in the subject Catholic Relief Services, the researcher has summarized the measures with the respective means and standard deviations. Thus, the mean indicates to what extent the sample group averagely agrees or disagrees with the different statements. The lower the mean, the more the respondents disagree with the statements. The higher the mean, the more the respondents agree with the statement. On the other hand, standard deviation shows the variability of an observed response from a single sample Marczyk, Dematteo and Festinger (2005).The mean values are presented in table bellows, together with standard deviation values for each variable.

Table 4 Descriptive statistics for project Cost management

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Evaluating Project cost estimation is important in project management success	171	1	5	4.04	.877
Regularly we monitor budget performance during the project life cycle	171	1	5	4.27	.964
Almost all the projects that are completed within budget are mostly able to achieve their set targets.	171	1	5	4.33	.880
According to my experience, the exceptionally high costs incurred over projections of a project are one of the greatest contributors to project failure	171	1	5	4.11	1.096

The management of budget is one of the main reasons for the success of the stakeholders.	171	1	5	4.13	1.090
Practicing or having a strict cost management system helps to increase the rate of success of projects	171	1	5	4.09	.913
The organization incorporate risk mitigation strategies to prevent cost overruns	171	1	5	3.91	1.100
Project Cost Management	171	2.43	4.86	4.1253	.50598
Valid N (listwise)	171				

(Source: The researcher's Survey data, 2025)

Respondents answered seven questions related to costs management, in the above analysis achieving a mean score of 4.1253 with standard deviation 0.50598. This result indicates that Project Cost Management Positively Impacts Project Success at CRS.

Table 5 Descriptive statistics for project Scope management

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Clarity on project scope requirements is also important when it comes to the success of the project.	171	1	5	3.55	1.128
Scope changes (or scope creep) have a very high potential of overrunning the project's term and may even delay the whole project	171	1	5	3.44	1.213

Tracking and controlling the project scope on a regular basis contributes to the achievements of the objectives of the projects	171	1	5	3.33	1.095
Every one of the stakeholders should be able to know the scope of the project so as to make it successful	171	1	5	3.25	1.231
Projects have turned out to have better outcome when the scope of the projects has been closely adhered to the defined scope.	171	1	5	3.89	.979
frequently project scope changes occurs in our project	171	1	5	2.80	1.254
Project Scope Management	171	1.40	5.00	3.4959	.94666
Valid N (listwise)	171				

(Source: The researcher's Survey data, 2025)

Six questions evaluated scope as one of the dimensions. The total average score for Scope amounts to 3.4959 with a Standard Deviation of 0.9466. The results demonstrate that Catholic Relief Services Project Scope Management has a positive effect on project success.

Table 6 Descriptive statistics for project Time management

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Working within the time set for a certain project is one of the critical aspects of project management	171	1	5	2.63	1.246
Time is a precious again and if used effectively, it helps to relieve team stress thus enhances the team's performance	171	1	5	4.33	.775

Time overruns negatively impact the success of my projects	171	1	5	4.12	1.011
Regularly updating the project schedule is crucial for successful time management	171	1	5	3.53	1.064
Projects that consistently meet their time targets are more successful.	171	1	5	3.81	1.085
Frequently delays caused by external factors beyond the project team's control	171	1	5	2.91	.935
Project Time Management	171	2.00	4.67	3.5527	.53491
project success	171	2.27	4.74	3.7191	.52964
Valid N (listwise)	171				

(Source: The researcher's Survey data, 2025)

The study found that Time management at Catholic Relief Services reached the mean score of 3.5527 on time management evaluation with a standard deviation of 0.53491. The respondents strongly agreed (4.33) about stress reduction from quality time management while they showed weak agreement (2.63) regarding project time achievement which points to possible time adherence problems. This implies that Catholic Relief Services Project Time Management Positively Impacts Project Success.

4.5 Relationships between Dependent and Independent Variables

One of the major objectives of this study is to assess the relationship between of Project Constraints and Project Success in Catholic Relief Services. Specifically, the relationship between cost and project success, scope and project success and time with project success . For this purpose, statistics of Pearson correlation and regression analysis have been used.

4.5.1 Correlation Analysis

This section discusses the relationship between Dependent (project success) and Independent Variables project success with time, scope and cost dimensions. According to Marczyk, Dematteo and Festinger(2005) correlations of .01 to .30 are considered small, correlations of .30 to .70 are considered moderate, correlations of .70 to .90 are considered large, and correlations of .90 to 1.00 are considered very large. Pearson correlation coefficients reveal magnitude and direction of relationships (either positive or negative) and the intensity of

the relationship (−1.0 to +1.0). Positive correlations indicate that both variables move in the same direction. Conversely, a value of -1 represents a perfect negative relationship. Negative correlations indicate that as one variable increases, the other decreases; they are inversely related. A zero indicates no correlation. Correlations are perhaps the most basic and most useful measure of association between two or more variables (Marczyk, Dematteo & Festinger, 2005).

Table 7 Correlation Analysis

Correlation				
	Project Cost Management	Project Scope Management	Project Time Management	project success
Project Cost Management	1	.577**	.314**	.752**
		.000	.000	.000
	171	171	171	171
Project Scope Management	.577**	1	.394**	.900**
	.000		.000	.000
	171	171	171	171
Project Time Management	.314**	.394**	1	.659**
	.000	.000		.000
	171	171	171	171
project success	.752**	.900**	.659**	1
	.000	.000	.000	
	171	171	171	171

Source: (The researcher's Survey data, 2025)

Statistical results from the above correlation analysis demonstrate strong relationships between project management elements and project achievement success. Project scope management shows the highest positive correlation ($r = 0.900$) with project success ($p = 0.000$), proving that proper definition and management of project scope are key factors for success. Project cost management establishes itself as a key contributor to project success, with a correlation value of $r = 0.752$ and a p-value of 0.000. Project time management stands out due to its high positive connection to project success rates ($r = 0.659$, $p = 0.000$), given its significance for scheduling and timely execution. A moderate relationship exists between project cost and scope management ($r = 0.577$, $p = 0.000$), and there are both weak to moderate and moderate correlations between project cost and time management ($r = 0.314$, $p = 0.000$) and project scope and time management ($r = 0.394$, $p = 0.000$).

4.5.2 Regression analysis

In this study, prior to employing regression analysis and testing the research hypothesis, a preliminary analysis was revealed to validate the important assumptions of regressions such as Multicollinearity, linearity, and normality tests.

4.5.3 Normality Test

In statistics, normality tests are used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. Skewness is a measure of symmetry. As a general rule of thumb, if skewness value between -0.5 and 0.5 then the distribution of the value is almost symmetrical, if skewness value between -1 and -0.5 data is negatively skewed and if it is between 0.5 to 1, the data is positively skewed then skewness is moderate and If the skewness is lower than -1 (negatively skewed) or greater than 1 (positively skewed) then data is highly skewed (Brown, 2016). Whereas kurtosis is a measure of whether the data are heavy tailed or light tailed relative to the normal distribution.

Table 8 Descriptive statistics for Skewness and Kurtosis Test

Descriptive Statistics					
	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Project Time Management	171	-.556	.186	-.047	.369
project success	171	-.382	.186	.111	.369
Project Cost Management	171	-.864	.186	.467	.369
Project Scope Management	171	-.235	.186	-.686	.369
Valid N (listwise)	171				

(Source: The researcher's Survey data, 2025)

The skewness values indicate the symmetry of the data distribution for each variables. Project Cost Management has a skewness of -0.864, which falls between -1 and -0.5, indicating a moderate negative skew. Project Scope Management has a skewness of -0.235, which falls between -0.5 and 0.5, indicating an almost symmetrical distribution. Project Time Management has a skewness of 0.556, which falls between -1 and -0.5, meaning it is moderately negatively skewed. Lastly, Project

Success has a skewness of -0.382, which also falls between -0.5 and 0.5, indicating that the data is approximately symmetrical.

4.5.4 Multicollinearity Test

Multicollinearity is defined as the degree to which the independent variables used in a multiple regression analysis are correlated (Zikmund et al., 2013; Ramadan et al., 2017). Multicollinearity reduces the ability to assess the individual importance of each independent variable. For multiple regressions, the researcher has checked the Collinearity problem with the assumption of tolerance and VIF statistics. In order to assess Multicollinearity, both indicators of variance inflation factor (VIF) and tolerance were used. Andy (2006) suggests that a tolerance value less than 0.1 almost certainly indicates a serious Collinearity problem and (Liu, 2010) also suggests that a VIF value greater than 10 is a concern, and higher VIF means more Multicollinearity. To determine whether the current study suffers from Multicollinearity, the researchers depend on a common cut off value of 0.10 for tolerance, and a value of 10 for VIF as recommended by Sekaran and Bougie (2013). These results indicate that in this study there is no Multicollinearity problem exists among the dimensions of the independent variable given that all the VIF values are below 10 and all the tolerance values are above 0.10.

4.5.5 Regression result

Table 9 Goodness of Fit Model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.991 ^a	.981	.981	.07297
a. Predictors: (Constant), Project Time Management, Project Cost Management , Project Scope Management				

Source: (The researcher's Survey data, 2025)

The study sought to determine the relationship between of Project Constraints and Project Success in Catholic Relief Services. R (0.991) indicates a very strong positive correlation between the predictor variables (Project Time, Cost, and Scope Management) and the dependent variable (Project Success) which tells that these three project management factors are highly associated

with project success at CRS. R^2 (0.981) means that 98.1% of the variance in Project Success is explained by Project Time, Cost, and Scope Management

The study further sought to examine the statistical significance of the research model. The study utilized the F-statistic results as the basis of testing the null hypothesis of the study

Table 10 ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.800	3	15.600	2930.031	.000 ^b
	Residual	.889	167	.005		
	Total	47.689	170			
a. Dependent Variable: project success						
b. Predictors: (Constant), Project Time Management, Project Cost Management, Project Scope Management						

Source: (The researcher's Survey data, 2025)

A remarkably high F-statistic value of 2930.031 in the ANOVA analysis indicates the regression model successfully describes project success beyond what a predictor-less model could provide. Analysis results indicate a high F-value demonstrates that one or multiple predictors (cost management, time management and scope management) strongly affect the dependent variable (Project success) when the p-value (Sig. = 0.000) reaches below 0.05 thus indicating a 95% confidence level significance. Hence the null hypothesis of the study is rejected. The study thus holds that the regression model was statistically significant in predicting the relationship between of Project Constraints and Project Success in CRS.

Table 11 Regression Analysis

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.076	.054		1.406	.161		
	Project Cost Management	.321	.014	.307	23.585	.000	.659	1.518
	Project Scope Management	.332	.008	.593	44.093	.000	.617	1.620
	Project Time Management	.326	.011	.329	28.437	.000	.834	1.200
a. Dependent Variable: project success								

Source: (The researcher's Survey data, 2025)

The regression analysis demonstrates that Project Success depends heavily on Project Scope Management and Project Time Management and Project Cost Management since all three predictors display statistical significance ($p < 0.001$). Project Scope Management delivers the highest impact among the predictive variables ($B = 0.332$, $Beta = 0.593$) and Project Time Management and Project Cost Management have similar positive effects respectively ($B = 0.326$, $Beta = 0.329$ and $B = 0.321$, $Beta = 0.307$). Project Cost Management demonstrates the smallest predictive impact.

A Variance Inflation Factor analysis demonstrates that multicollinearity does not cause substantial problems because the VIF values are 1.518, 1.620, and 1.200. This confirms the reliability of the regression model.

The Resultant Regression model is:

$$\text{Project Success} = 0.076 + 0.321C + 0.332S + 0.326T$$

Where C = Project Cost Management

S = Project Scope Management

T = Project Time Management

The model shows that by maintaining all the other variables constant, Project Success increase by 0.321 units when Project Cost Management rises by one unit. Also, Project Success increase by

0.332 units when Project Scope Management increases by one unit (greatest effect) and Project Time Management increase 0.326 units to Project Success when it increase by one unit.

4.6 Discussion of Results

This section discusses the findings from the research on the effect of project constraint management specifically cost, time and scope on project success at CRS Ethiopia.

Effect of project cost management on project success – the study founds a positive and significant relationship between project cost management and project success ($r = 0.752$, $p < 0.001$). the regression coefficient ($B = 0.321$, $\beta = 0.307$) which indicates substantial effect of cost management on project success.

This finding aligns with Kerzner (2017), who emphasized the cost overruns are critical barriers to success. (Frimpong 2003 & Zhao et al.,2021) also found the ,managing project budgets and resource allocations enhances the likelihood of meeting goals.

As the study findings match to the existing literature the null hypothesis is rejected and accepts the alternative.

Effect of project Scope management on project success – Among all the variables project Scope management showed the strongest correlation with project success ($r = 0.900$, $p < 0.001$). and the highest regression coefficient ($B = 0.332$, $\beta = 0.593$). this indicates clearly defined scope and control scope changes significantly affect the project success.

This result agrees with findings by (PMI 2021), (wang & Gibson 2020), and (Mokonea 2013), who identifies scope creep as a key factor in project failure. (Jugdev & Muller 2005) also emphasized that scope is one of the most consistent predictors of project success.

As the study findings support existing literature the null hypothesis is rejected and accepts the alternative.

Effect of project Time management on project success – this variable also found to be positively correlated with project success. ($r = 0.659$, $p < 0.001$). and having regression coefficient ($B = 0.326$, $\beta = 0.329$). which shows a notable but less impact than project scope and cost on project success.

This finding partially align with (Shenhar & Dvir 2007) concerns about meeting project timelines having a low mean score of 2.63. who stated on their research that deadlines have a significant impact on project execution performance, which slightly deviate in CRS result.

However the findings are generally consistent with the literature, thus the null hypothesis is rejected and accept the alternative

Overall the study findings align with the theoretical and empirical literature reviewed. All the variables were found to significantly impact project success at CRS Ethiopia, supporting the Iron triangle concept (Bryde, 2008; Pinto, 2010).

The model's high explanatory power ($R^2=0.981$) confirms the strength of the triple constraint framework in predicting project out comes within INGOs.

Chapter 5: Summary, Conclusion and Recommendations

5.1 Summary

Project management demands that projects to be accomplished within scope, within schedule and within budget or cost. The research analyzes the effect of project constraints management on the success of projects within Catholic Relief Services (CRS) in Ethiopia. Effective project constraints management reveals how organizations should understand and handle project limitations with priority emphasis on budget control along with time management and scope definition. Project management success stands as a fundamental requirement for International Non-Governmental Organizations including CRS to fulfill their activity in in various sectors such as emergency response, agriculture, health, and education.

This research paper tries to investigate the effect of project constraint management on project success in CRS. While the project success was measured by cost, time and scope. To this end, multi-linear regression model was employed to investigate the impact of the independent variable (cost, time and scope) on the dependent variable (project success). Before the actual empirical regression, a preliminary data analysis on the response rate, reliability & validity tests, multicollinearity tests between the dependent and independent variables were evaluated.

5.1.1 Summary of findings

A total of 19 questionnaires were distributed to 183 CRS employees working in program and finance departments, for which 19 questionnaires representing 93.4% response rate were returned. Among the respondents 29.2% were a senior Project officers and 55% of the respondents manage or involve in a large project which has above \$5 million budget.

The analysis verified the explanatory variables for multicollinearity through variance inflation factor (VIF). Among the three constraints, project scope management had the strongest correlation with project success ($r = 0.900$), suggesting that well-defined and controlled project scope plays a critical role in achieving objectives. Cost management also demonstrated a strong positive relationship with project success ($r = 0.752$), highlighting the importance of strict budget monitoring in minimizing financial uncertainties. Similarly, time management was found to be essential ($r = 0.659$), as delays were identified as a major challenge affecting project completion.

Furthermore, Project Cost Management has a mean score of 4.1253, indicating strong agreement on the importance of cost management for project success, Project Scope Management mean score of 3.4959, showing moderate agreement on the importance of scope management, with issues noted in frequent scope changes having a low mean value 2.8 and for Project Time Management the mean score was 3.5527, indicating moderate agreement on the importance of time management, with concerns about meeting project timelines having a low mean score of 2.63. The research model successfully accounts for 98.1% of project success variance due to the significant impact of the studied constraints. The regression analysis further confirmed that 98.1% of project success is explained by the combined effects of cost, scope, and time management ($R^2 = 0.981$), with project scope management having the highest impact ($B = 0.332$, $Beta = 0.593$). The ANOVA test ($F = 2930.031$, $p < 0.001$) validated the statistical significance of the model.

5.2 Conclusion

This paper was aimed at looking at how project constraints (cost, time and scope) affect project success in the Catholic Relief Services (CRS) in Ethiopia. Results indicate that all the three constraints exert a positive influence on the outcomes of the project and are statistically significant. Of them, the scope management turned out to have the biggest impact, which promised that the clarification and control of the project scope are the key expectation of a successful project.

The findings confirm the conceptualization of the Iron Triangle and match the existing literature on the domain of constraint-based project management. The experimental model of the present study explains 98.1 percent of the variation in the success of projects that suggests that constraint management will be very effective in driving the performance of INGOs such as CRS.

This research will offer practical recommendations to project managers and donors that aim at maximizing the use of resources and achieving better results in project delivery through the realization of its objectives. Nevertheless, the results can only be viewed cautiously because of certain limitations such as self-reported data and attention to one organization. In further research, it can be suggested to study the topic in more detail and include some more variables e.g. risk management, communication with stakeholders, or external challenges in operations.

On the whole study helps in understanding the determinants of project success within the non-profit context and the necessity to consider integrated and proactive constraint management plans to achieve sustainable development result.

5.3 Recommendations

Based on the findings the following recommendations are proposed to increase the success rate at CRS

Since Scope Management have the greatest effect on project Success, CRS should strengthen its scope definition and implement a better control system to reduce unpredictable scope creep. The organization should implement efficient scheduling and monitoring systems as an effective strategy to improve project progress tracking.

Cost overruns were identified as a major risk factor affecting project success. The organization should implement better financial review processes coupled with transparent cost reporting and prepared contingency plans to keep projects in budget. Donor funding needs proper accountability systems to maximize donor resources.

Monitoring and evaluation projects help to detect project constraints as soon as they develop. This detection allows organizations to respond early and implement solutions to prevent complications. CRS must create broad monitoring and evaluation systems which check project performance regarding budget costs and project schedule and project deliverables.

Project deadlines will get better results when teams provide weekly updates about scheduling and actively check for potential risks and detect delays early on.

By adopting These Recommendations CRS can improve its project management methodologies and reduce project costs for enhanced efficiency and achieve better outcomes for its beneficiary results and sustainable humanitarian service delivery.

For future research, the researcher recommended to include risk on the independent variables.

6 Reference

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Annex 1 Questionnaire

Introduction

Purpose:

The purpose of this survey is to understand the impact of effective project constraints management on project success. The questions are in the form of likert scale .Your responses will provide valuable insights into how managing cost, scope, and time constraints can influence project Success. This survey should take approximately 10-15 minutes to complete.

Confidentiality:

Your responses will remain confidential and will be used solely for research purposes. No personally identifiable information will be disclosed or published.

Instructions:

Please answer all questions honestly based on your personal experiences in project management. For the Likert scale questions, indicate your level of agreement by selecting the appropriate response.

Section 1: Demographic Information

1. What is your job role?

- ☐ Project Manager
- ☐ Project Officer Sr.
- ☐ Project Officer
- ☐ Finance Manager
- ☐ Finance officer Sr
- ☐ Finance Officer
- ☐ Other

2. How many years of experience do you have in project management?

- ☐ Less than 1 year

- ☐ 4-6 years
- ☐ 7-10 years
- ☐ 7-10 years
- ☐ More than 10 years

3. **What is the typical size of the projects you manage?**

- ☐ Small (less than \$100,000)
- ☐ Medium (\$100,000 - \$1 million)
- ☐ Large (more than \$1 million)

Section 2: Likert Scale Questions

For each statement below, please indicate your level of agreement or disagreement.

To what extent do you agree with the following statement? Use the following rating scale and put “√” mark for each rating. **1: Strongly Disagree, 2: Disagree, 3: Neutral, 4: Agree and 5: Strongly Agree**

SN.		Rating Scale				
		1	2	3	4	5
1	Evaluating Project cost estimation is important in project management success.					
2	Regularly we monitor budget performance during the project life cycle					
3	Almost all the projects that are completed within budget are mostly able to achieve their set targets.					
4	According to my experience, the exceptionally high costs incurred over projections of a project are one of the greatest contributors to project failure.					
5	The management of budget is one of the main reasons for the success of the stakeholders.					

6	Practicing or having a strict cost management system helps to increase the rate of success of projects.					
7	The organization incorporate risk mitigation strategies to prevent cost overruns					
8	Clarity on project scope requirements is also important when it comes to the success of the project.					
9	Scope changes (or scope creep) have a very high potential of overrunning the project's term and may even delay the whole project.					
10	Tracking and controlling the project scope on a regular basis contributes to the achievements of the objectives of the projects.					
11	Every one of the stakeholders should be able to know the scope of the project so as to make it successful.					
12	Projects have turned out to have better outcome when the scope of the projects has been closely adhered to the defined scope.					
13	Frequently project scope changes occur in our projects					
14	Working within the time set for a certain project is one of the critical aspects of project management.					
15	Time is a precious again and if used effectively, it helps to relieve team stress thus enhances the team's performance					
16	Time overruns negatively impact the success of my projects.					
17	Regularly updating the project schedule is crucial for successful time management.					
18	Projects that consistently meet their time targets are more successful.					
19	Frequently delays caused by external factors beyond the project team's control.					