ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

PROJECT FAILURE FACTORS IN THE CASE OF MINISTRY OF AGRICULTURE AND NATURAL RESOURCES

BY

AMLAKU GEDEFAW

ID NO: SGS/0540/2008A

JUNE, 2017

ADDIS ABABA, ETHIOPIA

PROJECT FAILURE FACTORS IN THE CASE OF MINISTRY OF AGRICULTURE AND NATURAL RESOURCES

BY

AMLAKU GEDEFAW

A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ART IN PROJECT MANAGEMENT

JUNE, 2017

ADDIS ABABA, ETHIOPIA

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

PROJECT FAILURE FACTORS IN THE CASE OF MINISTRY OF AGRICULTURE AND NATURAL RESOURCES

BY

AMLAKU GEDEFAW

APPROVED BY BOARD OF EXAMINERS

_____	_____
Dean, Graduate studies	Signature & Date
_____	_____
Advisor	Signature & Date
_____	_____
Internal Examiner	Signature& Date
_____	_____
External Examiner	Signature& Date

Table of Contents

DECLARATION

First, I declare that this thesis is my original work prepared under the guidance of Tiruneh Legesse (Assi.Prof), my thesis advisor. All the sources of materials used for this thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher institution for the purpose of earning any degree.

_____ _____

Name Signature:

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

CERTIFICATION

This is to certify that Amlaku Gedefaw has done the study on the topic of "Project Failure Factors in the case of Ministry of Agriculture and Natural Resources." Submitted to St. Mary's University, school of graduate studies a research thesis for partial fulfillments of the requirement of degree of Masters of Art in Project Management done by Amlaku Gedefaw, ID No SGS/0540/2008A.Therefore; the study is original and has not been done before by any other researcher at the same topic.

Advisor name_____

Signature_____

DEDICATION

I dedicate this thesis manuscript to my Father Ato Gedefaw Birhanu and my Mother w/o Bogalech Abera, my uncle Ato Addisu Kassa and my brothers for their affection, love and dedicated partnership in the success of my life.

ACKNOWLEDGEMENT

First I would like to thank my almighty God with his Mother who made it all possible.

I would like to also forward the deepest of my appreciation and gratitude to my advisor Tiruneh Legesse (Assi.Prof) for his patience and constructive advice throughout the course of the thesis. Not only did he help me with invaluable advice, I have also learned a lot from him. The brotherly treatment he accorded me has served as an inspiration for the completion of this study. I am in a position where I cannot take the sole credit for the completion of this study. I credit every piece of strength of this study to my advisor and any weakness to myself.

It is not possible to thank all those people and institutions that have helped me in accomplishing my thesis research work, but the following deserve a special mention. First and foremost I would like to sincerely acknowledge the project Coordinators and employees of AGP, SLM, Animal products quality project and participatory small scale Irrigation project.

I am extremely thankful to my Uncle Ato Addisu Kassa and his families for hosting and providing me with the necessary facilities during my stay in Addis Ababa.

I wish to take this opportunity to extend my gratitude to my friends: Alemnew Yitie, Bereket Molla, Teklay kidane, Weretaw Chane, Gizachew Admas, Nebayneh Amsalu, Teklewyni Menkir who have extended unreserved help during my request, shared their ideas, and thought me different ways of doing the course and research works.

ABBREVIATIONS

GDP	Growth Domestic product
GTP	growth and Transformation plan
MW	Mega Weight
HH	Household
ADLI	Agricultural Development Leads Industrialization
ADPs	Agricultural Development Projects
MoAR	Ministry of Agriculture and Natural Resources
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
AGP	Agricultural Growth program
SLM	Sustainable Land Management
ADPLAC	Agricultural Development Partner Linkage Advisory council
SPSS	Statistical Package for Social Science
STD	Standard Deviation
MoFED	Ministry of Finance and Economic Development

List of Tables

Tables **Pages**

List of Figures

Figures **page**

ABSTRACT

The purpose of the study is to identify Project Failure Factors in the case Ministry of Agriculture and Natural Resources. This paper examined the concept of project failure. The study adopted the explanatory design and correlation to show the relationship between the dependent and independent variables. The study used the stratified sampling method to select the projects and census survey methods to select respondents. The objective of the study was to identify the main factors responsible for project failure and suggest strategies aimed at curbing project failure and facilitating development in the future. Data was obtained from 80 respondents in Ministry of Agriculture and Natural Resources. The results were recorded, transcribed and entered into the qualitative research software SPSS version 20. According to the result independent variables have direct relationship with dependent variable i.e. project failure. The finding of the study showed that management related, project coordinators related, project team members related, bureaucratic procurement process and lack of project management knowhow were among the main causes of project failure in Ministry of Agriculture and Natural Resources.

Key Words: *Project Description, Project Management, Project Manager, critical Project failure factors*

CHAPTER ONE

INTRODUCTION

1.1. BACKGROUND OF THE STUDY

Ethiopia's economy has enjoyed a high rate of economic growth for the past decade. The Ethiopian Government has created a very conducive environment for projects in the Agricultural sector. Ethiopia sustained rapid, broad based and equitable economic growth, increased investment in Infrastructure, human development and institution building to underpin Ethiopia's long term transformation. Institutions to lead and support as well as various measures are under implementation to drive the progress towards industrialization. In 2014 the real GDP growth rate averaged 10.1 percent (MoFED, 2010). The value of better understanding of failure probably lies in learning from it and eventually preventing future failure or pursuing improved recovery strategies. Learning from the failure experience is therefore critical for it to serve as a positive feedback mechanism (Shepherd, 2003: 318) or as an anticipatory mechanism (Shepherd et al. , 2007: 318) Fortunately, more and more research explores the learning associated with failure as a benefit to the firm for use in future decision making. Individuals do not freely and openly share knowledge about the mistakes they have made (Baumard & Starbuck, 2005: 283). Some members of organizations do not discuss failure and hence do not learn from failures. One reason for this lack of de-briefing is fear that colleagues might blame those who participated in failed ventures, and another is managerial hierarchy that reacts to failure by seeking and punishing culprits. Cannon and Edmondson's (2005: 299) earlier proposition states that to learn from failure intelligently requires identifying failure, analyzing failure and experimenting with failure. What set out as an analysis of project failure as a phenomenon ended in the heart of the project management domain, covering more than failure and as such interfacing with subjects such as culture, change, cognition, leadership, finance, strategy and many more variables of the business and non-business environments. Only a few studies in the project management literature concentrate on the critical factors for project failure. Whereas many of these studies generate lists of critical failure factors, each list varies in its scope and purpose. The success factors are

usually listed as either very general factors or very specific factors affecting only a particular project. However, lacking a comprehensive list makes it difficult not only for project managers but also for researchers to evaluate projects based on these factors. Among different projects, there are agricultural development projects in Ethiopia to increase agricultural productivity and commercialization of smallholder farmers targeted by the program and also contributes to dietary diversity and consumption at HH level. The projects would also contribute to the higher level objectives of poverty reduction, change mitigation and adaptation through supported climate smart agricultural initiatives. The other objectives of those projects is to increase access to public agricultural services for smallholder farmers through support to establishment and strengthening of agricultural development partners linkage advisory council(ADPLACs), strengthening of public services delivery including extension services delivery and support to livestock production and animal health, crop production and plant health, natural resource management, soil fertility management, and agricultural mechanization as well as scaling up of best practices.(MoAR Report, 2013). Despite the Ethiopian government has created a very conducive environment for projects in the Agriculture sector. The following projects are stucked or failed. Agricultural Growth Program (AGP), Participatory small scale irrigation project, Sustainable land use management project, Animal and animal products quality project (MOAR, 2015). At the movement the performance of project management system is constrained by many factors such as: poor quality of projects, schedule delaying, cost change, poor linkage of research and development, absence of adequate information and intelligent services. There is no known empirical study to this research on the causes of failure of projects in Ministry of Agriculture and Natural Resources. The need to undertake such a research is to come out with empirical data, well-tested factors for project failures, cannot be overemphasized. The purpose of the study is to identify the real project failure factors of Agricultural Development projects in Ministry of Agriculture and Natural Resources.

1.2 Background of the Organization

1.2.1 Projects and Programs in Ministry of Agriculture and Natural Resources

The present day Ministry of Agriculture and Natural Resources (MoAR) was established in 1907during the reign of Emperor Menelik II. More than a century has been elapsed since agriculture was transformed in to an institution. During the last successive regimes, some measures have been taken to improve the Agricultural sector.

There are 16 projects and programs for supporting agricultural productivity and commercialization focusing on high agricultural potential areas. These projects and programs are viewed by government as the key investment mechanism for development partners and government to collaborate. The projects and programs are closely aligned with the objectives set for agriculture sector in the GTP. The projects and programs promotes competitiveness and employment in the agriculture sector as well as addresses the cross cutting issues of gender, nutrition and climate change. The projects and programs are aligned with GTP2 and would contribute to the achievements of targets set for agriculture sector growth to increase agricultural productivity and commercialization of smallholder farmers targeted by the program and also contributes to dietary diversity and consumption at HH level. The projects and programs would also contribute to the higher level objectives of poverty reduction, change mitigation and adaptation through supported climate smart agricultural initiatives.

1.3. Statement of the Problem

The development sector has become very promising and attractive agent in many countries globally and in countries like Ethiopia. The Government of Federal Democratic Republic of Ethiopia that has been established in 1991 designed the new agricultural policy and strategies. Agriculture Development led Industrialization (ADLI) that aimed at transforming the country's economy is one of the national policies and strategies. It is aimed at transforming the country's economy in to a well-developed and prospered one. This agricultural policy and strategies is based on the objective realities of the country and its prime objective is to accelerate agricultural production and productivity at all levels. So, there are different Agricultural Development projects (ADPs) supporting this policy and strategy to increase farm production and welfare among smallholders in Ministry of Agriculture and Natural Resources. Even if the Ethiopian government has created a very conducive environment for projects in the Agriculture sector. The following projects are failed in the first round of the period (MoAR five year report 2015) Agricultural Growth Program (AGP), Participatory small scale irrigation project, Sustainable land use management project, Animal and animal products quality project (MOAR, 2015) by many factors such as: poor quality of projects, schedule delaying, cost change, poor linkage of research and development, absence of adequate information and intelligent services, Furthermore, weak legal system to enforce contracts, lack of institutions to study, evaluate, plan and implement project management, inadequate government interventions, and poor contract management are some of the core problems. There is no known empirical study to this research on the causes of failure of projects in Ministry of Agriculture and Natural Resources. That is why the researcher is intended to carry out this study in order to identify project failure factors of the above mentioned project activities because it will be serious problem for the existing active firms in their progress. It is also urgent thing to the government and other necessary bodies to take corrective action if the real causes are clearly identified.

1.4 Basic Research Questions

The following questions will be answered by the study after carrying out the study. These are

1. What are the Project Managers related factors for failure of project in MoAR?
2. What are the management related factors that are causes for failure of project in MoAR?
3. What are the financial related factors that are causes for failure of projects in MoAR?
4. What are the external environment factors that are causes for project failure in MoAR?
5. What are project related failure Factors in MoAR?
6. What are Factors related to team members for project failure in MoaR?
7. What are the organizational related factors for project failures in MoAR?
8. What are the factors related to risk, culture and procurement for failure of projects in MoAR?

1.5 Objectives of the Study

1.5.1 General Objective

The General Objective of the study is to identify Project failure factors in the case of Ministry of Agriculture and Natural resource.

1.5.2 Specific objectives

In order to handle the research questions the study achieved the following objectives

1. To identify the project managers related failure factors of projects in MoAR
2. To identify the financial failure factors of projects in MoAR
3. To identify the management related factors of project failure in MoAR
4. To identify the organizational related factors for project failure in MoAR?
5. To identify project related factors for project failure in MoAR
6. To identify Factors related to team members for project failure in MoAR?

7. To identify the external environment factors those are factors for the project failure in MoAR.
8. To identify factors like, risk, culture and procurement as a failure factor for project in MoAR.

1.6. Definition of Terms

Project: A project is a temporary endeavor designed to produce a unique product, service or result with a defined beginning and end (PMI, 2004, p. 5).

Project Manager: The individual responsible for managing the project (Anantatmula, 2010, p. 19-20)

Project Management: The discipline of carefully projecting or planning, organizing, motivating and controlling resources to achieve specific goals and meet specific success criteria (PMBOK 2004, p. 8).

Project Team Members: the group that is performing the work of the project.

Failure: The extent to which the project doesn't be able to carry out its scope, cannot meet its set schedule within budget and couldn't attain its set objectives (PMI, 2004).

User: the individual or organization that will use the project's product.

Donor: the individual or group within or external to the performing organization that provides the financial resources, in cash or in kind for the project.

Project Stakeholders: A stakeholder is any individual, community, group, or organization with an interest in the outcome of a programme, or a project. (Kim Heldman, 2010, p 86).

1.7. Significance of the Study

The study will give detail information on the real project failure factors and the study will provides also general information for decision makers, planers, and other development stakeholders involved directly or indirectly in promoting different projects. Furthermore, the study also identifies an additional input for further related studies. It will help as a base for further research work. It will help different management bodies to give great considerations to these failure causes. Furthermore it will help different policy making bodies to consider the identified problems.

1.8. Scope of the Study

The area of the study will be limited to the topic of Project Failure Factors and the project management framework around which most projects are planned. This framework embodies the factors related to Management, Finance related, Project related, Project Manager related, Project team members related, Organization related, External environment related and factors related to risk, culture and procurement process in the case of ministry of Agriculture and Natural resources with four Agricultural development projects with 80 respondents in four selected projects.

1.9. Limitation of the Study

Despite the useful findings of the study, this study has several limitations. The major limitation of the study was mainly related to the limited coverage of the study area. In the country, there are different projects. However, the studies focused only in selected projects in the case of Ministry of Agriculture and Natural Resource due to lack of budgetary and time limitations.

1.10 Organization of the Study

Generally the paper is organized into five chapters. The first chapter starts with general information about the study, Back ground of the organization followed by statement of the problem and continued with the objective of the study, Definitions of conceptual terms, research questions, and significance of the study, the scope of the study and limitation of the study. The second chapter is looking into some previously conducted related researches and literatures on the subject. The Third chapter is about research design and methodology which presents the research design and methodology of the study. The fourth chapter deals with analysis and interpretation of the data collected. The last and the fifth chapter surfaces conclusions reached; and the recommendations forwarded.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The literature review chapter presents an overview of the literature that is related to the research area, for the purpose of this dissertation and the related research objectives. This chapter will focus on concept of project, project success, and the role of the project manager, project management, and project failure factors.

2.1. Theoretical Literature

2.1.1 Concept of Project

Anantatmula (2010, p.19) states Projects, by definition, are unique and often associated with uncertainties and unknowns. A project is a temporary endeavor designed to produce a unique product, service or result with a defined beginning and end (usually time-constrained, and often constrained by funding or deliverables undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value. Anantatmula (2010, pp. 19-20) defines a project as unique and commonly related to uncertainty. The temporary nature of projects stands in contrast with business as usual (or operations) which are repetitive, permanent, or semi-permanent functional activities to produce products or services. In practice, the management of these two systems is often quite different, and as such requires the development of distinct technical skills and management. A project is a one-time, multitask job with a definite starting point, definite ending point, a clearly defined scope of work, a budget, and usually a temporary team. A project is a problem scheduled for solution. - J. M. Juran. A project is defines as 'A unique set of co-ordinated activities, with definite starting and finishing points, undertaken by an individual or organization to meet specific objectives within defined schedule, cost and performance parameters.' It is a temporary endeavour undertaken to create a unique product or service (Project Management Institute, 2004, p. 5). Projects are temporary in nature and have definitive start dates and definitive end dates. The project is completed when its goals and

objectives are accomplished to the satisfaction of the stakeholders. Sometimes projects end when it's determined that the goals and objectives cannot be accomplished or when the product, service, or result of the project is no longer needed and the project is cancelled. A project is defined as a sequence of unique, complex, and connected activities having one goal or purpose and that must be completed by a specific time, within budget, and according to specification. A project is a proposal consisting of collection of activities performed to achieve a specific purpose so as to get benefits that exceed costs. Projects exist to bring about a product, service, or result that didn't exist before.

2.2. Project Success

The goal of project management is to ensure the success of the project. However, companies face new challenges when adopting project management methodologies, for example, in construction projects, as suggested by Ala-Risku and Kärkkäinen (2006), or in information systems (IS) projects, as suggested by Barclay and Osei-Bryson (2010). Furthermore, success, as a subjective term, is dependent on the perspective of those who are measuring it (Jha and Iyer, 2006). According to Barclay and Osei-Bryson (2010), a key challenge in IS projects often includes the lack of clearly defined objectives and the mismatched stakeholders' expectations (project sponsor, external consultant, staff and executive management). Moreover, the success criteria can vary from project to project as they are dependent on the context and on the perspectives of the various construction stakeholders (client, consultants, and contractors), according to Toor and Ogunlana (2010). Corroborating this assumption, some authors, such as Chou and Yang (2012) and de Vries (2009), who have applied the stakeholder salience theory and identified a strong influence based on the interests of various stakeholders, recommend the use of stakeholder analysis. Factors such as time, cost, and quality are traditionally used as criteria for measuring project success (Pinto and Slevin, 1987; Mullaly, 2006; Papke-Shields et al., 2010). These criteria comprise the "iron triangle" (Meredith and Mantel, 2000; Pinto and Slevin, 1987) in which a project is considered a success when the cost is very close to the initial budget planned, the estimated schedule is met, and all deliveries meet the requirements established by all parties involved in the project. However, there is no consensus regarding the success criteria among researchers (Jha and Iyer, 2006) because there are many variables that can affect success, such as

the context of the internal organization and the external environment in which a project is performed, and can influence both the outcome and the success of a project (Papke-Shields et al., 2010). In addition, over the years, the three criteria (time, cost, quality), often called the basic or traditional criteria, have been criticized because they seem inadequate. Some authors consider them excessive, while others consider them incomplete (Yu et al., 2005). Accordingly, several efforts have been made to overcome the inadequacies. These attempts can be grouped into two different approaches: (1) adding more dimensions to the traditional criteria (iron triangle), exploring the variables that can impact success; and (2) reducing various criteria to a single evaluation criterion, the financial criterion (Yu et al., 2005). The second approach considers that time and quality are project cost variables (Yu et al., 2005). This study is aligned with approach 01, exploring variables that impact project success. With respect to the context of an IS project, Barclay and Osei-Bryson (2010) adopted the following performance evaluation criteria as objectives: develop quality reputation, maximize revenue, maximize staff competences, maximize efficiency, and maximize record keeping. Jugdev et al. (2007) highlight the relationship between project management and the capability of the firm based on the VRIO (valuable, rare, inimitable, and organizational) framework from the research based view. The literature review suggests that project management is expected to be more concerned with efficiency than with effectiveness. However, Rauniar and Rawski (2012) argue that the failure to strategically manage important projects can limit the competitive growth of a business. Because of the complexity of the project success concept discussed above and the lack of consensus among authors in the field, the traditional dimensions of the "iron triangle", albeit criticized, are still considered central to the measurement of project success (Papke-Shields et al., 2010). Agarwal and Rathod (2006) stated that cost, time and quality (functionality) are still important criteria for evaluating the performance of software projects from the professional's point of view, and these criteria have been used in several studies, both alone and in combination with other measures. The present research used the basic dimensions, denoted as efficiency by Shenhar and Dvir (2007). Project performance was evaluated according to the planned budget, the schedule, the technical specifications (product/service requirements), and the ability to meet the customer service requirements. Note that the quality dimension was subdivided into two criteria: meeting technical specifications and meeting customer demands. Projects were considered successful when all four dependent variables of the conceptual model proposed and stated above as basic

dimensions were met. Partial success was considered when only one, two, or three of the basic dimensions were met.

2.3. Project Failure

If the project quality is poor project failure occurs, 'when projects fail to meet the criteria of time, cost, and effectiveness. The objectives have not been achieved in the specified time frame and when the project objectives are not achieved with the stipulated budget and time. 'project failure is usually a result of inadequate planning and project financing, bankruptcy of contractors or other problems associated with sub-contractors, project scope variations, political influences, incompetent personnel and delays in payments. The common factors identified as responsible for project failure included poor project planning, weak business case, poor technology, stakeholders' management, lack of senior management involvement, funds mismanagement by contractors, untimely delivery of construction materials/ inefficient supply chain machinery. Other factors identified included project management issues, scope creep, lack of clear cut project objectives, improper planning, lack of integrating and alignment projects into corporate strategies, environmental issues, limited project management vision and poor engineering design. When inadequate budgetary allocation was mentioned by a particular participant, there were mixed reactions as several other participants argued against its inclusion and suggested that most budgetary issues affecting projects should be associated with corruption. According to different studies low level of education and imposition of project team members by community leaders, the uncoordinated involvement of youth groups in community-based projects, poor monitoring and evaluation by government officials were among the events that led to the failure of a rural electrification project. When put together, it emerged that several factors were responsible for project failure. However, it was collectively agreed that project failures in most projects is originated from corruption at various levels, lack of professionalism, inexperienced project managers and project personnel, bureaucratic procurement process and the lack of skills and proven approach to project and risk management.

2.4. The Project Management Role

Project management is defined as the knowledge, skills, tools and techniques to project activities to meet the project requirements (PMBOK, 2013, p. 554). Project management is the discipline of carefully projecting or planning, organizing, motivating and controlling resources to achieve specific goals and meet specific success criteria. An official definition of project management, courtesy of the Project Management Institute, defines the term as: "the application of knowledge, skills, tools and techniques to project activities to meet project requirements." Project management is the discipline of planning, organizing and managing resources to bring about the successful completion of specific project goals. Project management is accomplished through the application and integration of the project management processes of initiating, planning, executing, monitoring and controlling, and closing" (PMBOK 2004, p. 8). Project management is a set of principles, methods, and techniques that people use to effectively plan and control project work. It establishes a sound basis for effective planning, scheduling, resourcing, decision-making, controlling, and re-planning. Project management principles and techniques help complete projects on schedule, within budget, and in full accordance with project specifications. At the same time, they help achieve the other goals of the organization, such as productivity, quality, and cost effectiveness. The objective of project management is to optimize project cost, time, and quality. The application of modern management techniques and systems to the execution of a project from start to finish, to achieve predetermined objectives of scope, quality, time and cost, to the equal satisfaction of those involved. Essentially, project management is a set of skills and tools that will help you get the project right in every way. A project manager is assigned to a project to guide the team so that they can achieve the project objectives. The project manager is the link between the project team and the project plan, and his/her task is to satisfy both the team and the task needs. The project manager is another key stakeholder in the project and his competence is a critical factor affecting project planning, scheduling, and communication (Belassi and Tukel 1996). Variables under this factor consist of the skills and characteristics of project managers, their commitment, competence, experience, and authority (Chua et al. 1999).Team needs might be group and/or individual needs. Knowledge, performance and personal skills are competences that are required for a project manager. Effective project managers require a balance of ethical, interpersonal, and conceptual skills that help them analyze

situations and interact appropriately (PMBOK, 2013, p. 17). Great leadership is therefore often of high importance so that the project team will work together towards achieving the project objective. The project manager must play an important role when motivating the team members. Anantatmula also states that a project manager should seek to create clarity and open communication in the project team. (Anantatmula, 2010, p. 19-20). It is essential for the project manager to be able to create an effective work environment so that the project team is suited to meet the challenges they experience in the global economy today (Anantatmula, 2010, p. 13). It is reasonable to assume that in project management, it is not if the plans will change, it is when, what will change, and by how much". The project manager's leadership role is also assumed to be of higher importance when there are big changes in a project. Larson and Gray (2011, p. 533) states that project managers usually face different problems when working internationally. However, there is no specific framework concerning this topic. Success or failure of a project is often influenced by how the project managers approach problems that might occur. (Larson and Gray, pp. 533-558). International projects might consist of cultural differences such as values and beliefs. It is also important for the project manager to understand the importance of language and meanings so that communication will be understood and interpret in the right way by the project team. (Javernick-Will & Scott, 2010, p. 554). Zeng, Xie, Tam and Sun (2009, p. 61) states that cultural diversity is one important factor to international project management, and that it is therefore also important for project managers to implement cross cultural management. Some can see cultural differences as negative; however, others also experience it as an essential part of growth in the organization and for individuals (Zeng, Xie, Tam and Sun 2009, p. 61). Zen, Xie, Tam and Sun (2009, p. 62) also define that "In a cross-cultural organization, changes in personnel, clientele, product line, financial climate, and even corporate philosophy and/or vision will happen. Cross-cultural awareness facilitates successful performance of a set task". Project managers working in an international environment tend to experience challenges in relation to project delivery, knowledge and experience in cross cultural management is therefore important in regards to project success. Hong, Snell and Easterby-Smith (2006, p. 423) states that project managers that work with international project teams should create awareness in regards to cultural differences and that identifying the different cultures represented is a key component in project management. Project management reduces risk and increases the chance of success. A triangle, commonly called the triple constraint, is used to summarize project

management. The triple constraint has four core elements: Projects must be within cost, on time, within scope and must meet customer quality requirements.

(PMI, 2014)

Figure 2.1 Triple constraints (Triangle)

2.5. Project Management Body of Knowledge Areas

There's a lot to learn as a project manager! (Ctnthia A.Berg 2000, p 40) breaks down what project managers need to know to successfully pass their PMP® exam and also be effective in the role. There are 10 project management knowledge areas covered by the PMBOK® Guide. These knowledge areas provide a way to organize and categorize knowledge and skills needed in a particular specialty. Processes, key concepts, and activities are group into common areas. By grouping many processes and activities into a few areas, it is easier to understand and remember. Also, knowledge areas describe the overall knowledge and skills you will need as a project manager. There are 10 knowledge areas a project manager uses. It is important to understand that project management knowledge areas are not linear. While managing a project, you may use the knowledge areas multiple times: In very simple terms, cooking a meal uses the same principles as project management knowledge areas. For a typical meal, an entrée and one or more side dishes will be prepared. The chef must know and apply the different knowledge areas of food preparation, such as menu selection, food safety, kitchen equipment safety, cooking, and

dish presentation to coordinate the meal. In the same way, a project manager uses specialty knowledge and skills to coordinate a project. It's not easy to remember a list of 10 items that sound formal and stiff. A mnemonic is a fun and easy way to help remember something, For the 10 knowledge areas, I really only need to remember key words, since 'project' and 'management' are in all of them. So, to help remember scope, time, cost, quality, human resources, communications, risk, procurement, and stakeholders, a silly saying using the first letter of each knowledge area will help. (PMI, PMBOK 2000 P 28).

1**.Project Integration Management** : The processes and activities needed to identify, define, combine, unify, and coordinate the various processes and project management activities within the project management process groups. Project integration management is the knowledge area that deals with skills, processes, and activities to coordinate all the elements of a project. It ensures that when processes interact, you can anticipate and control the result. Just like the chef coordinating the activities and staff in a busy kitchen, a project manager coordinates the elements and resources of a project. (PMI, PMBOK, 2000 P 45).

2**. Project Scope management**: the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. Project scope management is concerned with what is and is not included in the project. Scope must include all work necessary to make the project successful yet must limit 'extras' that are not required to meet the project's objectives. In creating a meal, scope is equivalent to what is and what is not on the menu. (Avantika Monnappa, 2012).

3**. Project Time Management** : the processes required to manage the timely completion of the project. Project time management is where you and the team conduct activities to make sure the project is completed when it's supposed to be. Tasks are defined, time estimates are completed, and a schedule is done. In the kitchen, this is where the chef times the preparation of each dish so that they all arrive at the table hot and fresh. (PMI, PMBOK 2000 P 46).

4. Project Cost Management: the processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so that the project can be completed within the approved budget. Project cost management estimates and controls the cost of the project

through inception to completion. Costs for human resources, materials, equipment, facilities, and project related services are included. Costs for things that will be contracted out are included in this estimate as well. If our chef decided to serve a cake for the meal's dessert but was going to purchase the cake from the local bakery, the cost of the cake would have to be included in the meal planning. (PMI, PMBOK 2000, P 46).

5. Project Quality Management: the processes and activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. Quality ensures the project results in products of an acceptable quality and that the project management itself is done with quality. You first have to define quality and what will be accepted, then you have to test and control quality during the project. Project quality management is exactly like the chef taste testing the dishes during cooking and adjusting ingredients to ensure a delicious meal. (PMI, PMBOK 2000 P 46).

6. Project Human Resource Management: the processes that organize, manage, and lead the project team. Human resource management deals with identifying, acquiring, and managing the people necessary to accomplish the project. You will identify who is needed, training the team, managing performance, and resolving resource issues. In a busy kitchen, our chef manages staff as well. He hires a souse chef, trains that person in his particular style of cooking, and oversees the souse chef's dishes. (PMI, PMBOK 2000, P 46).

7. Project Communications Management: The processes that are required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information. Given that a project manager’s job is often said to be about 80% communication, this is another small knowledge area. The three processes are planning, managing and controlling project communications. It’s here that you’ll write your communications plan for the project and monitor all the incoming and outgoing communications. (PMI, PMBOK 2000 P 47).

8. Project Risk Management: the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project. The first step in project risk management is planning your risk management work, and then you quickly move on

to identifying risks and understanding how to assess risks on your project. There is a lot of detail in this knowledge area, specifically around how you perform quantitative and qualitative risk assessments. Risk management isn't a one-off activity, though, and this knowledge area also covers controlling your project risks going forward through the project life cycle. (PMI, PMBOK 2000 P 47).

9. **Project Procurement Management** : the processes necessary to purchase or acquire products, services, or results needed from outside the project team. Processes in this area include Procurement Planning, Solicitation Planning, Solicitation, Source Selection, Contract Administration, and Contract Closeout. This knowledge area supports all your procurement and supplier work from planning what you need to buy, to going through the tendering and purchasing process to managing the work of the supplier and closing the contract when the project is finished (PMI, PMBOK 2000 P 50).

10**. Project Stakeholder Management** : the processes required to identify all people or organizations impacted by the project, analyzing stakeholder expectations and impact on the project, and developing appropriate management strategies for effectively engaging stakeholders in project decisions and execution. (PMI, 2013).

Table 2. 1 **PMI PMBOK 4th edition Project Management**

Processes / Knowledge areas	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring & Controlling Process Group	Closing Process Group
Project Integration Management	Develop Project Charter	Develop Project Management Plan	Direct and Manage Project Execution	Monitor and Control Project Work * Perform Integrated	Close Project or Phase

				Change Control	
Project Scope Management		Collect Requirements * Define Scope * Create WBS		Verify Scope * Control Scope	
Project Time Management		Define Activities * Sequence Activities * Estimate Activity Resources Estimate Activity Duration Develop Schedule		Control Schedule	
Project Cost Management		Estimate Costs Determine Budget		Control Cost	
Project Quality Management		Plan Quality	Perform Quality Assurance	Perform Quality Control	
Project Human Resource Management		Develop Human Resource Plan	Acquire Project Team * Develop Project Team		

			* Manage Project Team		
Project Communication Management	Identify Stakeholders	Plan Communications	Distribute Information * Manage Stakeholder Expectations	Report Performance	
Project Risk Management		Plan Risk Management Identify Risk Perform Qualitative Risk Analysis Perform Quantitative Risk Analysis Plan Risk Responses		Monitor and Control Risks	
Project Procurement Management		Plan Procurement	Conduct Procurement	Administer Procurement	Close Procurement
Project stakeholder management		Identify stakeholders		Measure satisfaction	

Figure 2 Overview of project management knowledge areas and project management process (PMBOK 2013, P 123).

Project processes falls into five basic process groups (PMI, 2014).

2.6. Project Process groups

The five project process groups are:

Initiating: processes performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase.

Planning: Those processes required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve.

Executing: Those processes performed to complete the work defined in the project management plan to satisfy the project specifications

Monitoring and Controlling: Those processes required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes.

Closing: Those processes performed to finalize all activities across all Process Groups to formally close the project or phase.

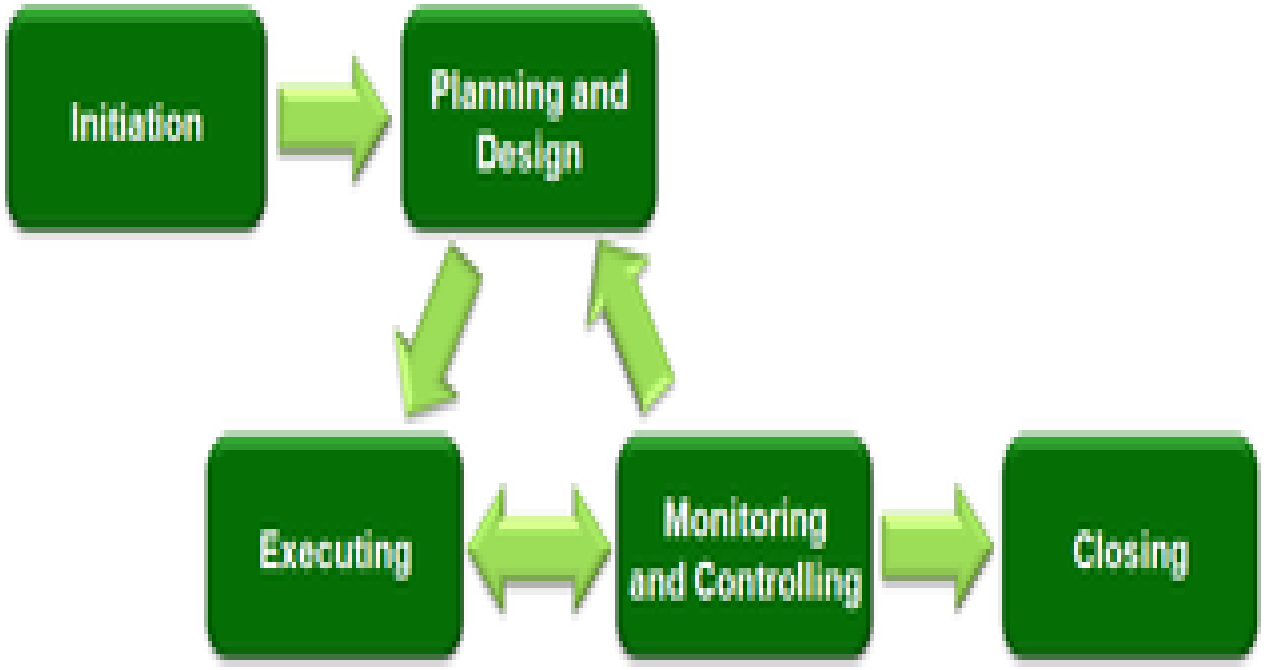


Figure 2.2 Typical development phases of projects

(Source PMI 2013 p 13-14)

2.7. Empirical Literature

2.7.1 Project failure

Most of the early studies in the area focused on the reasons for project failure rather than project success. It is assumed that if a projects completion time exceeded its due date, or expenses overran the budget, or outcomes did not satisfy a company's predetermined performance criteria, the project was assumed to be a failure. Delays in project completion times are common. Because of the delays, project managers sometimes pay penalties which increase overall project costs (Wallid Bellasi 1999 Vol. 14, No. 3, pp. 141-151,). There are many writers who tells why projects fail. For instance, Field tells us that projects fail too often because the project scope was not fully appreciated and/or user needs not fully understood. Hulme said that projects and associated procurements take place in an environment characterized by the following: Lack of management continuity and an incentive system that encourages overly optimistic estimates of the benefits that can be attained from doing the project. And Leicht said that high user

expectations can actually be the cause of project failure. Hoffman tells that projects fail because of poor alignment between departments and project users. And in another article Hoffman tells us that project managers too often act as "process cops and report compilers and lose sight of what they're supposed to be doing to make sure projects are running effectively. In a 2003 article Julia King reports, projects fail on average. Now if you are an extremely optimistic person you might conclude the good news is that 70% of these projects succeed. But note that King does not tell us how many of the 70% of the successful projects were over budget, over time, or defective in function upon completion. The purpose of this study is to identify project failure factors and identify the effects of the factors on project performance. Thus, instead of analyzing individual factors, one would first be able to the group a factor belongs to, and then determine the combined effects of these factors in eventually leading to project failure. The success and failure factors were first introduced by Rubin and Seeling in 1967. They investigated the impact of a project manager's experience on the project's success or failure. Technical performance was used as a measure of success. It was concluded that a project manager's previous experience has minimal impact on the project's performance, whereas the size of the previously managed project does affect the manager's performance. Rubin and Seeling's study was followed by a theoretical study by Avots. He identified reasons for project failure and concluded that the wrong choice of project manager, the unplanned project termination and unsupportive top management were the main reasons for failure. In 1983 Baker, Murphy and Fisher suggested that instead of using time, cost and performance as measures for project success, perceived performance should be measure. Hughes conducted a survey to identify the factors that affect project performance. He concluded that projects fail because of improper basic managerial principles, such as the improper focus of the management system, by rewarding the wrong actions, and the lack of communication of goals. In their book, Morris and Hough studied eight large, complex projects which had great potential economic impact but were poorly managed and generally failed. They identified the failure factors for each of them. One of the first efforts to classify critical factors was carried out by Schultz, Slevin and Pinto. They classified factors as strategic or tactical. These two groups of factors affect project performance at different phases of implementation. The strategic group includes factors such as project mission, top management support and project scheduling whereas the tactical group consists of factors such as client consultation, personnel selection and training. In their follow-up work, Pinto and Slevin identified success factors, and their relative

importance, for each stage of a research and development project life cycle. In addition to the literature described above the researcher referred to project management books by Locke, Meredith, Mantel, and by Martin for further discussions on critical failure factors.

2.8. Critical Failure Factors of the Project

The framework in Figure 3 addresses many of the drawbacks in the literature. The researcher grouped the factors into eight areas:

1. Factors Related to Management
2. Factors Related to Finance
3. Factors Related to the Project,
4. Factors Related to the Project Manager
5. Factors Related to the Project Team Members,
6. Factors Related to the Organization
7. Factors Related to the External Environment.
8. Factors Related to risk, culture and procurement process

As can be seen from the figure, the groups are interrelated.

A factor in one group can influence a factor in another group, and a combination of several factors from various groups might lead to project failure. For instance, top management support is a factor related to an organization which can be affected by the general state of the economy.

Similarly, the uniqueness of project activities can affect the project manager's competence on the job. Lack of top management support together with the project manager's lack of competence on the job might lead to project failure. One of the advantages of grouping the factors in this fashion is that although it might be difficult to identify the failure factors specific to certain industries or organizations, it might be easier to identify whether the failure is related to the project manager and/or to the project and/or to external factors. Note that these four groups offer a comprehensive set in that any factor listed in the literature, or even specific points of consideration, should belong to at least one group. The framework suggest here not only brings advantages by grouping critical factors, but also helps project managers understand the intra-relationships between the factors in different groups. For instance, in the literature the availability of resources is considered to be a factor necessary for the successful completion of projects. Here, however,

the studies suggest that resource availability is a systems response to organizational, environmental and project management-related factors such as top management support, project managers' negotiation skills and the general economic situation. This will help project managers evaluate and monitor their projects more accurately. Similarly, project managers' competence is a critical factor that affects project planning, scheduling and communication. Thus, effective planning, scheduling and communication are really not factors but immediate effects of factors related to a project manager, such as his managerial skills, competence and his technical background. Using this framework, project managers can easily observe these cause effect relationships. Furthermore, they can easily adapt this framework to their specific situations and include the factors that were found to be critical for their project's success. As will be explained in the next section, many project managers and managers involved in projects find this framework to be a better tool for understanding critical success factors.

2.8.1 Factors Relate to Management

A fundamental assumption of project management practice and research is that using project management to achieve organizational objectives improves organizational performance. This assumption is so ingrained that it appears to be self-evident; if it were otherwise, there would be little reason to justify the considerable expense that many organizations go to in developing and maintaining project management systems and certifying staff in external standards. There would also be little reason to justify the not inconsiderable intellectual effort applied by academics and researchers around the world to develop and refine project management theory and practice. A wide variety of authors comment that project management has a positive effect on aspects of an organization’s success. Whether this is broadly expressed in terms of the impact on overall productivity (Cleland, 1984; McHugh & Hogan, 2011), performance (Abbasi & Al-Mharmah, 2000), efficiency (Stimpson, 2008), or effectiveness (Shenhar, Dvir, Levy, & Maltz, 2001), the underlying assumption is that it is good business to use project management to achieve organizational objectives. However, this assumption typically remains unexamined.

2.8.2 Factors Related to Finance

Financial Management on project performance will be one of the key challenges for corporations in the next decade: only those institutions that have sound financial structures and stable income flows will be able to fulfill their multiple missions and respond to the current challenges in an increasingly complex and global environment Anthony and Young (2003). Indeed, financial management is not an end in itself; it aims to ensure a organization‘s goals are reached by guaranteeing that the institution produces sufficient income to enable it to invest in its future. Unsustainable project operations can be accommodated for either by developing sustainable operations or by planning for a future lacking in resources currently required. In practice organizations mostly tend to aim towards sustainability by increasing efficiency in the way in which resources are utilized. Financial management checks under review in this proposal will include: budgeting, banking and expenditure checks Strogatz (2003). Organizations are facing challenges regarding their budgeting in project management. Pressure to follow through with only the projects that are going to be successful and carry less risk is mounting. As a project manager one needs to keep budgeting queries and be aware of benefits at all times throughout the project (Bourne and Walker, 2003). Good financial and accounting systems are paramount: it is essential that management has current, accurate, and relevant financial data to ensure sound decision-making. Internal controls should be robust and should be rigorously overseen Anthony and Young (2003). According to Habeeb, (2013) financial management is the operation of an internal control system. Financial management of projects must be actively managed; it is an important part of the project management process and should be reviewed by the project manager, financial team, stakeholders and key project team members regularly (Weick, 2005; Backström, 2004; Jensen, 2004; van Eijnatten, 2003). By keeping a close eye on the project budgets one will be assured that they are kept within the forecast set from the beginning.

2.8.3. Factors Related to Project

Project characteristics have long been overlooked in the literature as being critical failure factors whereas they constitute one of the essential dimensions of project performance. Among the few studies, Morris and Hough II identified schedule duration and urgency as critical factors. Many projects, however, fail due to several other factors inherent in projects• The size and the value of

a project, the uniqueness of project activities (vs. standard activities), the density of a project network, project life cycle and the urgency of a project outcome• In a recent study by Tukel and Rom, it was found that the durations of many large size projects, those with more than 100 activities, exceed their deadlines. There are usually penalties imposed on projects when deadlines are exceeded. Monetary penalties and loss of credibility are the most common ones. Thus, if the project lifespan is being used as a measure to evaluate project performance, one should be cautious about the size of a project and the effectiveness of the penalties. Not only the number of activities but also the familiarity of the organization with the type of project being undertaken is critical. The project manager's performance on the job can be heavily influenced by the uniqueness of the activities. The more standard activities a project has, the easier it is for project managers to plan, schedule and monitor their projects. Another characteristic which needs to be emphasized is project density. This is defined as the ratio of total number of precedence relationships to the total number of activities. The allocation of resources, especially man hours, is affected by the density. Due to the resource constraints, project managers are often forced to use overtime, which jeopardizes budget performance, or are forced to delay activities competing for the same resource, which results in delays in project completion times. Finally, a characteristic worth mentioning is the urgency of a project. This is defined as the need to implement the project as soon as possible. In many cases project performance criteria are not met because of the urgency of a project. Projects which start after natural disasters are typical examples. In these situations, not enough time is allocated for planning and scheduling projects, and as a result projects are more likely to exceed budgets and be perceived as failures.

2.8.4. Factors Related to project Manager and Team Members

Project management action is a key for project success Hubbard 1990. Jaselskis and Ashley 1991 suggested that by using the management tools, the project managers would be able to plan and execute their construction projects to maximize the project’s chances of success. Then, the variables in project management include adequate communication, control mechanisms, feedback capabilities, troubleshooting, coordination effectiveness, decision making effectiveness, monitoring, project organization structure, plan and schedule followed, and related previous management experience(Belout 1998; Chua et al. 1999; Walker and Vines 2000).

A number of attributes will affect this factor, including the communication system, control mechanism, feedback capabilities, planning effort, organization structure, safety and quality assurance program, control of subcontractors' works, and finally the overall managerial actions.
Many factors related to the skills and characteristics of project managers and team members are proposed for the successful completion of projects. In their recent study, Pinto and Slevin demonstrated the importance of selecting project managers who possess the necessary technical and administrative skills for successful project termination. They showed that the project manager's commitment and competence become most critical during the planning and termination stages. The competence of the team members is also found to be a critical factor during the implementation stages. Note that these factors not only affect project performance but they also have an impact on client satisfaction and project acceptance. For example, a project manager's marketing skills influence the client's attitude towards the project outcome. Similarly, well established communication channels between the project manager, the organization and the client are necessary for the acceptance of the project outcome by the client.

2.8.5 Factors Related to Organization

One of the most critical factors for the successful completion of projects is top management support. The support is usually strongest if there is a project champion and this champion is from the top management. He helps project managers understand and achieve the project objectives which are specified by the client and/or top management. Top management usually controls a project manager's access to resources which are supervised by functional managers. The level of support provided by the functional manager is usually determined by the level of support from top management. If the project is part of the functional department, then the availability of resources is not usually an obstacle, because the functional manager is usually also the project manager. But for projects with matrix organizational forms, or for projects with pure project forms, acquiring adequate resources can be a difficult job. It requires negotiating skills and positional power within the organization. Clearly, full support from the organization for the project helps to facilitate and implement strategies for the successful completion of projects.

2.8.6 Factors Related to External Environment

Various researchers support environment as a factor affecting the project success (Akinsola et al. 1997; Kaming et al. 1997; Songer and Molenaar 1997; Chua et al. 1999; Walker and Vines 2000 Akinsola et al.1997) further described environment as all external influences on the process, including social, political, and technical systems. The attributes used to measure this factor are economic environment, social environment, political environment, and level of technology advanced. This last group consists of factors which are external to the organization but still have an impact on project success or failure. A number of environmental factors, such as political, economic, and social, as well as factors related to the advances in technology or even factors related to nature affect project performance. In an empirical study by Pinto and Slevin, it was found that most of the environmental factors affect projects during the planning stage of a project's life-cycle. Yet some of the factors affect a project at all phases of the life-cycle, such as weather conditions and social environment. Sometimes these factors are so influential that they cause a project to be terminated at the implementation stages. In their book, Morris and Hough gave many illustrations of governments being influential external factors and showed how crucial the public attitude towards a project could become. Note that if a client is from outside the organization, the client should also be considered as an external factor influencing the project performance. For functional projects, however, clients are usually part of the organization, such as top management. In such cases, factors related to the client can be grouped under the factors related to the organization. There might be additional external factors affecting project success, such as competitors in the market or subcontractors. They should also be listed with this group. Any factor in this group might influence the availability of resources and thus the project manager's performance on the job. The subcontractors start their main duties when the project reaches the construction stage. The variables include contractor experience, site management, supervision and involvement of subcontracting, contractor’s cash flow, effectiveness of cost control system, and speed of information flow (Chan and Kumaraswamy 1997; Dissanayaka and Kumaraswamy 1999.) The client-related factors concerned with client characteristics, client type and experience, knowledge of construction project organization, project financing, client confidence in the construction team, owner’s construction sophistication, well-defined scope, owner’s risk aversion, client project management. (Chan and Kumaraswamy 1997; Songer and

Molenaar 1997; Dissanayaka and Kumaraswamy 1999). Client consultation and acceptance are also influenced by the environmental factors. Similarly, the client might be the reason for ineffective consultation, which could lead to project failure. (Chan and Kumaraswamy 1997; Songer and Molenaar 1997; Dissanayaka and Kumaraswamy 1999).

2.8.7 Factors related to risk, culture and procurement process

Risk

Failure to think ahead and to foresee and address potential problems (Classic mistake award winner) and Risk management is seen as an independent activity rather than an integral part of the planning process. Risk, problems and issues become confused as a result team isn't really doing risk management.

Religion and culture

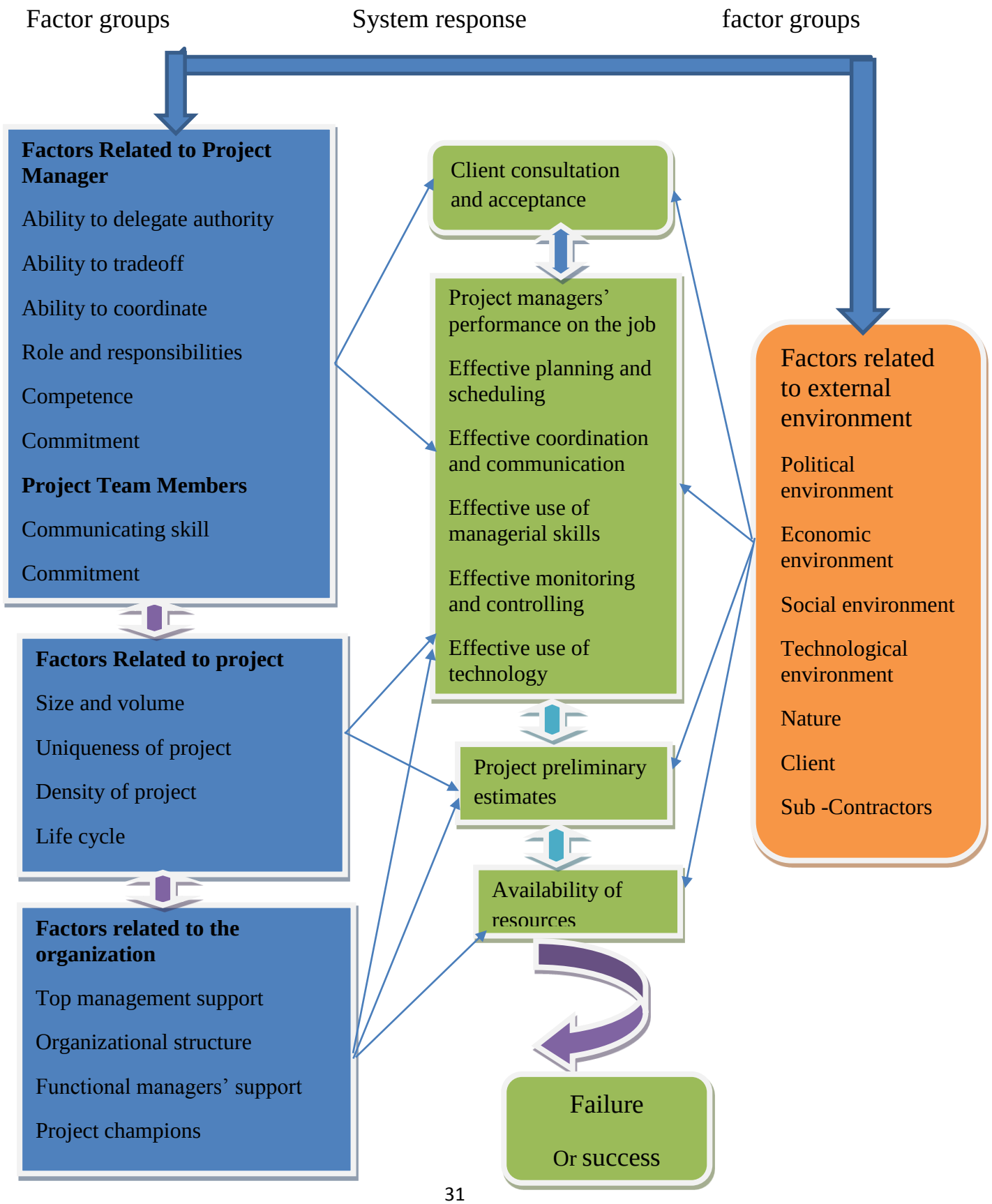
The World Commission on Culture and Development defined culture as 'ways of living together' and argued that this made culture a core element of sustainable development. Almost all of the grave threats confronting human and planetary survival originate in human actions. However, much narrow thinking on sustainable development has focused almost exclusively on the relationships of people to the natural environment without considering the people-to-people relationships that lie at the core of a sustainable society. Fulfilling today's human needs while preserving and protecting the natural environment for future generations requires equitable and harmonious interactions between individuals and communities. Developing cultural values that support these people-to-people and people-to-nature values has traditionally been the role of religion in most societies. Religion is a major influence in the world today. It seems that people in all cultures have a set of beliefs that go beyond both the self and the natural world. We use these beliefs to help explain reasons for human existence and to guide personal relationships and behavior. Part of the great diversity of humankind is the many different religions and belief systems we have developed Animism, Buddhism, Christianity, Hinduism, Islam, Jainism, Taoism, and many more. Religious beliefs have a strong influence on the culture of a community. Indeed, for many people around the world, religious beliefs are central to their culture and provide the moral codes by which they live. Even where people in the contemporary

world believe that the traditional beliefs of their parents and societies are not so relevant to their everyday lives, underlying religious beliefs about human worth and how to relate to other people and the Earth are still important parts of their lives. Many definitions of culture refer to particular values and beliefs. Other meanings refer to the everyday life and behavior of people that flow from these beliefs. Others are more general and refer to works of art. Culture is, therefore, an inextricable part of the complex notion of sustainability. It can be seen as an arbiter in the difficult trade-offs between conflicting ends with regard to development goals. As pointed out in the report of the World Commission on Culture and Development set up jointly by UNESCO and the United Nations, culture is not only the "servant of ends but the social basis of the ends themselves", a factor of development but also the "fountain of our progress and creativity". All these meanings or aspects of culture influence our worldviews and the ways in which we view our relationships with the Earth and each other. As a result, these aspects of culture affect different meanings of what it might mean to live sustainably. Culture is an important concept in projects for Sustainable Development. This is because the common cultural models in many societies often do not encourage sustainable development and what is needed are new, or re-discovered, norms and values that can guide our actions towards sustainable ways of caring for other people and the natural world.

2.9. Conceptual Framework

Conceptual framework is a critical base for indicating logical flows of assumption the study desire to attain in its objective. It shows conceptual foundation to proceed with the research and indicates how concepts are related to each other. So, the subsequent framework of failure factors in Ministry of Agriculture and Natural Resources.

Figure 2.3 Conceptual framework of project failure or success (Walid Belassi, 1996, pp. 141-151)


Factor groups
System response
factor groups
Factors Related to Project Manager
Ability to delegate authority
Ability to tradeoff
Ability to coordinate
Role and responsibilities
Competence
Commitment
Project Team Members
Communicating skill
Commitment
Factors Related to project
Size and volume
Uniqueness of project
Density of project
Life cycle
Factors related to the organization
Top management support
Organizational structure
Functional managers' support
Project champions
Client consultation and acceptance
Project managers' performance on the job
Effective planning and scheduling
Effective coordination and communication
Effective use of managerial skills
Effective monitoring and controlling
Effective use of technology
Project preliminary estimates
Availability of resources
Failure
Or success
Factors related to external environment
Political environment
Economic environment
Social environment
Technological environment
Nature
Client
Sub -Contractors

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Explanatory Design

Exploratory research is designed in order to gain insight into a situation of which little is known about or if the interest is in developing a hypothesis that would be probably tested in another research (Diem, 2002).

3.2 Population and Sampling Design

A population can be defined as the complete set of subjects that can be studied: people, objects, organizations from which a sample may be obtained (Shao, 1999). There are 16 projects in MoAR among these the project 4 projects were selected by stratified sampling method. The sampled projects were

1. Agricultural Growth Program (AGP)
2. Participatory Small Scale Irrigation project
3. Sustainable Land use Management project (SLM)
4. Animal and Animal Products Quality Project

3.2.1 Sampling Technique

The study used Stratified Sampling technique to select the projects**:** A two-step process in which the population is partitioned in to subpopulations, or strata. The strata should be mutually exclusive and collectively exhaustive in that every population element should be assigned to one and only one stratum and no population elements should be omitted. The elements within a stratum should be as homogeneous as possible, but the elements in different strata should be as heterogeneous as possible. Stratification was based on the principal variable under study such as

Departments namely: plant science projects, Animal science projects, Natural resource projects and Irrigation projects.

Sample Size Determination

The populations of the selected project are 80 so, the study used Census Surveys: A complete enumeration of all items in the population is known as a census survey. In census survey inquiry, when all items are covered, no element of chance is left and highest accuracy is obtained.

3.3 Types of Data to be collected and used

Both primary and secondary data were used

Primary Data

Primary data will be collected from the people directly involved in the research. Such as: - questionnaires, interviews.

Secondary Data

Secondary data means data that are already available i.e., they refer to the data which have already been collected and analyzed by someone else. Secondary data may be acquired from various sources: Reports of various kinds, books, periodicals, reference books (encyclopedia), university publications (thesis, dissertations, etc.), policy documents, statistical compilations, proceedings, personal documents (historical studies), The Internet etc.

3.4 Method of Data Collection

1 Questionnaire

A series of questions that are easy and convenient to answer but can describe the intended practices or behaviors was formulated into a questionnaire. Shao (1999) defines a questionnaire as a formal set of questions or statements designed to gather information from respondents that accomplish research objectives. In this respect the questionnaire will be answered by the employees in the project. The questionnaire may have either structured. The structured questions

are convenient easy and take less time to answers because options are available to the respondents from which they tick options that best describe their practices, opinions or attitudes. The disadvantage is that they restrict the respondent in choice. The available options from which they have to select may not be exhaustive to describe the situation of the respondent.

The questionnaire may be disseminated to the respondents in different ways as shown below:

a) Deliver and drop and pick up after respondents have responded

b) It was administered face to face.

2 Interviews

Interview as opposed to questionnaire requires more in depth answers and takes longer and more resources to carry out. It requires setting up appointments at the convenience of both the researcher and the respondents and it takes a longer period of time to get as much information as you could get from a questionnaire (Shao, 1999). The questions of the interview as with the questionnaire may be structured; the interview takes placed face to face.

3.5 Method of Data Analysis

The data was collected from questionnaires was analyzed by using descriptive statistics and by correlation model. The quantitative data would be entered, cleaned and analyzing using the statistical package for social sciences (SPSS) version 20.0.The qualitative data was analyzed by manually. Descriptive statistics provides with profiles of companies, work groups, persons, and other subjects on any of a multiple of characteristics such as size, composition, efficiency, preferences, etc. Such as: - Mode, Median, Mean, Percentage, tables, and frequency, etc.

3.6 Reliability Test

Reliability refers to the consistence, stability, or dependability of the data. The tendency toward consistency found in repeated measurements is referred to as reliability (Carmines & Zeller, 1979). Whenever an investigator measures a variable, he or she wants to be sure that the measurement provides dependable and consistent results (Cooper & Schindler, 2003). A reliable measurement is one that if repeated a second time gives the same results as it did the first time. If the results are different, then the measurement is unreliable (Mugenda & Mugenda, 2003). To

measure the reliability of the data collection instruments an internal consistency technique using Cronbach's alpha will be applied. Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability. An alpha coefficient of 0.75 or higher indicated that the gathered data is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population. Some very good achievement tests may reach .98, but probably not any higher than that. Reliability analysis of the questionnaire is made through SPSS version 20. The student researcher took seven independent variables for reliability test.

Table 3.1 Reliability Statistics

Cronbach's Alpha	N of Items
.934	7

3.8 Ethical Considerations

Ethical Considerations can be specified as one of the most important parts of the research. Dissertations may even be doomed to failure if this part is missing. In order to address ethical considerations aspect of my dissertation in an effective manner, the study would need to expand discussions according to each of the following points. The research purpose was clearly introduced for all participants of this study. Concerning the right of privacy of the respondents, the study assured the confidentiality of the identity of each participant. There was Voluntary participation of respondents in the research was important. The use of offensive, discriminatory, or other unacceptable language needs to be avoided in the formulation of Questionnaire/Interview. Privacy and anonymity or respondents was of a paramount importance.

CHAPTER FOUR

RESULT AND DISCUSSION

This section focused on analysis, interpretation and discussion. The collected data was compiled and subjected to statistical tools analysis. The primary data which was collected through questionnaires were scrutinized by SPSS version 20 is critically essential in order to have a precise output of the analysis.

4.1) Data Collected From Questionnaire

Questionnaires were collected from 80 respondents whose addresses were in projects. 80 respondents that were targeted in the study were completed and returned the questionnaires.
The primary data collected through questionnaires were analyzed by SPSS version 20.

4.2 General Background Information of Respondents

Table 4.2 General Background Information of Respondents

Characteristics	Category	Frequency	%
Sex	Male	69	86.3
	Female	11	13.8
	Total	80	100.0
Age	26-35 years	3	3.8
	36-45 years	20	25.0
	above 45 years	57	71.3
	Total	80	100.0
Educational status	First Degree	15	18.8
	Master's Degree	53	66.3
	PhD	12	15.0
	Total	80	100.0
Job position	project coordinator	4	5.0
	Expert	65	81.3
	Engineer	3	3.8
	procurement specialist	4	5.0
	Advisor	4	5.0
	Total	80	100.0
Field of study	project management	2	2.5
	Engineering	3	3.8
	Agriculture	69	86.3
	Procurement and supplies Management	4	5.0
	Land Resource Management	2	2.5
	Total	80	100.0
Project duration		Frequency	Percent
	6-10 years	80	100.0

Working area	AGP	24	30.0
	SLM	22	27.5
	small scale Irrigation	18	22.5
	Animal products project	16	20.0
	Total	80	100.0
Experience	2-3 years	5	6.3
	4-6 years	30	37.5
	more than 6 years	45	56.3
	Total	80	100.0

Source own survey, 2017

According to Table 4.2 86.3% of the respondents are male and the rest of 13.3% of the respondents are females and the table also explained Most of the of the respondents have Master's Degree 66.3%, first degree 18.8% and PhD 15.0% respectively.

Most of the respondents are under the age of above 45 i.e. 71.3% and 36-45 years 25.0%, 26-35 years 3.8% respectively.

The above table showed that the job position of the respondents is expert 81.3%, Advisor, Project coordinator and Procurement specialist 5.0% each, Engineer 3.8% respectively.

The above table showed that the job position of the respondents is expert 81.3%, advisor, project coordinator and procurement specialist 5.0% each, engineer 3.8% respectively.

Most of the respondent's field of study is Agriculture 86.3%, procurement and supplies management 5.0%, engineering 3.8% and project management 2.5% respectively.

According to the above table all of the respondents answered that the duration of the projects are 6-10 years second round project duration.

According to the table 30.0% of the respondents AGP, 27.5% of respondents SLM, 22.5% of the respondents, 20.0% of the respondents are working respectively.

Finally, the above table shows that 56.3% have more than 6 years of experience, 37.5% 4-6 years of experience and 6.3% have 2-3 years of experience respectively.

Table 4.3 Management Related Failure Factors

Questions	Strongly disagree		Disagree		Neutral		Agree		Strongly agree			
Management related factors	N	%	N	%	N	%	N	%	N	%	Mean	STD
Management skills and experience	-	-	9	13.3	10	12.5	52	65.0	9	11.3	3.73	.811
User involvement	-	-	-	-	6	7.5	54	67.5	20	25.0	4.1750	.54599
Management reporting	4	5.0	40	50 %	16	20	12	15	8	10	2.7500	1.0966
Adequate team	-	-	10	12.5	5	6.3	55	68.8	10	12.5	3.8125	.81277
Communication					5	6.3	70	87.5	5	6.3	4.0000	.35578
Planning	2	2.5	4	5.0	6	7.5	64	80	4	5	4.1375	.47049
Project management knowhow	2	2.5	4	5.0	6	7.5	64	80	4	5.0	3.8000	.71865
Sense of ownership	-	-	5	6.3	10	12.5	45	56.3	20	25.0	4.0000	.79556
Aggregate mean											3.775	

According to Abdufetah Mohammed 2013 mean more than 3 is considered as major problem, 2.50-2.99 is moderate problem, 2.00-2.49 minor problem, and below 2 is considered as least implemented challenge. According this category table 4.3 above user involvement mean 4.1750

and std. deviation .54599, planning mean 4.1375 and std. deviation .47049, sense of ownership mean 4.0000 and std. deviation .79556, communication mean 4.000 and Std. deviation .35578, adequate team mean 3.8125 and std. deviation .81277, project management knowhow mean 3.8000 and std. deviation .71865, management skills and experience mean 3.73 and std. deviation .811 are failure factors respectively, and management reporting mean 2.7500 and STD. deviation 1.09660 this indicates no management reporting problems.

Table 4.4 Financial Related Factors

Issues	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	
	N	%	N	%	N	%	N	%	N	%	Mean	Standard deviation
Operating expenses	5	6.3	52	65.0	8	10	10	12.5	5	6.3	2.4750	1.00599
Capital	50	62.5	25	31.3	5	6.3	-	-	-	-	1.4375	.61302
Costing and budgetary control system	5	6.3	14	17.5	37	46.3	20	25.0	4	5.0	3.0500	.93997
Working capital	-	-	10	12.5	9	11.3	56	70.0	5	6.3	3.7000	.76968
high payroll	-	-	12	12.5	9	11.3	56	70.0	5	6.3	3.7000	.76968
Aggregate mean											2.84	

Source own survey, 2017

According to the above table high payroll mean 3.7000 and STD deviation .76968, budgetary control system mean 3.0500 and STD .deviation of .93997, are factors that affects projects.

Operating expense mean 2.4750 and STD deviation of 1.00599 and capital mean 1.4375 and STD .deviation of .61302 have insignificant relationship with project failure.

Table 4.5 Organizational Related Factors

Issues	Strongly disagree		Disagree		Neutral		Agree		Strongly agree			
	N	%	N	%	N	%	N	%	N	%	Mean	Standard deviation
Top management support	5	6.3	10	12.5	5	6.3	56	70.0	4	5.0	3.5500	.99238
Project organizational structure	4	5.0	55	68.8	6	7.5	15	18.8	-	-	2.4000	.85091
Aggregate mean											2.95	

Source own survey, 2017

According to the table above top management supports mean 3.5500 and std. deviation .99238 is organizational related major project failure factor.

Project organizational structures mean 2.4000 and STD .85091 is minor factor for project failure.

Table 4.6 External Environment Related Factors

	Strongly disagree		Disagree		Neutral		Agree		Strongly agree			
Issues	N	%	N	%	N	%	N	%	N	%	Mean	Std
Political environment	1	1.3	15	18.8	7	8.8	55	68.8	2	2.5	3.3750	.83249
Economic environment	6	7.5	45	56.3	10	12.5	15	18.8	4	5.0	3.5750	.83855
Social environment	6	7.5	15	18.8	5	6.3	50	62.5	4	5.0	2.6250	1.05991
Technological environment	-	-	17	21.3	20	25.0	42	52.5	1	1.3	3.4375	1.06550
Nature	6	7.5	60	75.0	14	17.5	-	-	-	-	2.1250	.48718
Client	-	-	-	-	6	7.5	64	80	10	12.5	4.0750	.44366
Competitors	7	8.8	51	63.8	18	22.5	-	-	4	5	2.3375	.87067
Aggregate mean											3.057	

Source own survey, 2017

According to the above table User of the project mean 4.0750 and std. deviation of .44366, Political environment mean 5.5750 and STD deviation of .83855, Social environment mean 3.4375 and std. deviation of 1.06550, Technological environment 3.3750 and std. deviation of .83249, Economic environment mean 2.6250 and std. deviation of 1.05991 are external environment related project failure factors respectively.

Competitors mean 2.3375 and std. deviation of .87067 and Nature mean 2.1250 and std. deviation of .48718 this indicates less effect on project failure.

Table 4.7 Project Coordinators Related Factors

	Strongly disagree		Disagree		Neutral		Agree		Disagree			
	N	%	N	%	N	%	N	%	N	%	Mean	Std
Ability to delegate authority	4	5.0	6	7.5	9	11.3	57	71.3	4	5.0	3.6375	.88937
Ability to tradeoff	-	-	10	12.5	6	7.5	56	70	8	10	3.7750	.79516
Ability to coordinate	-	-	15	18.8	5	6.3	58	72.5	2	2.5	3.5875	.82207
Perception of his role and responsibilities	-	-	9	11.3	10	12.5	59	73.8	2	2.5	3.6750	.70755
Competence	-	-	10	12.5	5	6.3	61	76.3	4	5.0	3.7375	.74194
Commitment	-	-	15	18.8	15	18.8	43	53.8	7	8.8	3.5250	.89972
Aggregate mean											3.65	

Source own survey, 2017

According to the above table ability to tradeoff mean 3.7750 and std. deviation .79516, competence mean 3.7375 and std. deviation .74194, perception of his role and responsibility mean 3.6750 and std. deviation .70755, ability to delegate authority mean 3.6375 and std. deviation .88937, ability to coordinate mean 3.5875 and std .deviation .82207 and commitment mean 3.5250 and std. deviation .89972 are project coordinators related project failure factors respectively

Table 4.8 project Related Factors

	Strongly disagree		Disagree		Neutral		Agree		Disagree			
Issues	N	%	N	%	N	%	N	%	N	%	Mean	Std
The size and the value	4	5.0	60	75.0	6	7.5	10	12.5	-	-	2.2750	.74587
Uniqueness of the project activities	4	5.0	70	87.5	6	7.5	-	-	-	-	2.0250	.35489
Project life cycle	5	6.3	7	8.8	15	18.8	49	61.3	4	5.0	3.5000	.95467
Urgency	-	-	9	11.3	21	23.6	48	60.0	2	2.5	3.5375	.72816
Aggregate mean											2.8	

Source own survey, 2017

According to the above table urgency mean 3.5375 and std. deviation .72816, project life cycle mean 3.5000 and std. deviation .95467 are project related factors for project failure.

The size and volume of project mean 2.2750 and std. deviation .74587 and uniqueness of project mean 2.0250 and std. deviation .35489 has indirect relationship with project failure.

Table 4.9 Project Team Members Related Factors

	Strongly disagree		Disagree		Neutral		Agree		Disagree			
	N	%	N	%	N	%	N	%	N	%	Mean	Standard deviation
Technical background	-	-	6	7.5	10	12.5	55	68.8	9	11.3	3.8750	.70036
Communication	-	-	1	1.3	5	6.3	70	87.5	4	5.0	4.0000	.35578
Trouble shooting	-	-	11	13.8	10	12.5	57	71.3	2	2.5	3.6625	.74534
Commitment	-	-	5	6.3	16	20	40	50	19	23.8	3.9500	.80975
Aggregate mean											3.900	

Source own survey, 2017

According to the table above communication mean 4.0000 and std deviation of .35578, commitment mean 3.9500 and std. deviation of .80975, technical back ground mean 3.8750 and std deviation of .70036 and troubleshooting mean 3.6625 and std deviation of .74534 is project team members related project failure factors respectively.

Table 4.10 Factors related to culture, risk, and procurement process

Issues	Strongly disagree		Disagree		Neutral		Agree		Disagree			
	N		N		N		N		N		Mean	Standard deviation
Culture, norms, values	-	-	19	23.8	16	20	45	56.3	-	-	3.3750	.83249
Procurement process	-	-	13	6.3	4	5.0	61	76.3	2	2.5	3.6875	.77286
Risk	-	-	11	13.8	50	62.5	19	23.8	-	-	3.1250	.60326
Aggregate mean											3.400	

Source own survey, 2017

According to the above table procurement process mean 3.6875 and std. deviation of .77286, culture mean 3.3750 and std. deviation of .83249, risk mean 3.1250 and std. deviation of .60326 are project failure factors.

4.3 Correlation

Correlation is a statistical tool used to find the direction and strength of relationship between variables/ factors. It also provides the type and direction of interrelationships and intensity of relationship among the factors. Correlation is used to determine both the magnitude and the direction of the relationship. Correlation analysis is important for at least two reasons. First, when we find a relationship between two variables, it's possible that one variable is the cause of the other**.** The second reason correlation analysis is important is that it is used in establishing the reliability of measurement instruments**.**

Table 4.11 correlation

		Project failure	Management related factors	Financial related factors	Organizational Related Factors	Project Related factors	Project team related factors	Project managers related factor	External Environment related factors	Factors related to culture, risk and procurement process
Project failure	Pearson Correlation	1	.943**	.882**	.925**	.952**	.970**	.979**	.919**	.966**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	N	80	80	80	80	80	80	80	80	80

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

The study in the above table shows that all the predictor variables on Management related factors, financial related factors, Organizational related factors, Project related factors Project team related factors, Project Coordinators related factor, External Environment related factors and factors like culture, risk and procurement process were shown to have a positive association.

4.5 Data Analysis from Secondary Sources

According to MoAR five year evaluation report, p 55-57, based on first period of projects, the student researcher reviewed documents. Accordingly there are many causes of project failure and every failed project will have its own set of issues. Sometimes it is a single trigger event that leads to failure, but more often than not, it is a complex entwined set of problems that combine and cumulatively result in failure. Generally these project failure factors are explained below.

1. Goal and vision

Failure to understand the why behind the what results in a project delivering something that fails to meet the real needs of the organization (i.e. failure to ask or answer the question "what are we really trying to achieve?")

2. Leadership and Governance

Failure to establish a governance structure appropriate to the needs of the project.

3. Stakeholder Engagement issues

Failure to identify or engage the stakeholders and Failing to view the project through the eyes of the stakeholders results in a failure to appreciate how the project will impact the stakeholders or how they will react to the project.

4. Team issues

Lack of clear roles and responsibilities result in confusion, errors and omissions and there are insufficient team members to complete the work.

5. Estimation

Those who will actually perform the work are excluded from the estimating process. Estimates are arbitrarily cut in order to secure a contract or make a project more attractive. Allowing a manager, sales agent or customer to bully the team into making unrealistic commitments.

6. Planning

Failure to plan – diving into the performance and execution of work without first slowing down to think

7. Risk Management

Failure to think ahead and to foresee and address potential problems (Classic mistake award winner) and Risk management is seen as an independent activity rather than an integral part of the planning process. Risk, problems and issues become confused as a result team isn't really doing risk management (Achievement of the project's objectives APM, 1997, p. 16).

8. Configuration and Information Management

Failure to maintain control over document or component versions results in confusion over which is current, compatibility problems and other issues that disrupt progress. Failure to put in place appropriate tools for organizing and managing information results in a loss of key information and/or a loss of control.

9. Quality

Quality requirements are never discussed, thereby allowing different people to have different expectations of what is being produced and the standards to be achieved. Failure to plan into the project appropriate reviews, tests or checkpoints at which quality can be verified

10. Project Tracking and Management

Believing that although the team is behind schedule, they will catch up later, the project plan is published but there is insufficient follow up or tracking to allow issues to be surfaced and addressed early. Those failures result in delays and other knock-on problems

11. Decision Making Problems

Key decisions (strategic, structural or architectural type decisions) are made by people who lack the subject matter expertise to be making the decision and failure to establish clear ownership of decisions or the process by which key decisions will be made results in indecision and confusion. Absence of professional association. (Sisay Habte, 2001, p 44)

Lack of adequate planning, delays in the release of funds, Lack of commitment., Inadequate funds, Inadequate documentations on the part of owners of projects, Lack of professionalism, Miscommunication between team members and users ,Lack of effective planning ,Lack of Project Management Know-how, Delay in the release of funds , Bad Weather Condition, Cost of Tendering, Lack of Management Support , In adequate team, Lack of commitment, Lack of technical knowhow ,Use of low quality materials , Bureaucratic Procurement Processes , Inability to do due diligence(Chua, D. K. H., Kog, Y. C., and Loh, P. K. 1999 P 142–150).

4.5 Data Gathered From Conducted Interview

As the interview made with different people who has good background to the study, they have given the following causes as the reason why projects fails in MoANR.

Most of the respondents have worked more than 6 years of experience (76.4%).

Most of the respondent's responsibility is an expert (81.3%).

At the movement projects fail or sick because of management related factors such as lack of skill, knowledge and experience.

From different project failure factors Management related failure factors such as management skills and experience, communication, management support, user involvement, sense of ownership and continuous monitoring and controlling problems are the serious causes of project failure which is caused by building poor management practice.

Most of the respondents replied that economic relate factors doesn't affect projects.

Most of the respondents answered that financial related factors affect projects through Working capital and high payroll.

Most of the respondents replied about the mode of project fund that is donor funded and the budget of each project is AGP 600 Million dollar, SLM 450 Million Dollar, participatory small scale project 320 Million Dollar and Animal products quality project 430 Million Dollar (86.4%).of the respondents.

Management related factors affect projects is expressed in terms of poor coordination between the stakeholders, poor communication, no encouragements and incentives from the top management are the causes for project failure.

External related factors such as political environment through government intervention, social environment through social norms and values, technological environment through lack of using advanced technologies and client through dissatisfaction by the project achievements are also causes of project failure in the organization.

Almost interviewee looks project manager related and project team members related factors are as the major cause of failure of project in the organization.

All of the projects are about more than 6 years duration i.e. second round project time.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

This research was motivated by the need to investigate the project failure factors in selected projects in MoAR. To achieve this aim, eight research questions were articulated.

5.2. Conclusions

The Agriculture sector in Ethiopia is the largest, strongest and fastest growing market. However, the projects in MoAR has faced many challenges. These challenges include the lack of real progress in achieving good management and organizational performance, variability in quality among the projects commissioned by government agencies, increasing project delays and cost and time overruns, lack of planning and design, lack of sense of ownership and weak supervision by the government agencies of the project process.

One of the significant findings to emerge from this study is that the current user involvement in projects in MoAR is at the level of neutral or low involvement in tasks in the project process. This means that the clients are giving less of efforts to the day-to-day project activities.

The groups of factors, namely, project managers related, project team member's related, external environment related, management related, project related factors and organizational related factors and factors related to risk, culture and procurement related factors that affect project performance.

Most of the respondents have Master's Degree (66.3%) and the remaining are first Degree and PhD this indicates that the respondents can read and understand questionnaires and give effective feedback.

Most factors for the project failure are the following.

Low knowledge and experience leads to insufficient decision-making in the early stage of design.

Inability to communicate clearly and weak training with low knowledge lead to failure to identify the project regulations and responsibilities.

Low satisfaction with job and salary leads to low client expectations.

Insufficient personal skills with long work hours lead to low client expectations.

Management related factors

Planning, management skills and experience, management support, user involvement, adequate team, miscommunication, project management knowhow, sense of ownership are the management related project failure factors in the organization.

Most of the respondents responded that project fails because of poor management related and project coordinators related factors.

Finance Related Failure Factors of Project

Most of respondents and most of interviewees said that projects are not failing because of shortage of capital.

Project Coordinators Related Factors

Ability to tradeoff, competence. Perception of his role and responsibility, ability to delegate authority, ability to coordinate and commitment are project coordinators related project failure factors respectively.

Project Team Members Related Factors

Communication, commitment, technical back ground and troubleshooting are project team members related project failure factors respectively.

Most of the respondents responded that no costing and budgetary control system and too high payroll as a factor for project failure in the organization.

Most of respondents responded that customer dissatisfaction, poor quality of project, scope change and project time delays are project failure factors.

External Environment Related Factors

Political environment, Social environment, Technological environment, Client, and competitors are Factors related to external environment for project failure in the organization.

Failure Factors related to culture, risk, and procurement process

Bureaucratic procurement process, culture and project risk are project failure factors in the organization. The existing policies and conditions of the country are not as much influencing negatively projects in the organization.

5.5 Recommendations

As management related and project managers' related factors are the main cause of project failure causes in Ministry of Agriculture and Natural Resources., those who are coordinating the projects should:

Develop user involvement Practices in every project activities by participating the stakeholders.

Building sense of ownership that is developing the habit of mine property by creating an awareness about the important of projects.

Deliver Continues training of project managers and project team members.

Develop good management practices by giving management related trainings for management bodies for a better result of projects.

Develop good financial plan and management in order to avoid heavy operating expenses and poor cash flow, control costing and budget, reduce high payroll expenses and working capital deficiencies.

Develop good team building practice due to explaining the role and responsibilities of team members and the relationship with other stakeholders.

Develop good habit of procurement process for purchasing project equipment by hiring experts.

Establishing project management institution (PMI) by professionals.

Owing to the huge disparities in male-female project management practitioners in the organization, a recommendation to the Ministry of Agriculture and Natural Resources would be to encourage female participation in science and particularly project management professions by increasing the number of scholarships for females offering reading science.

Adopt a project management methodology and use it consistently through continues training.

Select the right person as the project manager based on their qualification and related disciplines.

Focus on identifying and solving problems early, quickly, and cost effectively**.** Realistic and meaningful implementation plans including cost performance plans must be drawn up for all projects and approved before budgetary allocations are made.

Project organizations must be made to demonstrate the existence of a project management information system for tracking project performance. Project monitoring units in organizations should be strengthened through training. They should be empowered to enforce corrective actions on implementation issues arising out of their monitoring activities. Project organizations' strategy to address this is to design and construct performance-based monitoring and evaluation (M&E) systems to be able to track the results produced (or not produced) by the organization.

Considering risk alleviation methods, develop good habit of procurement practices by bidding, and narrow cultural differences.

Develop good financial plan and management in order to control costing and budget, reduce high payroll expenses.

Pertinent PM education policies already in existent in tertiary institutions in Ethiopia are disparate. There is a need for harmonization of these policies so that PM can be introduced more broadly at all levels so that students can use skills (hands-on design of monitoring and evaluation systems, conducting stakeholder analysis studies and reporting, writing comprehensive feasibility studies and reporting, using software to develop schedule development etc.) acquired after graduating from school. .

There should be participatory and decentralized way of solving problems making decisions and setting objectives.

Top management should avoid frauding or bureaucratic procurement process and neglecting behaviors.

Effective follow up reporting and appraisal of their employees and performance should be kept. Employees should get necessary motivation, incentives safety, health protection and other services.

Due to the fact that this research has been conducted in only in ministry of agriculture and natural resources in selected four affiliate projects, therefore further study is recommended using different projects.

REFFERENCES

ALTMAN, E.I. (1968). Financial ratios, Discriminant analysis and the prediction of corporate bankruptcy, The Journal of Finance, 23(4): 589-609 ALTMAN, E.I. (1983). Corporate financial distress: A complete guide to predicting, avoiding, and dealing with bankruptcy. New York: John Wiley &Sons

ABBASI, G., & AL-MHARMAH, H. (2000**).** Project management practice by the public sector in a developing country International Journal of Project Management, *18*, 105–109.

ANANTATMULA (2010) definitions of projects in developing countries, 19

ATKINSON, R (1999) Project management: cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria. "International Journal of Project Management", **17**(6) 337-42.

AVOTS, I 'Why does project management fail?' California Management Review (Fall 1969) 77-82

BAKER. B N, MURPHY, D C AND FISHER, D 'Factors affecting project success' Project Management Handbook Van Nostrand Reinhold Co.,New York (1983).

BAUMARD, P. & STARBUCK, W.H. (2005) "Learning from failures: Why it may not happen", Long Range Planning, 38: 281-298

BELASSI, W., & TUKEL, O. I. 1996 A new framework for determining critical success/failure factors in projects.'' *Int. J. Proj. Manage.*p 141–151.

BRUNO, A.V.; MCQUARRIE, E.F. & TORGRIMSON, C.G. (1992) "The evolution of new technology ventures over twenty years: Patterns of failure, merger and survival", Journal of Business Venturing, 7: 291-302.

CANNON, M.D. & EDMONDSON, A.C. (2005) "Failing to learn and learning to fail (intelligently): How great organizations put failure to work to innovate and improve", Long Range Planning, 38: 299-319

CHAN, A. P. C., SCOTT, D., and LAM, E. W. M. 2002. ‘‘Framework of success criteria for design/build projects.’’ *J. Manage. Eng.*, 18, 120–128.

DISSANAYAKA, S. M., and KUMARASWAMY, M. M. 1999. ‘‘Evaluation of factors affecting time and cost performance in Hong Kong building projects.’’ *Eng., Constr. Archit. Manage.*, 6(3) 287–298.

EDELMAN, G.M. 1992. *Brilliant Air, Bright Fire: On the Matter of the Mind.* New York, NY: HarperCollins.

HUBBARD, D. G. 1990 ‘‘Successful utility project management from lessons learned.’’ *Proj. Manage. J.*, 21(3)19–23.

MASLOW, A.H. 1943. ‘A Theory of Motivation’, Psychological Review, 50: 370–96.

JOHNSON, C.G. (1970), Ratio Analysis and the prediction of firm failure, Journal of Finance, 25(3): 1166-1172.

Project Management Institute, A Guide to the Project Management Body of Knowledge, *(PMBOK® Guide)* – Fifth Edition, Project Management Institute Inc., 2013, Page 61.

IEEE (2011), IEEE Guide--Adoption of the Project Management Institute (PMI(R)) Standard A Guide to the Project Management Body of Knowledge (PMBOK(R) Guide)--Fourth Edition

A Guide to the Project Management Body of Knowledge, copyright page, edition 2 ISBN 1-880410-12-5, and edition 3 2004 ISBN 978-1-930699-45-8, and edition 4 2008 ISBN 1-933890-51-7

Project Management Institute], retrieved 15 March 2017

Project Management Institute, A Guide to the Project Management Body of Knowledge – Fifth Edition, Project Management Institute Inc., 2013, Page 2.

ELIYAHU M. GOLDRATT . ISBN 0884271536 and Lawrence P. Leach. (Artech House Professional Development Library). ISBN 1580530745

KELLEY K, BELINDA C BROWN V and STIZIA J. 2002: Good conduct in the conduct and reporting of survey research. International Journal for Quality in Health Care: 15(2):261-286

Kothari C 2003: Research methodology: Methods and Techniques, Kisha Prakasham. New Delhi

SHEPHERD, 2000, new venture survival: Ignorance, external shocks, risk reduction strategies, Journal of Business Venturing, 15: 393-410.

SONGER, A. D., & MOLENAAR, K. R. 1997 ‘‘Project characteristics for successful public-sector design-build.’’ J. Constr. Eng. Manage.123 (1), 34–40.

HUGHES, M W 'Why projects fail: The effects of ignoring the obvious' Ind Eng (1986) 18 14-18

MORRIS, P W and HOUGH, G H the Anatomy of Major Projects John Wiley and Sons, New York (1987)

PINTO, J., & SLEVIN, D. (1988). Project success: definitions and measurement techniques. *Project Management Journal*, *19*(1), 67–71.

RAZ, T., & MICHAEL, E. (2001). Use and benefits of tools for project risk management. *International Journal of Project Management*, *19*(1), 9–17. http://dx.doi.org/ 10.1016/S0263-7863(99)00036-8

STIMPSON, J. (2008). Project management: A means to efficiency. Practical Accountant, June, *41*(6) 17–21.

ZUOFA, T., & OCHIENG, E. G. (2012). Towards The Advancement of Project Management Practice in Developing Countries: PMI Research and Education Conference Limerick Ireland, 15-18 July 2012, Limerick, Ireland.

ZWIKAEL, O., & GLOBERSON, S. (2004). Evaluating the quality of project planning: a model and field results. *International Journal of Production Research*, *42*(8), 1545–1556. http://dx.doi.org/10.1080/00207540310001639955

APPENDEX

Questionnaires

Part one: General Information

1. Nationality ……..

2. Job position ……

3. Project Name……

4. Sex Male ☐ Female ☐

5. Educational status

Diploma ☐ Degree ☐ Masters ☐ PhD and above ☐

If other please specify…….

6. Field of study

Project management ☐ Business management ☐ Agriculture ☐

If other please specify……

7. Age:

Below 20 years ☐ 20-25 years ☐ 26-35 years ☐

36-45 years ☐ Above 45 ☐

If other please specify……..

8. How many years of work experience you have in this organization?

Less than 2 years ☐ 4-6 years ☐

2-3 years ☐

More than 6 years ☐

If other please specify……..

Part two

Give Values based on

Strongly disagree 1, Disagree 2, Neutral 3, Agree 4, strongly agree 5.

Criteria's to Measure Failure Factors

No	Issues	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	User satisfaction					
2	Schedule/Time					
3	Scope					
4	Quality					

Management Related Factors

No	Issues	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Management skills and experience					
2	Management Support					
3	User involvement					
4	Management reporting					
5	Adequate team					
6	Communication					
7	Project management knowhow					
8	Planning					
9	Sense of ownership					

Finance Related Factors

No	Issues	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	High operating expense					
2	Capital					
3	Budget controlling system					
4	High payroll					

Organizational Related Factors

No	Issues	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Top management support					
2	Project organizational structure					

Project Related Factors

No	Issues	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Size and volume of project					
2	Uniqueness of project					
3	Project life cycle					
4	Urgency					

Project Coordinators Related Factors

No	Issues	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Ability to delegate authority					
2	Ability to tradeoff					
3	Ability to coordinate					
4	Perception of his role and responsibilities					
5	Competence					
6	Commitment					

Project Team Members Related Factors

No	Issues	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Technical background					
2	Communication					
3	Trouble shooting					
4	Commitment					

External Environment Related Factors

No	Issues	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Political environment					
2	Economic environment					
3	Social environment					
4	Technological environment					
5	Nature					
6	Client					
7	Competitors					

Factors related to risk, culture, and procurement process

No	Issues	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	Culture, norms, values					
2	Procurement process					
5	Risk management					

Thank you for your cooperation!

An Interview Questions on Project failure factors in Ministry of Agriculture and Natural resources will be:

1. How many years have you been in this organization? _____

2. What is your area of responsibilities in this organization? _____

3. At the movement projects were failed/stucked and sick. What do you think that the failure causes for projects in your organization? _____

4. How much is project total budget for five years _____

5. What is the source of project fund? ……
6. How do economic related factors affect project success in your organization? _____

7. How do financial related factors affect project success in your organization? _____

8. How do political related factors affect project success in your organization? _____

9. How many years is your project duration? _____
10. From economic, financial, management, technology and human related factors which one is a serious cause for project failure in your organization? _____
11. Do you think that lack of encouragements and incentives from government is the main causes of project failure in your organization? _____

12. What are the other factors for project failure in your organization? ……

ENDORSMENT

This thesis has been submitted to St. Mary's University, school of Graduate studies for examination with my approval as a University advisor.

_____ ___ ____ _____

Advisor signature

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