



**ST MARY UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**ASSESSMENT OF PROJECT MANAGEMENT PRACTICES
AND CHALLENGES: EVIDENCE FROM SELECTED
PROJECTS AT THE MINISTRY OF AGRICULTURE**

By

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June:2022
Addis Ababa, Ethiopia

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DECLARATION

I, Solomon Gizaw Desta, the undersigned person declare that the thesis entitled entitled “Assessment of Project Management Practices and Challenges: Evidence from selected projects at Ministry of Agriculture” is my original and submitted for the award of Master of Art Degree in Project Management from St. Mary University at Addis Ababa and it hasn’t been presented for the award of any other degree. Under this study, fellowship of other similar titles of any other university or institution of all sources of material used for the study has been appropriately acknowledged and notice.

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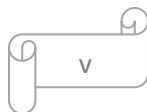
This is to certify that Mr. Solomon Gizaw Desta has properly completed his research work entitled “Assessment of Project Management Practices and Challenges: Evidence from selected projects at Ministry of Agriculture” with our guidance through the time. In my recommendation, his task is appropriate to be submitted as a partial fulfillment requirement for the Master of art Degree in Project Management.

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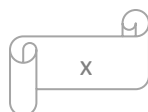
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List of Acronyms

AGP	Agriculture Growth Development
DRLSD	Disaster Resilient Livelihood Sustainable Project
IFAD	International Fund for Agricultural Development
LFDP	Livestock and Fisheries Development Project
PASIDP	Pastoral Small Scale Irrigation Development Project
PIM	Program/Project Implementation Manual
PM4DEV	Project Management for Development
PMBOK	Project Management Body of Knowledge
PM	Project Management
PMAJ	Project Management Association of Japan
PMI	Project Management Institute
P2M	Project and Program Management
PSNP	Productive Safety Net Program
RLLP	Resilient Landscape Livelihood Project
RPDRP	Regional Pastoral Development Resilient Project
UD	Undated

ABSTRACT

Assessment of Project Management Practices and Challenges: Evidence from selected projects at Ministry of Agriculture.

Development Organizations cannot be successful unless they implement a project management methodology that is applicable to their projects in consistent and predictable manner. The main purpose of this study is to assess whether and the extent to which the application of project management processes is consistent with existing theory or not based on the data collected from target Programs/Projects. Purposive sampling method was used to sample respondents. A blend of quantitative and qualitative research tools were used to collect data. About 38 respondents were completed the survey questionnaires, and key informants interviews were done with few experts.SPSS (20) was used for statistical data analysis and descriptive results were presented in the form of percentatge, median, tables and figures. The result showed that among the 10 Project Management knowledge areas, about 6 knowledge areas were found widely used practiced, Whereas Project Quality, Risk, communication and Stakeholders management were poorly practiced. Concerning the assessment of project management challenges, result showed that scheduled delay beyond plan, lack of quality check at satisfaction level, lack of strict quality evaluation measure, risk management process on failure to manage expectation of risk event with no effective response, lack of communication plan and lack of effective communication with stakeholders, and low commitment of stakeholders were identified as challenges. It is suggested that properly applying the standared project management guidelines taking into account local context is required if projects needed to succeed. Furthermore, project team memebers should be aquianted with Project management knowledge areas which are very vital processes in the project management that drastically reduces risk and uncertainty if they are properly practiced as per needed.

Keywords: Project, Project management, Project management practices, Challenges

CHAPTER ONE

Introduction

1.1 Background of the study

Project management as it is explained by Project Management Institute (PMBOK, 2013), is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. In the same vein PM4DEV (2015), emphasized Project management as planning, implementing, and monitoring of project activities to meet project objectives, achieved by effectively controlling and balancing the constraint of time, cost, and scope in producing quality deliverables that meet or exceed the expectations of the project stakeholders. Karen (1998) also underlined Project management is very broad, and its practice varies by the type of business, organization, and projects. According to Gabriela et al. (2018), PM practices are the mechanisms by which PM processes in the organization are delivered and supported. This includes PM techniques (e.g., work breakdown structure or earned value management), various guidelines in which organizational processes are defined, including the use of procedure documents, checklists, job aids, and templates, as well as the use of software packages and various databases.

Ana et al. (2016), described that practitioners and academics have been showing an increasing interest in the use of project management for strategic purposes. Rezania and Lingham (2009: cited in Eric and Patrick, 2014), noted that projects and programs are created to deliver the change needed to achieve the organization's strategic and tactical objectives. In the PMBOK, PMI (2017), stated that project management enables organizations to execute projects effectively and efficiently through using tools and techniques. It is also vital and the corner stone of any successful organization (Kerzner, 2010). Moreover, Thomas and Mulley (2008: cited in Anabela, et al.,

2019), explained PM practices, when applied properly, lead to an increase in the probability of project success. Assem and Mario (2018), also suggested that PM practices, in combination with several other factors, influence project success. The same thought reflected by Liviu et al. (2010), revealed that best practices in project management contribute to the achievement of organizational goals.

The PMBOK (PMI, 2013), asserted the project management guide contains the globally recognized standard document that describes established norms, methods, process and practices contributing for the enhancement of project performance and achieving success. Project management is an effective approach for developing countries to use in improving their management capabilities and facilitating the successful completion of projects. However, research has identified that there is a lack of knowledge of PM techniques and tools (Ama and Devid, 2016: cited in Abbasi and Al-Mharmah, 2000). In Ethiopia, empirical study on constructing rice field in Gambela MIDROC Company was investigated based on PMI Knowledge areas and found that insufficient application of tools and techniques and project control is not prioritized in the Ethiopian culture and problems are solved as they occur rather than by controlling the project to avoid problems.

Project Management Body of Knowledge is a collection of processes and knowledge areas accepted as best practice within the project management discipline worldwide. The existing few stated empirical research of the policy environment as indicated above revealed that there is a limitation in terms of execution project body of knowledge for the enhancement of project performance and achieving success. Thus, this research is attempt to seek the extent to which project management practices (process) mostly applied and challenges in selected program/projects being implemented in the Ministry of Agriculture.

1.2 Statement of the problem

It is noted that development organizations should understand that in order to implement projects successfully, project management must become part of the organizational culture; because, the effective utilization of the project management, practices and method depends upon the integration of key knowledge areas with project management processes (PM4DEV, 2015). In the Ministry of Agriculture 10 years perspective plan there are key development projects jointly funded by government and development partners comprised as: Productive Safety Net Program, Agricultural Growth Program, Resilient Landscape Livelihood Project, Regional Pastoral Development Resilient Project, Drought Resilient Sustainable Pastoral Livelihood Improvement Program, Livestock and Fishery Development Project and Pastoral Small Scale Irrigation Development Project) aimed to achieve strategic objectives of the organization (MoA, 2020).

According to (Gale, 2012; Wirick, 2011; Fraser- Moleketi, 2003: cited in Ama, et al., 2016), the public sector approach of management, particularly in developing countries, has expressed concerns for the need to embed standardized project management practices deeply in public organizations to enhance successful delivery of projects. Ama et al. (2016), revealed that the PM knowledge areas were utilized in Unab and Kundi's study to map the current state of how project management is practiced. A considerable Empirical work have been conducted by researchers in the area of project management mainly in construction and IT projects to measure the performance and success of the projects though limited in development projects.

Norlena et al. (2008), explained that American construction managers ranked scope management, schedule management, communication, cost management, ability to lead customer communication and customer time requirements as the most important variables in the project management. Amgad (2015), noted PM practices, a communication plan and time plan are critical to obtaining

project management success. Variables like Time, Cost and Risk were found among the nine planning activities to achieve better project success (Ermias, et al., 2016). PM practice in public sector has been identified as an efficient approach which would help in upgrading management capabilities and enable public sector to efficiently complete projects and attain developmental objectives (Arnaboldi, et al., 2004: cited in Pulmanis, 2013).

Organizational culture is shaped by common experiences of member of organization and developed unique cultures overtime by practices a common usage PMBOK (PMI, 2013). The project management culture experienced in the Ministry are widely comprised by Financial management, Human resource Management, Procurement management, Risk management and stakeholder's engagement along with application monitoring and evaluation which is part of project management process group. Each program/project operating in the Ministry used Program/project Implementation Manual (PIM) as project management guidance based on few knowledge areas mentioned in the manual. However, the use of others project management processes by operational program/project are not clearly described in the PIM though they contribute significant role in enhancing and achieving project performance and success.

Moreover, project completion delay was mentioned in the project completion report of Pastoral Small Scale Irrigation Development Project (PASIDP) I (IFAD, 2018) and extended by six months due to lack of effective PM practices mainly linked with procurement and human resource management along with others factors. Similarly, as indicated in similar project (PASIDP) II mid-term review (IFAD, 2019), showed that ineffective communication, human resource and procurement management were identified as a challenge in the application of proper project management process. The completed Regional Pastoral Livelihood Project internal report suggested that lack of proper time, communication, stakeholders and procurement management

including delay fund release from the funding organization (Development partner) were identified as a critical challenge and hence, this project extended by two years from the actual planned completion time. In addition to this previous assessment has not been conducted focusing project management processes exercised by the projects in the organization.

Hence, this gap has motivated this research to see the general picture of project management practices applied through investigating in selected Program/projects (PSNP, RLLP, PASIDP, AGP) under each 10 project management body of knowledge area. The main purpose of this study is to assess the existing facts of the extent to which project management processes whether it is consistent with existing theory or not, using collection of information from sample of individuals based on their response to the questions. The finding of this research gives an insight for decision makers to understand the existing situation of project management practices being implemented in the organization.

1.3 Objective of the study

1.3.1 General objectives: The overall objective of this study is to assess Project management practices and challenges based on 10-knowledge area of project management.

1.3.2 Specific objective:

- To describe the existing project management practices (processes and themes) of selected projects.
- To discuss the challenges in the existing project management practices of selected projects.

1.4 The Research questions:

- What does the existing project management practices (process and theme) of selected project look like?
- What are the challenges of the existing project management practices of selected projects?

1.5 Significance of the study

The significance of this study in the domain of project management practices and challenges would contribute to identify the widely and poorly project management practices and challenges in relation to standard project management knowledge areas. The finding of this study will be used as a reference document for the target organization to improve their existing Program/Project implementation manual through incorporating key Project management knowledge areas as project management component to strengthen project performance and success. It also used as input for further research to be conducted in similar organization to address the impact caused by poor practice and challenges under each processes. Moreover, the research is significantly contributes to the researcher to further broaden project management knowledge through reviewing theoretical and empirical literature review in the course of preparing this study.

1.6 Scope of the study

This study is basically focused to investigate the project management practices applied in the target organization in reference to the key components of project management body of knowledge (PMBOK). It covers assessing of practices and interrelated tasks or processes under 10 knowlegde areas of Project integration management, Project scope management, Project time management, Project quality management, Project communication management, Project cost management, Project human resource management, Project risk management, Project procurement management and project stakeholders management. It also assesses critical challenges, which affects the application of practices and processes along with each knowledge areas. Accordingly, based on the finding recommendation is provided that may contribute for the program/projects for the successful achievement of strategic objectives of the organization.

1.7 Limitation of the study

This study is entirely aimed to capture the existing project management practices and challenges experienced by selected projects based on the response obtained from the respondents' perception in projects under study. One of the limitation encountered was all survey questionnaires sent to the respondents were not filled and returned even additional time was given though about 84 % of the respondents were participated. Semi-structured interview was conducted through telephone, as it was very difficult to get relevant experts face to face due to engagement of very tight work during working hours. Most of the empirical studies related to the project management practices were belongs to construction projects and very limited study conducted in development projects, which restrict to capture enough information in the course document review processes. The impact of poor application of project management practices on the performance and success of the projects did not addressed or covered in this study, and hence, this might be considered as future research area in similar organization.

1.8 Organization of this paper

This paper is organized in five chapters and the first chapter comprises an introduction with overview of background of the study. The second chapter captures review of related literature that includes theoretical and empirical literature review pertinent to this research topic. Chapter three discusses the research design and methods that encompasses types of data, data collection tools, methods of data analysis. Chapter four presents results and interpretations of the processed statistical data in the form of percentage, text, table and figure. Chapter five provides vital points of the research findings in summarized form and point out recommendations for the key points need future action.

CHAPTER TWO

RELATED LITERATURE REVIEW

In this chapter, fundamental concepts and broad context of the study were investigated and reviewed based on the existing theoretical and empirical literature. The reviewed literature enables the researcher to understand the broader scholarly and historical context of the study to distinguish what has been assessed, learnt and accomplished and what still needs to be learnt and accomplished.

2.1 Theoretical Literature Review

2.1.1 Concepts and Definition of Project and Project Management

Projects, as a way to attain objectives, have been used since ancient times, generating important results to society and culture like The Great Wall of China (Livi, et al., 2010). Amilcar et al. (2016), have strengthened this history of project management as it is very old it has been practiced for thousands of years since the Egyptian and Romans Era. However, the growth and acceptance of models of management projects, has changed significantly over the twentieth century and it is expected that these changes will multiply during this century. Project management has been practiced for as long as humanity inhabited earth. There are many examples in history of challenging projects that were successfully completed, despite all the complexities and uncertainties that could have rendered the project a failure (Tom and Sara, 2014).

There are many definitions what constitute a project, but the most common definition in PMBOK by PMI (2013), described as a project is a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of projects indicates that a project has a definite beginning and end. For the same reason, a program is defined as a group of related projects, subprograms, and program activities managed in a coordinated way to obtain benefits not available

from managing them individually. Programs may include elements of related work outside the scope of the discrete projects in the program. A project may or may not be part of a program but a program will always have projects (Ibid).

Project management is, fundamentally, a straightforward concept. It refers to the human interaction and activities required to accomplish a common objective, specifically known as a project and it is also described as project management is a process of managing five project objectives, namely managing scope, managing organization, managing quality, managing cost and managing time (Bennett, 1983 and Turner, 2000: cited in Norlena, et al.,2008). PMI (2013), defined Project management as the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements while PM4DEV (2015), illustrated as planning, implementing, and monitoring of project activities to meet project objectives achieved by effectively controlling and balancing the constraint of time, cost, and scope in producing quality deliverables that meet or exceed the expectations of the project stakeholders.

Karen (1998), described project management is very broad, and its practice varies by the type of business, organization, and projects. Amilcar et al. (2016), noted project management is a complex and ongoing activity, which can provide competitive advantage to an organization, but on the other hand, can bring you many problems if not managed in a proper and professional way. Kezner (2013), depicted Project management can mean different things to different people. Quite often, people misunderstand the concept because they have ongoing projects within their company and feel that they are using project management to control these activities. In this regards it is defined, as project management is the art of creating the illusion that any outcome is the result of a series of predetermined, deliberate acts when, in fact, it was dumb luck.

According to Norlena et al. (2008), explained project management today has been increasingly accepted as an inclusive concept, which integrates the efforts of all project team players in order to provide better performance to customers through the effective intra-organizational integration and optimal utilization of scarce resources. Itegi (2015), revealed that the fundamentals of project management approach have been established as proper planning, design, execution and monitoring. Arnaboldi et al. (2004: cited in Pulmanis, 2013), discussed the application of project management practice in public sector has been identified as an efficient approach which would help in upgrading management capabilities and enable public sector to efficiently complete projects and attain developmental objectives.

Project management is not limited to the private sector. Project management is also a vehicle for doing good deeds and solving social problems. Endeavors such as providing emergency aid to areas hit by natural disasters, devising a strategy for reducing crime and drug abuse within a city, or organizing a community effort to renovate a public playground would and do benefit from the application of modern project management skills and techniques (Erik and Clifford, 2018).

Program management is defined as a group of related projects, subprograms, and program activities managed in a coordinated way to obtain benefits not available from managing them individually. Program management is the application of knowledge, skills, tools, and techniques to a program in order to meet the program requirements and to obtain benefits and control not available by managing projects individually. Projects within a program are related through the common outcome or collective capability (PMI, 2013).

A panel paper presented by Joseph et al. (2015), has described as a project and program management should be understood along a continuum of increasing scale and complexity. The continuum begins with small projects and moves to projects of increasing size and complexity. As

the scale and complexity of these projects increases, the work must be broken into multiple projects that should be managed in a coordinated way as programs. Project and program management are distinct disciplines, but they are inextricably linked. Effective program management depends on effective project management, which itself depends on a cadre of professionals including not only project managers, but also an array of technical specialists and disciplines within the project and program management profession, such as requirements development, cost and schedule estimation, and risk management. As stated by Kerzner (2010), program and project management expertise is core to success. It is with these professions as a core competency that we can execute in delivering value to our customers.

2.1.2 Project Management Practices:

The term 'project management practice' is construed in several ways. Some authors associate it with project management competence and use it synonymously with demonstrable performance (Crawford, 2005: Cited in Ama and Devid, 2016), while others refer to it as simply the use of project management tools and techniques on project activities (Olateju, 2011; Abbasi and Al-Mharmah, 2000: cited in Ama and Devid, 2016).

According to Rehema and Gladys (2018), Project management practices are those fundamental issues inherent in the project, which must be maintained in order for team working to take place in an efficient and effective manner. They require day to day attention and operate through the life of the project.” It is interesting to find out whether project managers in the power sector are aware of the project management practices and how the factors under their control impact on the outcomes.

Kerzner (2010), described a best practice begins with an idea that there is a technique, process, method, or activity that can be more effective at delivering an outcome than any other approach

and provides us with the desired outcome with fewer problems and unforeseen complications. As a result, we supposedly end up with the most efficient and effective way of accomplishing a task based upon a repeatable process that has been proven over time for a large number of people and/or projects. A best practice is a work package comprised of a process, tool (or templates), and people that when used together can enable a project team to produce a consistent and stable deliverable for a client with increased accuracy and efficiency (Ibid).

According to Jarzabkowski (2004: cited in Ama and David, 2016), project management 'practice' is defined as a range of customs and rules or bodies of knowledge that state, clearly or implicitly, how the practitioner should operate or work in a certain situation. Relating the definition by Jarzabkowski and the varying descriptions of 'project management practices', it can be stated that the use of tools and techniques is an indication of clearly informed bodies of knowledge, the use of processes indicates a range of customs and rules, and the use of personnel is the action of the practitioner. Therefore, for the current study, project management practice in a public organization is defined as a 'project management system demonstrating specific project management tools and techniques that will enhance management processes through the actions of a project manager or professional in order to support government organizations in managing public projects'.

2.1.3 Leading Project Management Practices

C.M.M et al. (2010), reviewed project management practices and they noted that the five leading project management practices, its merits and drawbacks to be discussed in this paper are Project Management Body of Knowledge (PMBOK), Projects in Controlled Environments (PRINCE), Association of Project Management Body of Knowledge (APMBOK), International Project Management Association (IPMA) and the British Standards (BSI) BS6079-1:2002. There are also additional project management practices as standard/guidelines comprised by (ISO 10006),

International Standards Organization (ISO), (OPM3) Organizational Project Management Maturity Model issued by the Project Management Institute (PMI), (P2M), A Guide book of Project & Program Management for Enterprise Innovation issued by ENNA, (PCM), Project Cycle Management Guidelines issued by the European Commission (Liviu, et al., 2010).

The authors further explained that PMBOK is considered to be a ‘best practice guide’ and is widely recognized as the (de facto) standard of project management knowledge. It has been applied in numerous industrial sectors to manage a wide range of projects including; management projects (general), departmental projects (functional), industrial specific projects (technical), product development (marketing) and governmental projects (public). From the perspective of PMBOK, project management is viewed as a number of interlinked processes, which are directed towards delivering the desired results (Ibid).

The authors stated the merit and drawback, as PMBOK is a comprehensive knowledge-based project management guide covering widely proven practices. Other methodologies, which have subsequently been developed e.g. PRINCE2, are based upon the same grounds as the PMBOK. This fact combined with its descriptive knowledge areas and easy to understand concepts makes PMBOK relatively simple and thereby accessible. PMBOK is considered (at least the current version) to be both a comprehensive and well-structured approach to the management of projects which can be applied regardless of the scale or nature of the project. However, PMBOK does not include any template or checklist needed to construct a project plan (Ibid).

The Fifth edition of PIM (2013), guide identifies 10 Project Management knowledge areas, which describes project management knowledge and practice in terms their component processes. A Knowledge Area represents a complete set of concepts, terms, and activities that make up a professional field, project management field, or area of specialization. These processes are

organized (1). Project Integration Management, (2). Project Scope Management, (3). Project time Management, (4). Project Cost Management, (5). Project Quality Management (6). Project Human Resource Management, (7). Project Communications Management, (8). Project Risk Management (9). Project Procurement Management, (10). Project Stakeholder Management. Therefore, the standard identifies the processes that are considered good practices on most projects, most of the time. The standard also identifies the inputs and outputs that are usually associated with those processes.

- **Project Integration Management:** Includes the processes and activities to identify, define, combine, unify, and coordinate the various processes and project management activities within the Project Management Process Groups. In the project management context, integration includes characteristics of unification, consolidation, communication, and integrative actions that are crucial to controlled project execution through completion, successfully managing stakeholder expectations, and meeting requirements.
- **Project Scope Management:** Includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. Managing the project scope is primarily concerned with defining and controlling what is and is not included in the project.
- **Project Time Management:** Includes the processes required to manage the timely completion of the project. The key benefit of this process is to break down work packages into activities that provide a basis for estimating, scheduling, executing, monitoring, and controlling the project work.

- **Project Cost Management:** Includes 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 Quality Management:** Includes 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. Project Quality Management uses policies and procedures to implement, within the project's context, the organization's quality management system and, as appropriate, it supports continuous process improvement activities as undertaken on behalf of the performing organization. Project Quality Management works to ensure that the project requirements, including product requirements, are met and validated.
- **Project Human Resource Management:** Includes the processes that organize, manage, and lead the project team. The project team is comprised of the people with assigned roles and responsibilities for completing the project. Project team members may have varied skill sets, may be assigned full or part-time, and may be added or removed from the team as the project progresses. Project team members may also be referred to as the project's staff.
- **Project Communications Management:** Includes 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. Project managers spend most of their time communicating with team members and other project stakeholders, whether they are internal (at all organizational levels) or external to the organization. Effective communication creates a bridge between diverse stakeholders who may have different cultural and organizational backgrounds, different levels of expertise, and

different perspectives and interests, which impact or have an influence upon the project execution or outcome.

- **Project Risk Management:** Includes the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project. The objectives of project risk management are to increase the likelihood and impact of positive events, and decrease the likelihood and impact of negative events in the project.
- **Project Procurement Management:** Includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team. The organization can be either the buyer or seller of the products, services, or results of a project.
- **Project Stakeholder Management:** Includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution. Stakeholder management also focuses on continuous communication with stakeholders to understand their needs and expectations, addressing issues as they occur, managing conflicting interests and fostering appropriate stakeholder engagement in project decisions and activities. Stakeholder satisfaction should be managed as a key project objective.

In PMAJ (2015), discussed relationship management refers to a series of operational processes that define the type of relationship between stakeholders who are involved with a project, and maintains good conditions to guide the project successfully. Its objective is to achieve the project to the satisfaction of customers/stakeholders and to further aim for the maintenance and development of the project in a continuous and sound relationship with stakeholders.

Stakeholder theory as developed by Friedman (2006: cited in Rehema and Gladys (2018), stated that the organization in itself is thought of as a group of stakeholders and the purpose of the organization should be to manage their interests, needs and viewpoints. Stakeholder management is thought to be fulfilled by the managers of a firm. The general idea of the stakeholder concept is a redefinition of the organization. In general, the concept is about what the organization would be and how it should be conceptualized. The managers should on one hand manage the corporation for the benefit of its stakeholders in order to ensure their rights and the participation in decision-making and on the other hand, the management must act as the stakeholder's agent to ensure the survival of the firm and safeguard long-term stakes of each group.

2.2 Empirical literature Review

Empirical studies pertinent to Project Management practices predominantly studied in construction sector in developed and developing country and very limited research is found in the application of development project management. Hence, this section attempted to capture very few studies conducted relevant with project management practices.

Rwelamila and Asalan (2010), have presented in the annual conference on the common causes of project failure in the South African Public Sector, which are also reported by the UK office of Government Commerce through citing (Hargovan 2006) are: lack of clear links between the project and the organization's key strategic priorities, including agreed measures of success; lack of clear senior management and ministerial ownership and leadership; lack of effective engagement with stakeholders; lack of skills and proven approach to project management and risk management; too little attention to breaking development and implementation into manageable steps. Ama et al (2016), explained the present condition of the methodological approach applied in government organization research in developing countries in relation to project management

may explain the difficulty in understanding and implementing project management in public projects in such contexts and specifically, in Africa, these challenges, referred to as "African Project Syndrome" (Rwelamalia and Ssegwa, 2014) limit the goal of delivering projects on time, on budget, within scope and delivering value to the public.

The research conducted by Rehema et al. (2018), on how project practices and implementation of power projects in Kenya affect project success indicated that project planning essential in power project implementation and project planning points out the project goals, communication matrix, risk management plan, budget, project reporting, project monitoring, and implementation targets and above all it sets out roles and obligations of each player in the implementation process. Furthermore, they concluded that project monitoring is also a key part in successful power project implementation and monitoring is enabled managers to work towards attaining project goals, and it enables the organization to have a communication matrix and also establishes feedback mechanism to the organization.

Pinto & Dominguez (2012: cited in Anabela, et al., 2019), identified that a study conducted in 30 metal working companies in Portugal revealed that the management practices were valued by the practitioners for all Knowledge Areas, with Project Scope Management and Project Procurement Management being considered the most important, and Project Risk Management and Project Integration Management the least important. The study also revealed that the majority of the projects considered did not achieve the desired results. Considering the importance of the practices, those related to planning of activities, human resources, costs, and communications were considered the most important (Ibid).

According to Anabela, et al. (2019), study of project management practices in the private organization finding indicated that the most used project management practices are, in fact,

clustered into groups. Interestingly, planning practices are strongly linked to the use of other techniques of Initiating, Executing, Monitoring and Controlling, and Closing, thus forming four toolsets of project management practices: Planning/Initiating, Planning/Executing, Planning/Controlling, and Planning/Closing. They suggested also based on their finding organizations with practitioners with lower levels of education might not adopt more advanced and complex project management tools and techniques, because these practitioners might not have yet the necessary background knowledge.

The study conducted by Gitari and Rosemary (2018), on critical success factors in the implementation of community-based projects in Kenya found that community participation influences the implementation of CBPs and that monitoring and control influences the implementation of community based projects to a very great extent. Further, the study deduced that management of funds is a key recipe for successful implementation of CBPs and that funds need to be mobilized for the success of a community based project, which is an indicator that the data is in line with the theoretical expectation. Education level, good managerial skills of the staff improves managerial skills of individuals; making a project achieve its objectives resolving that institutional capacity is a major influence on the implementation of community based projects. Monitoring and evaluation was found to be a key aspect in ensuring that an organization's operations are transparent, accurate and that time is used economically hence an important influence in CBPs implementation.

Assem and Mario (2018), based on their research finding described that Project success is a perceived measure, irrespective of the individual success criteria and factors. None of the surveyed projects indicates the achievement of project success, without utilizing project management tools and techniques. There exists a universal set of project success measures, applicable to all projects

in the construction industry. This is due to the fact that information collected originates from projects scattered over ten nations. The data features significant similarities representing a new insight whereas, the literature suggests that individual projects have project specific success measures. Although, data indicates that the project practitioners do not utilize project management tools and techniques perfectly, the vast majority of project managers implement project management methodologies. Project management practices and techniques are widely used in successful projects and therefore, project management positively influences project success. The majority of surveyed projects are successful.

A study conducted by Claude and Brian (2006), on the perceived value and potential contribution of project management practices to project success have explained that Successful projects provide value to organizations; project management practices provide organizations with a strategic and valuable asset. Value is created when good project management practices and good measurement tools improve project success. Studying tools and techniques is a tangible way to research project management practices because tools and techniques are directly related to the things practitioners do. These are the means through which project managers execute project management processes. These are also the means project managers can use to measure dimensions of project performance and success: cost, time, quality, progress, satisfaction, and other dimensions of success.

The finding of the research revealed that current set of well-known project management tools and techniques is more highly valued in the context of large projects for external customers and less highly valued for smaller projects for internal customers. Given the very large number of these latter types of projects, the field should focus its efforts on developing a new set of project management tools and techniques, one that focuses on small and internal projects. The development of a project management tool set for a specific organization will, of course, need to

be based on an analysis of the current state of practice in the organization and the specific characteristics of the projects being managed and the organizational context (Ibid).

A study by Amgad (2015), on the impact of project management and benefits management practices on project success found that the responsibility for obtaining benefits is the most critical factor to project investment success, and project management practices like a communication plan and time plan are critical to obtaining project management success, whereas reviewing the time plan is the most critical factor for obtaining project investment success.

The review made by Anne, et al. (2017), on Human Resource Management (HRM) and project-based organizing noted that based on theoretical and methodological resources from the HRM field, project studies can benefit from a more refined focus on levels of analysis and practices. No less important, the HRM field can benefit from a richer and more highly contextualized focus on the complex, multi-actor, multi-level and multi-organizational setting of projects which are increasingly prevalent.

The study conducted by Antônio, et al. (2015), on what stakeholder management practices are used in successful projects to create science parks found that the project team was concerned from the beginning to understand the interests of the main stakeholders and to learn how these stakeholders could contribute to the success of the project. It was also noted that the project team had an interest in exploiting the features and specific capabilities of the main stakeholders, because the project was large and complex and could require different kinds of contributions.

Unegbu, et al. (2020), described the result of studies on at improving scope management will improve project performance and customer satisfaction and the impact of time management on project performance and project success was positive, thus, a better time management will improve project success and project performance. Regarding cost management it directly influences project

performance which shows that managing project cost should not be done at the expense of project performance. Quality management was seen to positively influence project performance and customer satisfaction. Generally speaking, a high quality product will enhance project performance and customer satisfaction. Concerning risk management the study of Molefi, Et al (2016), revealed that based on assessment of cases the most affected project areas were time, cost, integration, quality, and procurement management, which implies project risk management, do not exist. It is recommended that improved risk management education and training that could influence practice.

2.3 Challenge of project management practices

As stated by Project Management for Development (2015), development projects operate in challenging environments, where uncertainties about the future increase the risk to the project. Managers need to deal with extremely complex social, economic, and political factors that affect the delivery of goods and services. Development projects are implemented in some of the most remote and difficult locations in the world; additionally, projects operate in areas of high personal risk and high security threats to project staff. The lack of proper infrastructure, limited resources, and a changing environment put a strain on project managers who need to deliver the project outcomes.

2.4 Experience of Project Management Practices in Ethiopia

Project management practice applied specific to Ethiopia in line with development program/projects were rarely found. This study assessed could provide basic understanding how project management body of knowledge applied under their organizational context.

According to the study conducted by Mihret and Ernest (2017), in Software project risk management practice in Ethiopia revealed that research contributed to knowledge with its finding of project managers' perception of risk management and their involvement in the process. They

found also project managers consider they carry out risk management just by watching their projects for occurrence of risks, but without undertaking risk assessment. In addition, they explained their finding project managers showed uncertainty in identifying which steps of the risk management processes are practiced in the projects they manage.

Misgana (2019) in his thesis titled by Challenges of Project Management Practice in Ethiopian Airports Infrastructure Development Projects has found ten identified factors considered most significant or major challenging factors. He listed as lack of Project Management Skills and training in project management; Unexpected events with no effective response possible; Project schedule delays; Changing requirements late in the project and continuing change requests; Low commitment of Stakeholders towards planned projects; Failure to manage expectations; Poor risk management; Not obtaining stakeholder approval; Low commitment of Stakeholders towards planned projects; Lack of clearly defined Rules and procedures for project management. Hence, the organization should give high priority and treat these factors individually.

In the same vein Firehiwot (2019), thesis shown that AAWSA Project management practice were found to be at low level. The average mean value of most knowledge area ranges between two and three only one knowledge was found that is quality management score above three. The result indicated that project management body of knowledge areas exist in the organization, but they are not considered organizational standards. Documentation exists on these basic processes and management supports the implementation of project management, but there is neither consistent understanding, involvement, no organizational mandate to comply with all projects. Functional management is involved in the project management of larger, more visible projects and these are typically executed in a systematic fashion. There are basic metrics to track project cost, schedule, and technical performance, although data may be collected/correlated manually. Information

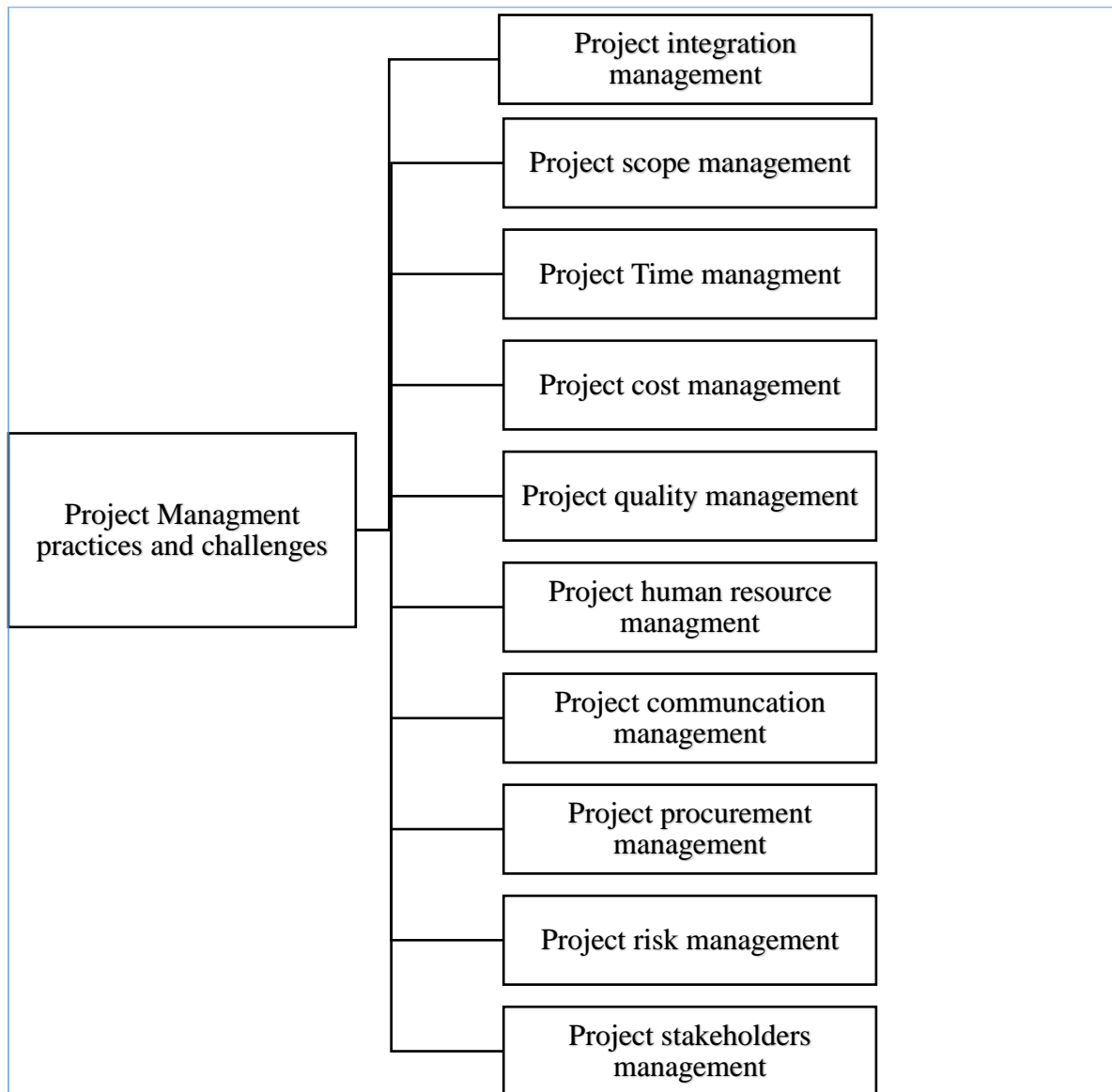
available for managing the project is often a mix between summary level data and detailed level data.

The overall summary of the empirical literature reviewed have shown that the failure of project success is attributed by lack of implementing project management practices. However, the review indicated that most successful projects have resulted due to proper utilization tools and techniques, which are very familiar in the project management body of knowledge standard. This requires ample research to be further investigated in development program/project. Hence, this study is considered development organization where similar studies limited in terms of looking to what extent existing body of knowledge is applied. Thus, it is very imperative for the policy makers and decision making to leverage the PM body of knowledge to attain benefit out of it.

2.4 Conceptual Framework

The conceptual framework offers a logical structure of connected concepts that help provide a picture or visual display of how ideas in a study relate to one another within the theoretical framework. The theories reviewed in this study is to explore and identify key essential variables, which are useful for the study and present their relationship diagrammatically. The conceptual framework shown below figure (2.1) is designed based on the core concepts of Project Management Body of Knowledge attributed by 10-project body of knowledge considered as independent variables while Project management practices denoted as dependent variables. The independent variable for this study are self-response for the respondents on the application of PM knowledge area and the dependent variable is scale of using those PM practices.

Figure (2.1) Conceptual framework for Project Management Practices



Source: Adopted from (PMI, 2013) Project knowledge areas and developed by the researcher

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Research Design

Kothari (2004) has explained, “A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.” A research design is simply the framework or plan for a study that is used as a guide in collecting and analyzing the data. Thus, this research was designed using Non-probability sampling with purposive sampling techniques and involves blended methods of quantitative and qualitative research aimed to investigate and understand the practical conceptions of the respondents’ was taken as unit of analysis on the use of PM practices and challenges for the target projects using data collection tool so as to describe and interpret the finding.

3.2. Research Approach

This study was conducted through applying a procedure that consists of both quantitative and qualitative approach. The quantitative approach is based ordinal Likert scale data measurement of respondents’ views and opinion quantified into scale of values while the qualitative approach involves key informant interview that is carried out with selected key experts to get additional information for the issues assessed for illustration. Primary and secondary data collection, analysis and interpretation were employed.

3.3 Research Methodology

The research methodology employed for this study comprised by methods of data collection, for the work of describing and explaining the independent variables being assessed. Hence, both quantitative and qualitative methods was employed for primary data collection using tools of structured questionnaires for the assessment of sample respondents and semi-structured

questionnaires for key informant interview. The qualitative method data was gathered from key selected organization experts working in the program/projects who have sufficient experience and capable of understand the underlying reasons. A quantitative methods look to quantify data, which is gathered through survey questionnaires, that was carefully developed which is Ordinal observations ranked in response measure of magnitude. The response of respondents' views and opinion are generalized the results based the rating given by the respondents' asked questions on each practices that have been adopted using a 5 point Likert- scale.

A Likert-type scale consists of a series of statements that define and describe the content and meaning of the construct measured. The statements comprising the scale express a belief, preference, judgment, or opinion. In designing a Likert scale, the generation and wording of individual statements are crucial tasks for producing an instrument that yields valid and reliable summated scores (Edwards, 1957; Oppenheim, 1992; Spector, 1992: cited in Robert, J. 2014).

Rating Scale: Rating is term applied to express opinion or judgment regarding some situation, object or character. Opinions are usually expressed on a scale of values; rating techniques are devices by which such judgments may be quantified. "Rating is an essence and direct observation." Ruth Stron (ud): cited in Prabhat and Meenu, 2015).

According to PMI (2013), there are about 47-project management process, which ensure the effective flow of the project throughout project life cycle. However, in this questionnaires one process belongs to Project Time management and two processes under risk management were merged and hence, about 44 (Rating sheet tools) processes and activities were used in the assessment related to project management knowledge areas. Accordingly, the respondents were asked to classify the degree of usage of each processes and activities by means of scale ranging from 1 (not used) up to 5 (Extensively use). Hence, 1. Not used 2. Little used 3. Moderately used

4. Highly used 5. Extensively used. Similarly, for the assessment of challenges/obstacles affecting the proper project management practices respondents were asked to rate from 1 up to 5 comprised by a Likert scale: 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree

3.3.1 Sampling methods

The sampling methods for this study was employed using non-probability sampling methods, which is thought suitable by the researcher due to lack of complete and up-to-date list of the members (names and/or addresses) of the population that are needed to participate in the survey. According to Kothari (2004), Samples can be either probability samples or non-probability samples. With probability samples, each element has a known probability of being included in the sample but the non-probability samples do not allow the researcher to determine this probability. Probability samples are those based on simple random sampling, systematic sampling, stratified sampling, cluster/area sampling whereas non-probability samples are those based on convenience, judgement, quota and snowball sampling techniques.

Accordingly, a non-probability sampling method was used which is ‘Purposive sampling’ that is very useful to choose the best-fit participants whose views are relevant to the issue concerned to gather data for this research. Hence, researcher selected respondents working as program/project coordinators and technical experts taking into consideration their knowledge and experiences to capture project management knowledge areas are being practiced in the Ministry of Agriculture targeted program/projects.

Hence, there was no possibility of predetermination of sample size since the final actual response were determined by the willingness of all potential experts known by the researcher and those who assisted researcher in identifying other potential respondents. As a result, 38 survey questionnaires

were completed and received from 45 respondents sent to identified federal and regional experts/respondents working in targeted projects. The survey questionnaires were sent largely through E-mail while few printed questionnaires were also given directly to the respondents. In this study, and the survey response rate was estimated about 84%.

3.3.2 Data collection methods

The data were gathered through survey methods using structured questionnaires from sample respondents working in the selected projects and key experts were interviewed to get additional reliable information based on the semi-structured questionnaires. Primary data were collected (Rating sheet tools) through self-administered way by the respondents, and key informants interview was done through telephone discussion to have a more comprehensive understanding about the issues under consideration as additional input to the survey. The secondary data was collected through reviewing Journal article, Publication of books, Government report and Thesis. Documents related with the program/projects belongs to this study were reviewed like program/project implementation manual, projects appraisal documents and periodical report to triangulate the response of the participants.

3.3.3 Methods of data analysis

The data analysis and interpretation for this research were conducted for both quantitative and qualitative data through raw data cleansing and coding. For quantitative data type, SPSS (20) was used for ordinal data using non-parametric statistical analysis. Normality test was not done since non-probability sampling method and ordinal data were employed for this study. Shah and Madden (2004), indicated that Parametric methods of analysis using statistics based on means, or differences between means (such as ANOVA), are thus, strictly speaking, inappropriate for analyzing data on an ordinal scale, though they are used quite often in many disciplines. Ordinal

data do not have metric information. Although the response options might be numerically labelled as '1', '2', '3'... the numerals only indicate order and do not indicate equal intervals between levels (Torrin and John, 2018).

Thus, median statistical analysis is applied to collected responses in order to place respondents into different categories, according to their responses. Descriptive statistical or analytical tools like median, frequency and percentage were applied including tables and figure to visualize the analyzed data. The qualitative data analysis was done through illustration and interpretation of interviewed own personal experience during their engagement in operational project intervention.

3.4.4 Validity and Reliability

As stated by Frank (2017), the reliability estimate for items on a Likert scale is measured using the reliability method known as Cronbach Alpha. He added that, Lee Cronbach in 1951 developed the Cronbach Alpha to offer a measure of the internal consistency of a scale or test, expressed as a number between 0 and 1, which is used for items whose responses are on a scale. J. Robert (2014), noted that a principle basic to Likert scale measurement methodology is that scores yielded by a Likert scale are composite (summated) scores derived from an individual's responses to the multiple items on the scale.

Joseph and Rosemary (2003), described the Cronbach formula equal to $\frac{rk}{[1 + (k - 1) r]}$ where k is the number of items considered and r is the mean of the inter-item correlations the size of alpha is determined by both the number of items in the scale and the mean inter-item correlations. George and Mallery (2003: cited by Joseph and Rosemary, 2003), provided the following rules of thumb on the value of Cronbach alpha as: "> 0.9 Excellent, > 0.8 Good, > 0.7 Acceptable, > 0.6 Questionable, and above 0.5 Poor. Accordingly, Cronbach alpha was computed in this study using SPSS (20) to see the internal consistency of the items used in Likert scale of questionnaire.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the analysis and discussion of data collected by survey instruments from the respondents working in the selected projects implemented under the targeted organization in this study. The results of this study was compiled and presented in percentage, table and figure including interpretation and illustration to address the research objectives stated in chapter one.

4.1 Reliability test

In this study from data collected, the Cronbach's alpha to measure the internal consistency of the Likert scale items was computed. The Cronbach's alpha coefficients were computed for each ten-project management knowledge areas of subsequent process (items) based on the mean-items summated score divided by the number of items constituting the scale. Hence, table (4.3), showed that the Cronbach's alpha constructed from summated 44 questionnaire items that was computed (0.960) which is categorized as excellent Cronbach's alpha reliability coefficient calculated using SPSS reliability analysis.

Table (4.1) Reliability Statistics for project management practices

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.960	0.961	44

Source: Computed from own survey (March, 2022)

Similarly, Table (4.2) below indicated the Cronbach's alpha identified for various variables.

Table (4.2) Reliability Test for Project management practices

S/n	Variables	No of respondents	No of Items	Composite Median	Cronbach's alpha
1	Project Integration Management	38	6	4	0.800
2	Project Scope Management	38	6	4	0.889
3	Project Time Management	38	5	4	0.800
4	Project Cost Management	38	4	3.5	0.831
5	Project Quality Management	38	3	3	0.812
6	Project Human Resource Management	38	4	3.5	0.701
7	Project Communication Management	38	3	3	0.792
8	Project Risk Management	38	4	3	0.870
9	Project Procurement Management	38	4	4	0.864
10	Project Stakeholders Management	38	4	3	0.877

Source: Computed from own survey (March, 2022)

The Table (4.2), above revealed the results of reliability statistics analysis made for all variables (scales). Accordingly, most of the variables (Scales) summated or composite scores were analyzed and found greater than (0.8) Cronbach's alpha value, which is "(Good)", and greater than (0.7) is acceptable level of internal consistency as a rule of thumb stated by George and Mallery (2003: cited by Joseph and Rosemary, 2003). Hence, the minimum acceptable Cronbach's alpha scored (0.701) and (0.792) for human resource and communication management respectively. However, the result of Cronbach's coefficient alpha reliability value was found for the rest of Knowledge areas were computed (0.8) and above in this study and showed that respondents provided a good level of internal consistency in the course of measuring Likert scale questions.

The Cronbach's alpha for survey questionnaire to gather respondents' opinion on the challenges of project management practices was also computed to measure the internal consistency. Hence, the Cronbach's alpha coefficients were found for each challenges on the project management knowledge areas of subsequent process (items). Hence, table (4.3), showed that the Cronbach's alpha constructed from summated 44 questionnaire items was found (0.950) which is almost close

to the result indicated in table (4.1) that was accounted for (0.960) and it is considered as excellent Cronbach's alpha reliability coefficient.

Table (4.3) Reliability Statistics for Project management challenges

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.950	0.951	44

Accordingly, table (4.4) below shown the Cronbach's alpha identified for various list of variables.

Table (4.4) Reliability test for project management challenges

S/n	Variables	No of respondents	No of Items	Composite Median	Cronbach's alpha
1	Challenges Related to organizational Environmental Factors	38	3	2	0.668
2	Project Integration Management Challenges	38	6	2	0.724
3	Project Scope Management challenges	38	5	2	0.849
4	Project time Management challenges	38	3	3	0.756
5	Project Cost Management challenges	38	4	3	0.658
6	Project Quality Management Challenges	38	3	4	0.899
7	Project Human Resource Management Challenges	38	4	2	0.788
8	Project Communication Management Challenges	38	3	3	0.903
9	Project Procurement Management Challenges	38	4	2	0.927
10	Project Risk Management Challenges	38	3	3	0.735
11	Project Stakeholder management challenges	38	5	3	0.850

Source: Computed from own survey (March, 2022)

As shown in the above table (4.4) only two variables (1&5) were found in the category of questionable internal consistency of the respondents' while the remaining were computed over

(0.701) which implies a good level of internal consistency during measurement of the Likert scale measurement.

4.2 General respondents' profile

The table (4.5) showed the profile of respondents', which is tabulated and computed in terms of sex, year of experience, level of education. The majority of respondents were found male constituted about 95% while the remaining were identified females group. Among the category of respondents' year of experience with a frequency of 20 or about 53% of them have more than 20 years' service while 18 or 47% of them served between 11-20 years. The majority of respondents' educational status revealed about 79% holds Master degree followed by Bachelor degree and single respondent holds PhD degree. This shows that respondents' acquired adequate educational level and work experience contributed to perceive and answered survey questionnaires provided on the area of project management practices and process.

Table 4.5 Respondents' profile

Sex	Survey result		Year of Experience	Survey Result		Level of Education	Survey result	
				Frequency	Percent		Frequency	Percent
	Frequency	Percent	11-15	11	28.9	PhD degree	1	2.6
Male	36	94.7	16-20	7	18.4	Master degree	30	78.9
Female	2	5.3	>20	20	52.6	BA/BSc degree	7	18.4
Total	38	100		38	100		38	100

Source: Computed from own survey (March, 2022)

In addition, respondents were categorized in terms of job title and found Program/project coordinator (8%), Monitoring and Evolution expert (8%), dominantly about (40%) Technical expert and technical advisor (13%) and only one procurement expert identified among the participants in responding the survey instrument.

4.3 Project Management Practices of the Ministry of Agriculture

4.3.1 Project Management Integration

Project Management Institute (PMI, 2013), stated Project management processes as a processes ensure the effective flow of the project throughout its life cycle. These processes encompass the tools and techniques involved in applying the skills and capabilities described in the Knowledge areas. Consequently, in the table (4.6) below respondents were given their perception and opinion on the project management practices applied in the project they are working to target organization.

Table (4.6) Project Management Integration process

s/n	Project Management Integration process	Likert Scale analysis					
			Note used	Little used	Moderately used	Highly used	Extensively used
		N	38	38	38	38	38
			%	%	%	%	%
1	Project charter prepared		2.6	5.3	26.3	36.8	28.9
2	Project prepared management plan		2.6	7.9	26.3	42.1	21.1
3	Project coordinator manage execution		-	2.6	21.1	44.7	31.6
4	Project owner perform M&E		-	7.9	28.9	39.5	23.7
5	Perform integrated change control		-	26.3	42.1	28.9	2.6
6	Project run phase by phase		-	5.3	31.6	34.2	28.9

Source: Computed from own survey (March, 2022)

As per the result indicated on the above Table (4.6) higher list of processes were largely responded on highly and extensively used categories together for processes (1,2,3,4&6) and accounted 65%, 63%, 76%, 63%, 63% respectively. However, performing integrated change control process responded under moderately used and constituted about 42%. About 2.6% of respondents from each of the first consecutives (1&2) processes reported they are not entirely used. Relatively smaller proportions were found to all processes within the range of little used categories. Project coordinator, prepared plan was found the highest score about 45% and 42% in moderately used

process respectively. The result of this survey generally showed that every process is practiced widely with response proved by highly and extensively used, but only one process was found poorly practiced as scored below 50% response rate.

4.3.2 Project Scope Management

The Project Scope Management process practiced by target program/projects participants were responded to all list of required processes shown in the table (4.7) below. The application of this process contribute to enhance the performance and completion of the project successfully as stated in the PMI (2013).

Table (4.7) Project Scope Management Process

s/n	Project Scope Management Process	Likert Scale analysis					
			Note used	Little used	Moderately used	Highly used	Extensively used
		N	38	38	38	38	38
		%	%	%	%	%	
1	Project scope plan and validate and controlled		-	7.9	39.5	39.5	13.2
2	Project used to collect requirements essential for the project achievement		2.6	2.6	31.6	52.6	10.5
3	Detailed description to define the scope		-	7.9	26.3	52.6	13.2
4	Create work breakdown structure		2.6	-	13.2	34.2	50.0
5	Validate feasibility or viability of tasks to be performed		-	10.5	31.6	47.4	10.5
6	Manage or control your projects scope		2.6	10.5	28.9	42.1	15.8

Source: Computed from own Survey (March, 2022)

The above table (4.7), showed that based on answer given by the respondents' the majority answered both highly and extensively used practices in all project scope management processes from (1-6 processes) and scored together accounted for 52%, 63%, 66%, 84%, 58% and 57%

respectively. Among the process collect requirements essential for the project achievement and detailed description to define the scope were found highest score in highly used type about 53% each. Work break down structure was identified by the respondents as extensively used practice and accounted about 50%. On the contrary very low level of weight about 2.6% of respondents were given their perception on (Process 2, 4, 6) and these practices have not used. Hence, from the general finding of the respondents' response result in project scope management action process implied that all processes were found well practiced.

4.3.3 Project Time Management

Project Time Management process specifically focused on the processes required to manage the timely completion of the project as mentioned in the PMI (2013). Accordingly, the result of respondents is summarized under the table (4.8) below.

Table (4.8) Project time Management process

s/n	Project Time Management Process	Likert Scale analysis					
			Note used	Little used	Moderately used	Highly used	Extensively used
		N	38	38	38	38	38
		%	%	%	%	%	%
1	Plan schedule management		2.6	7.9	28.9	39.5	21.2
2	Define and sequence of specific activities		-	2.6	28.9	57.9	10.5
3	Estimate activity resource			5.3	18.4	52.6	23.7
4	Estimate individual activities duration		2.6	18.4	31.6	39.5	7.9
5	Developed schedule and controlled timetable		-	2.6	34.2	52.6	10.5
6	Project monitoring status as per project time frame		-	7.9	26.3	44.7	21.1

Source: Computed from own Survey (March, 2022)

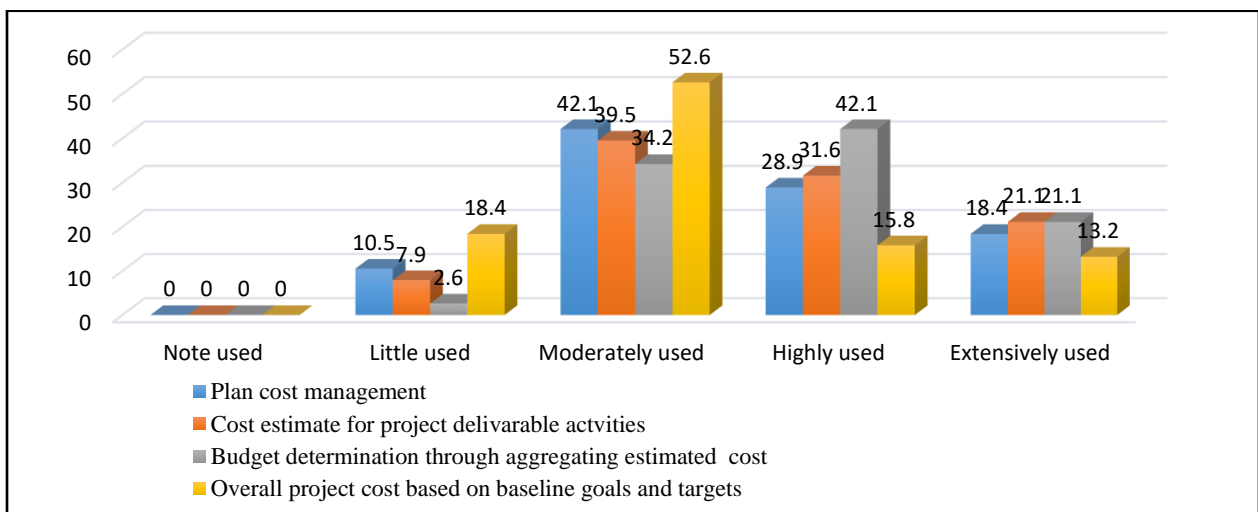
The finding of the result as indicated above (table 4.8) revealed that minor proportion about 2.6% of respondents replied this process were not used on processes 1&2 while 97% of them reported

all list of practices in the process were applied at difference level from little to extensively used. However, majority of respondents perceived all these processes were scored more weight to highly and extensively used type and their joint result in the processes (1,2,3,5&6) computed about 61%, 68%, 76%, 63%, 66% respectively. Among the order plan schedule management was responded at lower level though it was agreed and incorporated in the well practiced categories. Estimate individual activities duration was considered as poorly practiced based on scoring about 47% which implies a significant factor in the timely completion of activity with in estimated cost. Hence, the result obtained showed that respondents were found consistent in providing relatively higher score to decide these processes are grouped in widely used practices.

4.3.4 Project Cost Management

PMI (2013) noted that Project Cost Management is primarily concerned with the cost of the resources needed to complete project activities. Project Cost Management should also consider the effect of project decisions on the subsequent recurring cost of using, maintaining, and supporting the product, service, or result of the project.

Figure (4.1).Project cost management



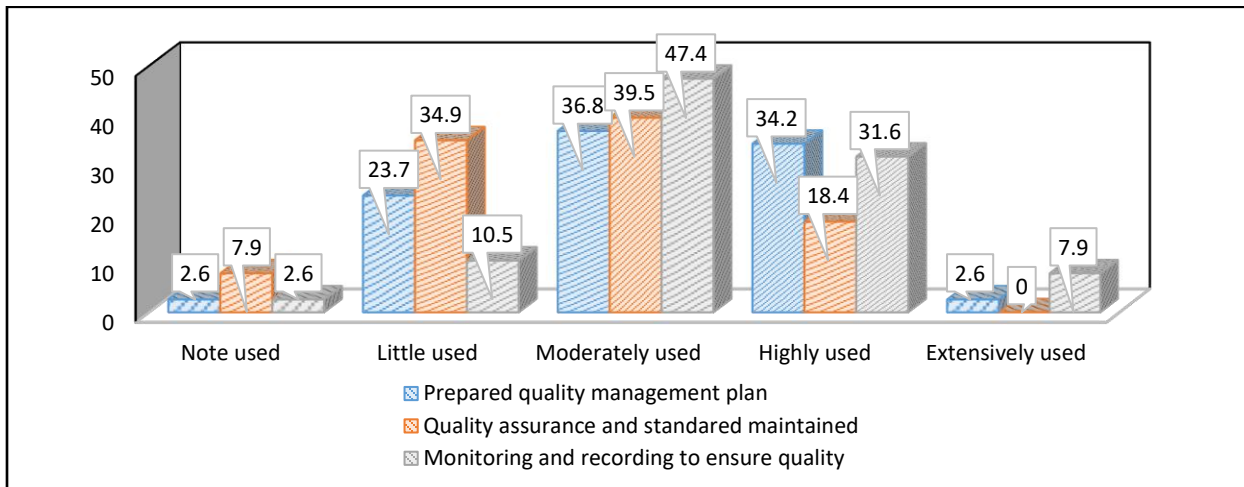
Source: Computed from Own Survey (March 2022)

According to the respondents' perceived response indicated in the above Figure (4.1) the majority of respondents reported all four processes largely grouped in moderately used practices scored from 34% to 53%. Among the four processes cost estimate for project deliverable activities and budget determination through aggregating estimated cost were responded as better practiced and jointly by highly and extensively used categories accounted as 53% and 63% respectively. While the other two processes were replied as poorly practiced and scored 47% and 29% for plan cost management and overall project cost based on the baseline goal and target respectively by highly and extensively used level of score. The key features of these processes proved that no respondents replied as one of the processes not used entirely which is practically true in the course of program/project implementation as far as estimating, budgeting, and controlling of cost management is concerned.

4.3.5 Project Quality Management

PIM (2013) refers Project Quality Management that addresses the management of the project and the deliverables of the project. It applies to all projects, regardless of the nature of their deliverables. As indicated below in the Figure (4.2) respondents were replied their views on the application of project quality practices experienced in their program/projects and hence, it is revealed that all processes exercised from little to extensively used. However, the computed weight value showed that three processes which are, Prepared quality management plan, Quality assurance and standard maintained and Monitoring and recording to ensure quality were perceived poorly practiced as the combined highly and extensively used level score found less than little and moderately used level of practices jointly with a proportion of (37%, 18% and 39%) and (60%, 74% and 58%) respectively.

Figure (4.2) Project Quality Management



Source: Computed from own Survey (March, 2022)

On the contrary few respondents based on their understanding about 2.6% and 8% reported this process did not practiced. Quality assurance and standard maintaining process was found poorly practiced when jointly scored little with moderately used and accounted 74%, which implies this process, have not properly or in adequately practiced. The study conducted by John and Herman (2012), described on the limited practice of managing of project quality in which standards provide generic processes for project quality management and for organization-wide quality management systems but coverage of appropriate techniques is unsatisfactory.

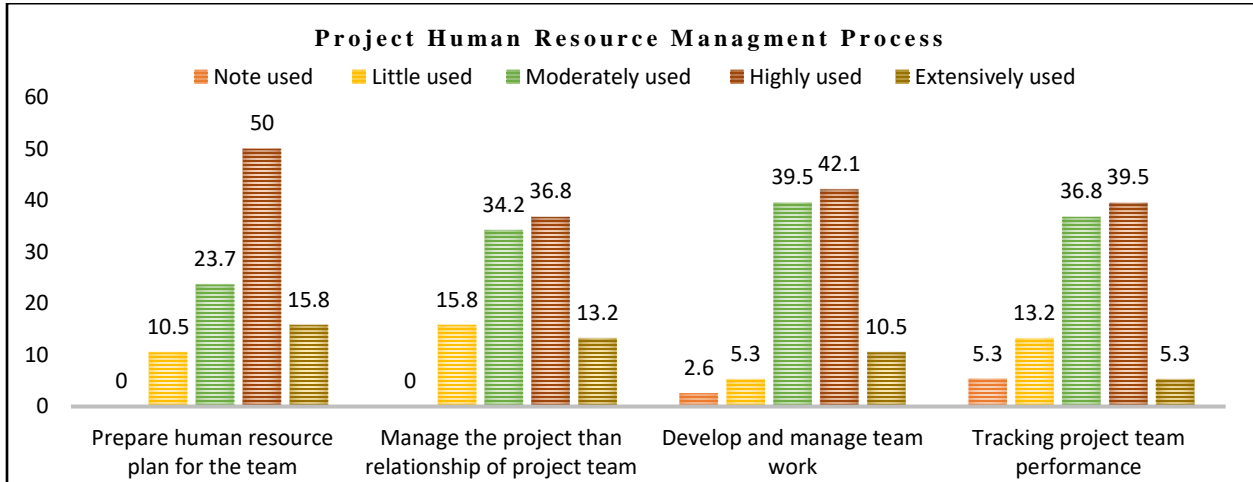
The interviewed experts explained that ensuring the quality of the project activities is undertaken for each sub-project interventions based on the technical guideline which comprises the design and procedures to be followed while implementation, and during monitoring quality is checked whether it is maintained or not as per the design indicated in the guideline, but expert judgement requires extensive experience in checking product quality especially in development project.

4.3.6 Project Human Resource Management

Human resource management (HRM) has play significant role to achieve project performance and success. As depicted by Nega and Yugandhar (2015), any organization, without a proper setup for

HRM is bound to suffer from serious problems while managing its regular activities. For this reason, today, companies must put a lot of effort and energy into setting up a strong and effective HRM. The figure (4.3) below captured the finding of respondents on practices of four processes examined during their respective program/projects intervention.

Figure (4.3) Project Human Resource Management



Source: Computed from Own Survey (March, 2022)

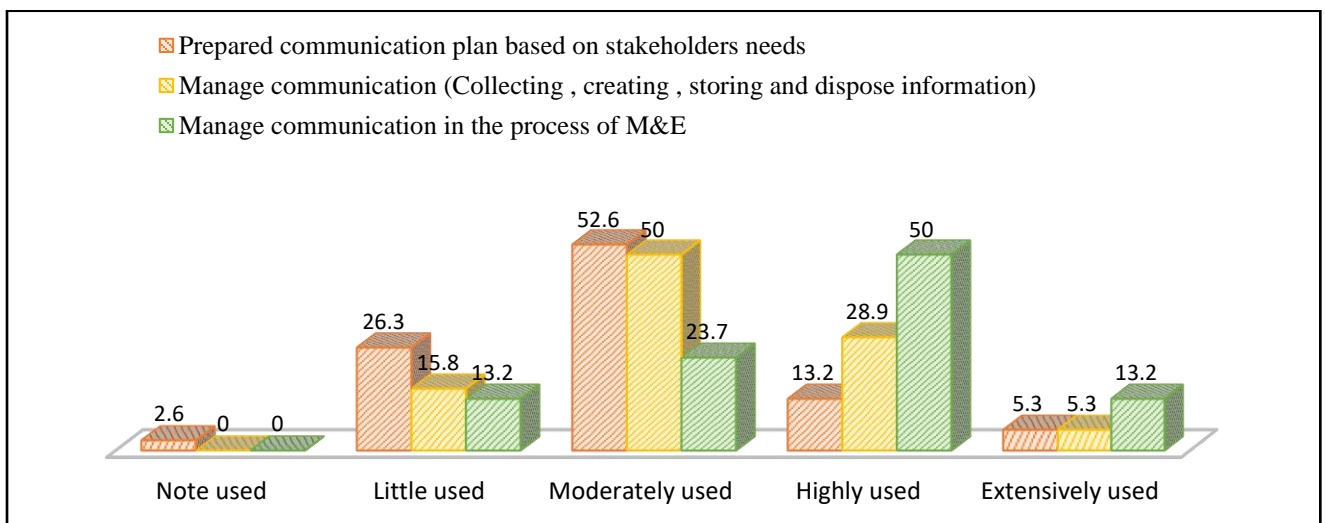
As per computed result among four list of processes, three of them human resource plan preparation, manage the project than relationship of project team, develop and manage team work were reported combined by highly and extensively used level of measurement and scored about 66%, 50% and 53% respectively implies well practiced under this knowledge area. On the contrary on process which is tracking of project team performance was perceived by the respondents as poorly practiced scored about 45% in the level of measurement jointly by highly and extensively used level of measurement. As far as project performance measurement is concerned continuous tracking of project team, performance is mandatory and this process needs significant attention in the course of project implementation. As per the response rate of the respondents under this knowledge area, there is a considerable gap among the respondents in terms of understanding the concept of human resource management.

4.3.7 Project Communication Management

Project communication management is one of the process involved in the program/project intervention period to manage and provide the necessary information needed for each stakeholders and engage them during monitoring and evaluation process. Thus, according to the response made by the respondents indicated in the figure (4.4) showed that majority of the respondents recognized among the three processes two of them were reported as poorly practiced and only one agreed as well practiced. Hence, as per the respondents view Preparation of communication plan and manage communication for provision of information were accounted jointly 18% and 34% while Manage communication in the process of M&E scored jointly about 63% for highly and extensively level of measurement respectively.

By and large, the results revealed that these two processes scored lower responses have shown poorly practiced and heavily impacting the flow of information to undertake smooth implementation of project and requires further improvement to practice these processes in acceptable level.

Figure (4.4) Project Communication management Process

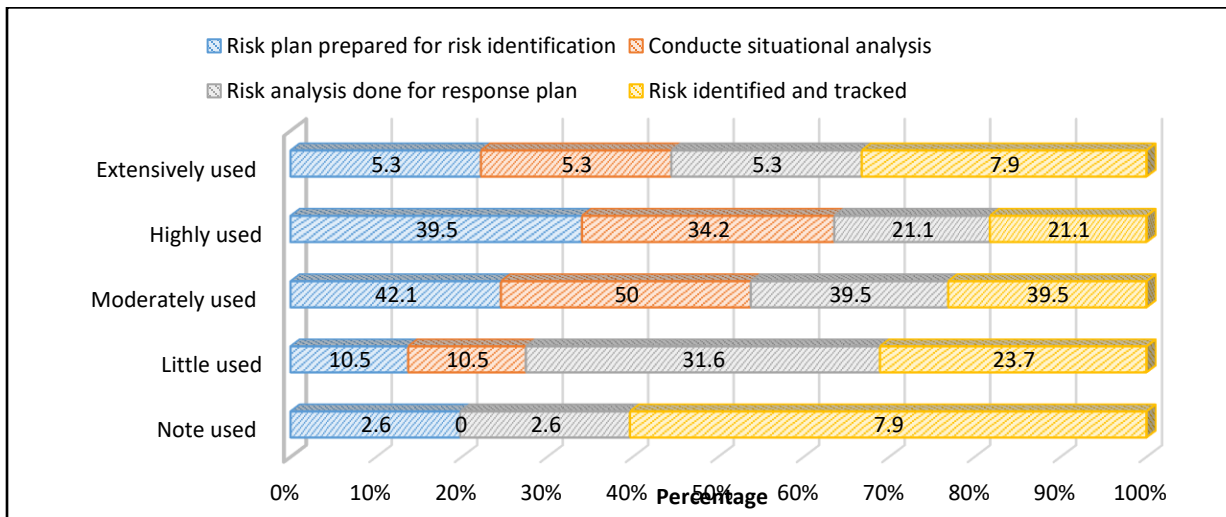


Source: Computed from Own Survey (March, 2022)

4.3.8 Project Risk Management

Risk identification and response strategy is one of the body of knowledge in the project management, and project team decide to acknowledge this uncertain event or condition so as to take proactive action. The figure (4.5) below showed the existing picture of project risk management processes practiced in the target program/projects as perceived by the respondents.

Figure (4.5) Project Risk Management Pro process



Source: Computed from own Survey (March, 2022)

The results showed that all the four risk management processes were at moderately used level compared to other level of orders. However, the combined score for highly and extensively used practices were found less than the value computed by little and moderately used for all items of the risk plan prepared for risk identification, conduct situational analysis, risk analysis for response plan, and risk identified and tracked accounted about (45%, 40%, 26%, 29%) and (53%, 61%, 70%, 63%) respectively.

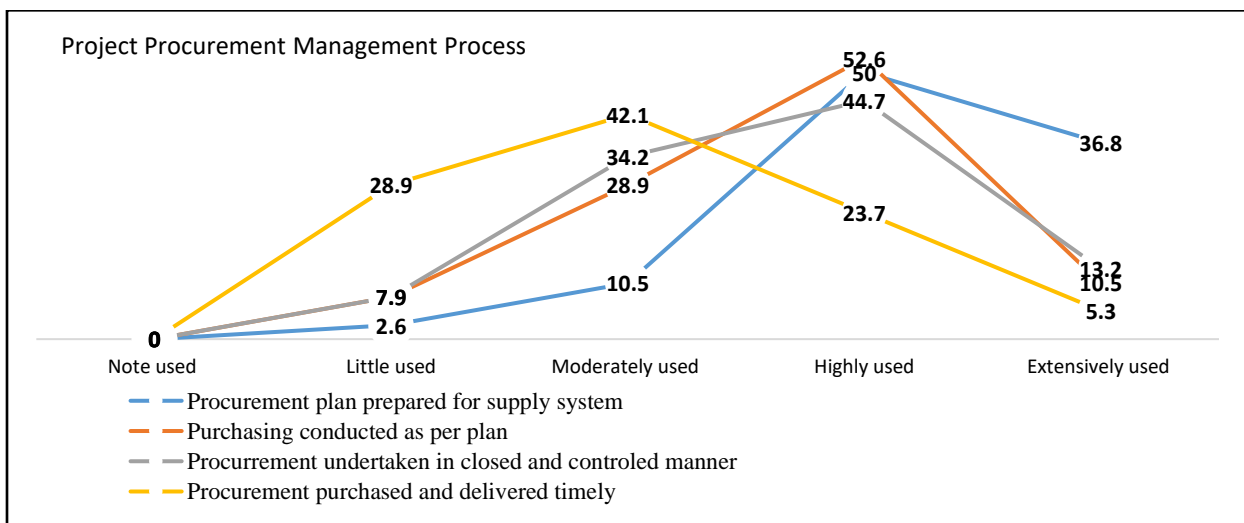
In general this result implies risk management processes practiced in the course of their project implementation are belongs to poor level than widely practiced. In the study conducted in hundred projects by Raz, et al. (2002, cited in Elena, 2019), noted that Risk management is not widely used;

The projects that most likely had a risk management plan were those that were perceived to be high risk; When the risk management practices were applied to the projects, they seemed to be positive concerning the success of the project; Proper risk management increases the likelihood of a successful project.

4.3.9 Project Procurement Management

Project Procurement Management comprises the processes of procurement planning, conduct purchasing the required product and services in controlled and closed manner followed by timely delivery of the purchased product. The figure (4.6) below portrayed the response of the respondents' in the project procurement processes practiced in the surveyed projects. Hence, three procurement processes of plan preparation, purchasing as per plan and procurement undertaken in closed and controlled manner processes revealed the combined results for highly and extensively used value were found greater than moderately and little used level which are accounted (87%, 63%, 58%) and (13%, 36%, 43%) respectively. However, procurement purchased and delivered on timely bases scored about 29% together with highly and extensively used practices, which implies this process is not efficiently and effectively practiced.

Figure (4.6) Project Procurement Management process

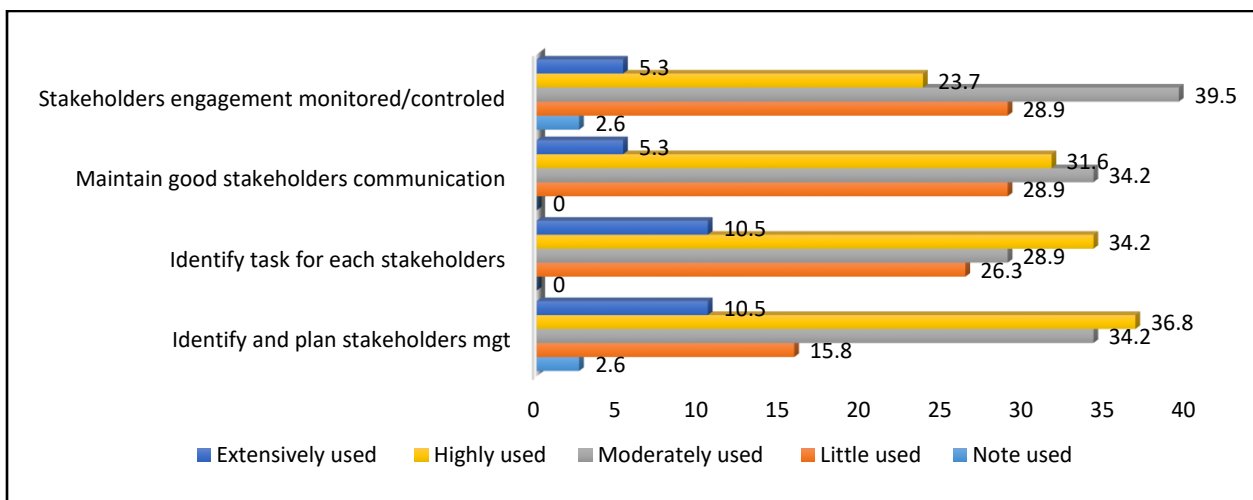


Source: Computed from own survey (March, 2022)

4.3.10 Project Stakeholders Management

Project stakeholders' Management processes comprises four process from the identification of stakeholders to engagement and relationship. In the figure (4.7) below the respondents' perception indicated that stakeholders' management in all four interrelated task showed that the combined result for highly and extensively used practices were computed less than from the moderately and little used level of score obtained.

Figure (4.7) Project stakeholders Management process



Source: Computed from own survey (March, 2022)

Hence, processes identify and plan stakeholders, identify task for each stakeholders, maintain good stakeholders and communication and stakeholders engagement monitored/controlled were scored jointly by highly and extensively used practices were (47%, 45%, 37%, 29%) and for moderately and little used practices scored together about (50%, 55%, 63%, 68%) respectively. The overall respondents' perception indicated that stakeholders' management processes were not implemented at expected level which needs tremendous attention and effort to be undertaken so as to contribute for joint effective performance and success of the project. As confirmed by Sekou et al. (2019), stakeholders' involvement through identification, planning, implementation, monitoring and control contribute in a very great extent to project success.

4.3.11 Most widely used Project Management Practices

As per the survey, result the table (4.9) below indicated the most widely used practices/ process identified under each project management knowledge areas based on respondents' perception and attitude. The selection was done taking into consideration the highest median value that was computed 3.5 and above. This identified practices/processes thought to be most acquainted by the project coordinators and project team members in the project management processes, which are contributing for enhancing project execution performance and successful completion. Project quality, Risk, Communication management as well as project Stakeholders' management were identified as poorly practiced as per the respondents view where results were found at lower level. In the study conducted by Ahmed, et al., (2016) found that Project management practices of Scope Management, HR Management, Communications Management, Stakeholder Management and Project Planning has an effect on Project Success if they are not properly practiced.

Table (4.9) Most widely used project management practices/processes

S/n	Project knowledge areas		Identified Widely used practices/processes
1	Project Integration Management	1	Project charter has prepared to formalize the project
		2	In the beginning our project has developed management plan
		3	Project Managers (Coordinators) have directed and manage the project execution
		4	Project owners Perform monitor and evaluation project work
		5	Followed project phase by phase and close when it's done
2	Project Scope Management	1	We used project scope plan and validate and controlled
		2	Our project used to collect requirements essential for the project achievement
		3	You used detailed description to define the scope
		4	Your project used to create work breakdown structure (WBS) like sub-project (Activity 1----3 etc.,
		5	The project used to validate feasibility or viability of tasks to be performed
		6	You used to manage or control your projects scope
3	Project Time Management	1	We used plan schedule management of our project, to manage the schedule
		2	We used to define and sequence of specific activities (Define and sequence together)
		3	We used to estimate activity resources (human resource, material etc.)
		4	We do have developed schedule and controlled developed timetable
		5	We used project monitoring status as per project time frame
4	Project Cost Management	1	We used cost estimate for the project deliverable activities
		2	We used budget determination through aggregating the estimated cost
5	Project Human Resource Management	1	The project used to acquire human resource plan for the project team (responsibility, required skill etc.)
		2	The project was more important to manage the project rather than the relationships in the project team
		3	The project had developed and managed project team work
6	Project Procurement Management	1	Project used Procurement plan for purchasing and supply management system
		2	Purchasing of materials were conducted as per the plan
		3	Procurement was made and closed in a controlled manner

Source: Computed from own survey (March, 2022)

4.3.12 Summary of Project Management Practices

PMI (2013), noted Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. This application of knowledge requires the effective management of the project management processes. Accordingly, as per the finding of this study generally the project management knowledge areas and processes of integration, scope, time, human resource, procurement and cost management were found relatively well practiced during execution of the project. However, among the interrelated action process like estimate individual activities duration in Time management, plan cost management and overall project cost estimate based on baseline goals and target in cost management, tracking of the project team performance in human resource management, procurement purchased and delivered timely in procurement management, were identified poorly practiced. As mentioned in the above table (4.9) out of 10 knowledge areas six project management knowledge areas practices can be considered well performed practices while Project quality, Risk, Communication management as well as project Stakeholders' revealed low level of experience being practiced which requires a considerable concern to improve overall project performance.

4.4 Challenges of Project Management practices

Project are characterized by unique and temporary requires different management discipline (Verzuh, 2008). Among the challenges depicted by the Author includes: staffing, accurate estimates of costs and schedule, lack of clear decision by Authority that result political maneuvering and gridlock that blocks the progress. Normal accounting practices match operational budgets to operational costs on a quarterly or annual basis. Nevertheless, these time frames are not sufficient to keep a project on track. Accordingly, in this section the finding obtained from the assessment were presented to challenges prevailed in the course of implementation in targeted program/projects related with 10 Project Management Knowledge areas. Thus, descriptive analysis like percentage, composite median were computed to capture respondents' perception.

4.4.1 Challenges Related to Organizational Environmental Factors

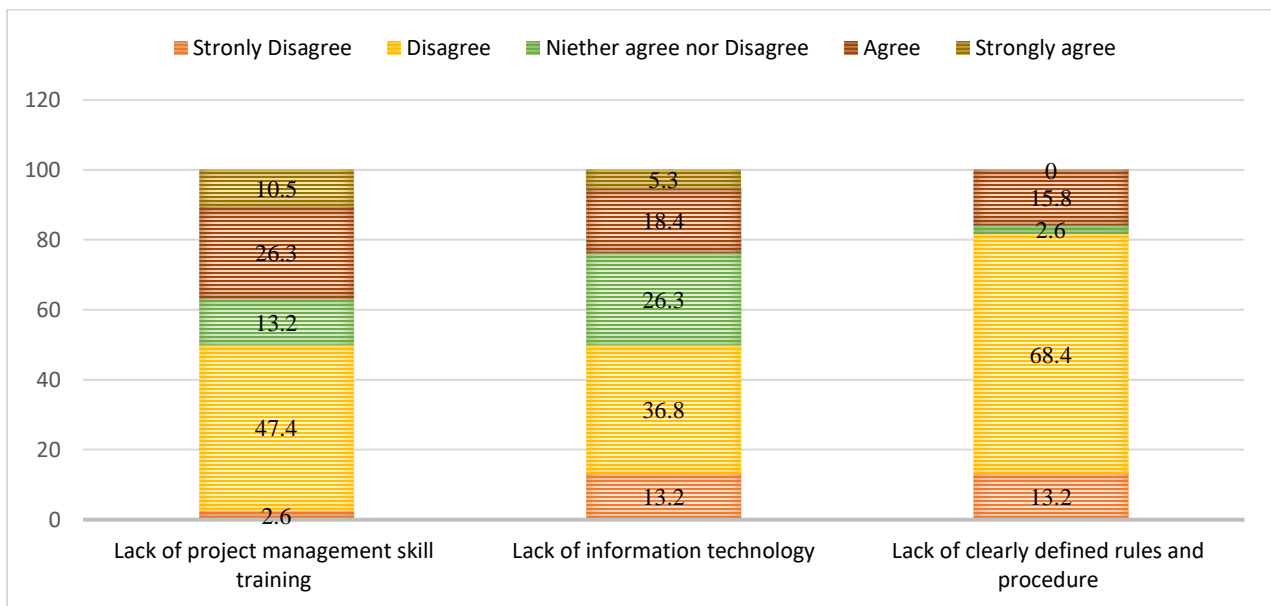
As can be seen from the Figure (4.8) below the finding depicted that challenges in the organizational environmental factors were largely responded disagree and strongly disagree which were computed more weight jointly about (50%, 50%, 82%) for lack of project management skill training, lack of information technology and lack of clearly defined rules and procedure respectively compared with other order of measurement. However, minor proportions felt agreed and strongly agree for this organizational environmental factors that affect the project management process, which implies still needs action to be taken to address their concern.

The interviewed experts clearly described that training of skill building for the project staffs largely focused on one of process group of monitoring and evaluation to track progress of project activities, review and identify any changes required. The others key project management knowledge areas have not been taken into consideration as training topics, which aimed to contribute for the performance and success of the program/project. For instance key project

management areas like project time, quality, scope, communication, stakeholders and cost management can be taken as training topics in the sessions. Hence, project staffs would have the chance of having basic understanding on key project management areas to perform their duties effectively.

This opinion explained by the experts is similar with idea depicted by PM4DEV (2015), that is most of the information available to development organizations focuses on the funding and monitoring and evaluation process; but there is little information about all the management competencies, methodologies, and practices required to manage a project from beginning to end.

Figure (4.8) Challenges related to organizational environmental factors



Source: Computed from own survey (March, 2022)

4.4.2 Challenges on Project Management integration

As indicated in Table (4.10), below the survey result showed that among the list of six processes as per the respondents opinion only two processes such as lack of project process and lesson learnt, and lack of budget allocation for M&E were considered as a challenges to perform the process properly based on the computed result of 45% and 40% jointly for disagree and strongly disagree

level of measurement. Others four processes (1, 2, 3, 4, 5) indicated in the table (4.10) were agreed by the respondents as they are practiced smoothly taking the combined result of disagree and strongly disagree and scored about (63%, 73%, 53%, 77%, 63%) respectively. This finding in general is consistent with one of the widely used practices identified under the project management integration. Hence, based on the response of the respondent's opinion the challenges to maintain proper practices under this knowledge area in order to integrate, combine, unify, and coordinate the various processes.

Table (4.10) Challenges on Project Management integration

s/n	Challenges on Project Management integration	Likert Scale analysis					
			Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
		N	38	38	38	38	38
		%	%	%	%	%	%
1	Failure to identify project manager/Coordinator		28.9	34.2	28.9	5.3	2.6
2	Lack of efficient change management		34.2	39.5	23.7	28.9	2.6
3	Lack of clear vision and goal		5.3	47.7	7.9	13.2	0
4	Not breaking down to phases and milestone		26.7	50	15.8	5.3	2.6
5	Not prioritizing operational activities		23.7	36.8	13.2	26.3	0
6	Lack of project process and lesson learnt		5.3	39.5	10.5	42.1	2.6
7	Lack of budget allocation for M&E		5.3	34.2	23.7	31.6	5.3

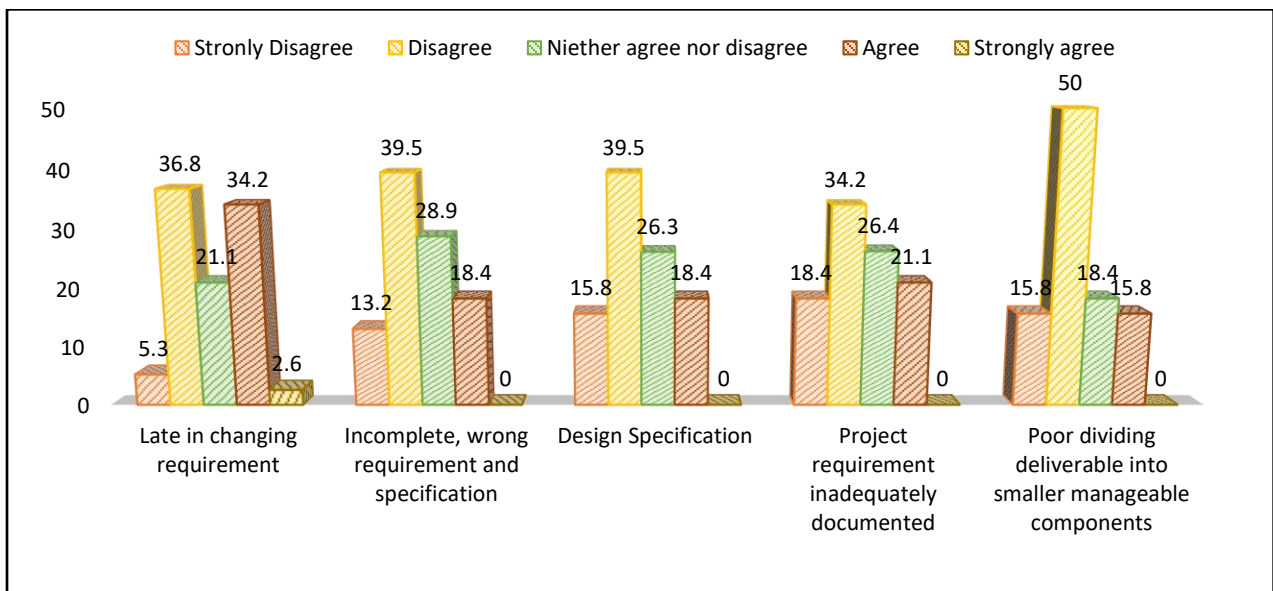
Source: Computed from own survey (March, 2022)

4.4.3 Challenges on Project Scope Management

The result of the survey in the figure (4.9) demonstrated to level of challenges encountered in the scope management processes. Accordingly, the finding showed each process responded were found and scored higher in the level of disagree and strongly disagree for four processes of

incomplete, wrong requirement and specification, design specification, project requirement inadequately documented and poor dividing deliverable into smaller manageable components which are scored (53%, 55%, 53% and 66%) respectively except one challenge agreed and reported and accounted 42% compared with others processes. Hence, the result found revealed that project scope management is not obstacle by the majority of the list activities, which is very consistent with the response made in the project scope management practices existing scenario.

Figure (4.9) Challenges on the project scope management



Source: Computed from own survey (March, 2022)

4.4.4 Challenges on Project Time Management

The analysis of the response in the table (4.11) showed that large proportion of the respondents answered project schedule delayed beyond what was initially planned and scored about 63% to both agree and strongly agree and only 27% replied disagree and strongly disagree. Thus, this shows that keeping initial project plan is a significant challenge during implementation. On the contrary about 53 % of the respondents replied disagree and strongly disagree for in accurate time estimation, but still 47% of the respondents believed there is a problem in estimating time accurately. About 50% of the respondents thought no constraints regarding too tight schedule and

unrealistic deadline observed in their experience, but similar proportion of the respondents commonly agreed on the existence of challenges for this process.

As per Unegbu, et al., (2020), proved on the their studies of Project management practices on the effect of project performance in the construction project found that time management on project performance and project success was positive, thus, a better time and quality management will improve project success and project performance and influence project performance and customer satisfaction respectively. In addition, cost management directly influences project performance.

Table (4.11) Challenges on the project time management

Challenges on the project time management	Likert scale analysis					
		Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	N	38	38	38	38	38
	%	%	%	%	%	%
Project schedule delayed beyond planned		2.6	23.7	10.5	31.6	31.6
Too tight schedule and unrealistic deadline		10.5	39.5	18.4	31.6	0
In accurate time estimation		10.5	42.2	18.4	23.7	5.3

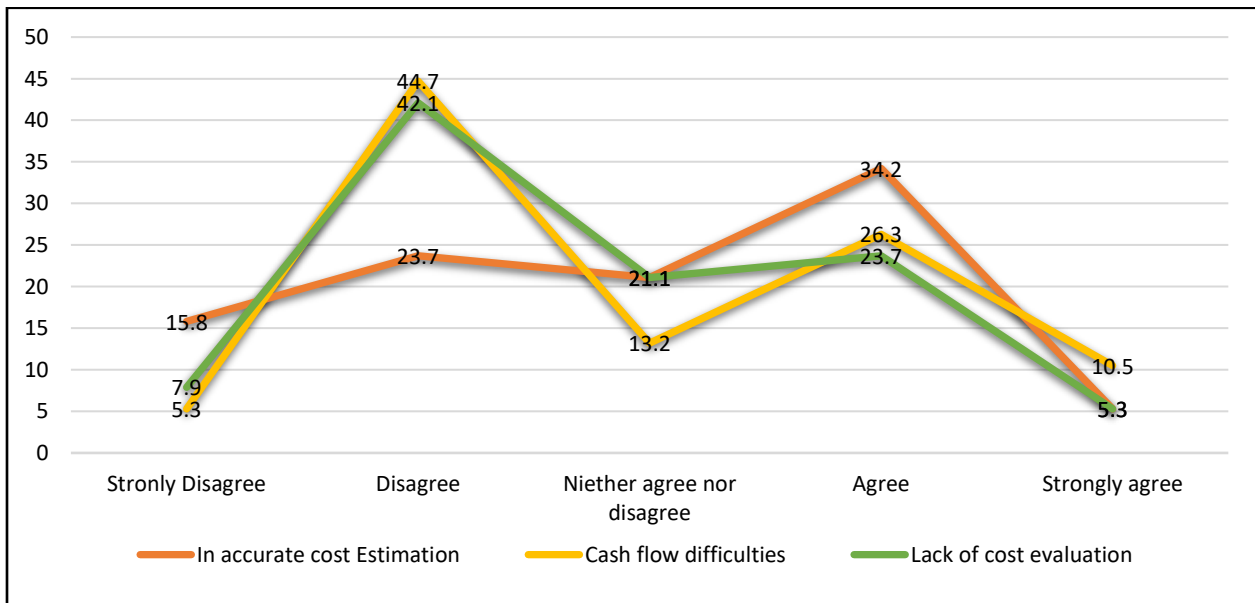
Source: Computed from own survey (March, 2022)

4.4.5 Challenges on the Project Cost Management

In the project cost management process, this study tried to capture what challenges encountered pertaining to in accurate cost Estimation, Cash flow difficulties, lack of cost evaluation and in adequate funding and poor utilization. Accordingly, the Figure (4.10) below as per the respondents' understanding revealed that cash flow difficulties and lack of cost evaluation together weighted more in disagree and strongly disagree than in the order value compared with agree and strongly agree. This implies the respondents did not consider these two variables as a challenge. However, inaccurate cost estimation scored about about 61% jointly for agree, strongly agree and

neither agree or nor disagree replied as one of the constraints in the processes. This is very consistent with study conducted by (Karlsson, 2011) in MIDROC project management in Gambella project and study found that rough estimation of the total cost was made in order to be granted bank loans. This estimation is however, not detailed calculated and it is not implemented in the project management.

Figure (4.10) Challenges on the project cost management



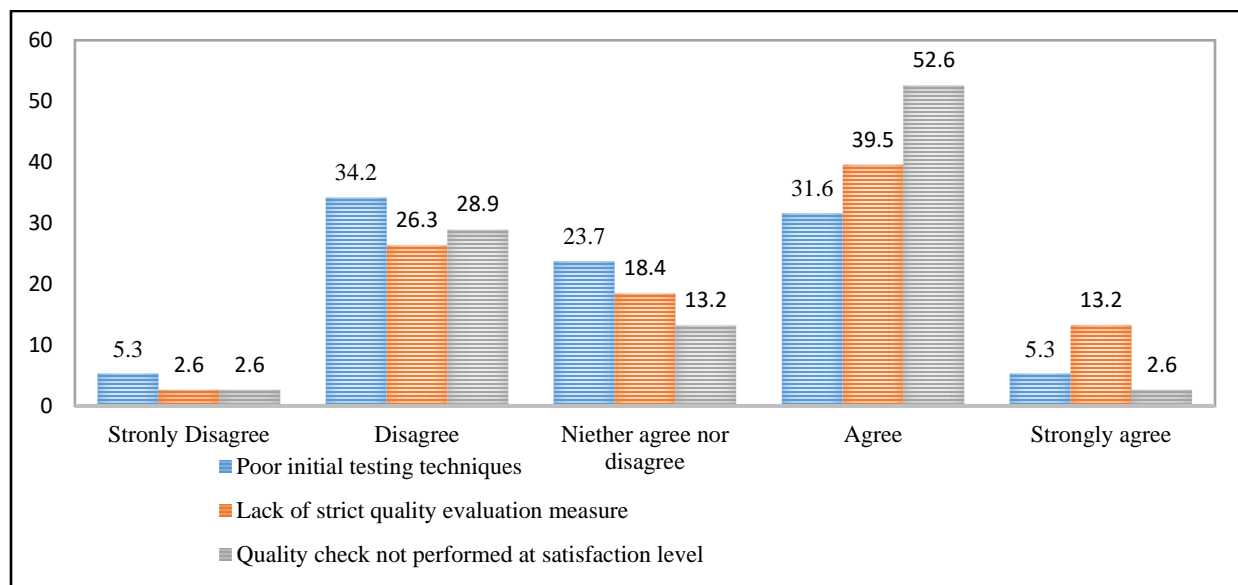
Source: Computed from own survey (March, 2022)

Key informant interview in this regard pointed out sometimes project budget is prepared with quick assessment without in depth cost analysis to each required items. Hence, project is later have faced budget constraints to perform all necessary activities that results compromising quality of project product and restrict regular monitoring. Moreover, budget is not released as per the plan or agreement made and it has caused negative impact on the project implementation to maintain quality, timely implementation and increase cost of inputs.

4.4.6 Challenges on the Project quality Management

According to the finding as indicated in the Figure (4.11) below respondents' replied that all three processes of Poor initial testing techniques, check not performed at satisfaction level and lack of strict quality evaluation measure weight accounted for (60%, 71%, 69%) for three order measurement of neither agree/disagree, agree and strongly agree respectively. Hence, it implies that quality practicing is a significant challenge in the project management.

Figure (4.11) Challenges on the project quality management



Source: Computed from own survey (March, 2022)

4.4.7 Challenges on Project Human Resource Management

The table (4.12) below explained the majority of the respondents' replied disagree and strongly disagree and both order in a combined way resulted about 71% , 73%, 63% and 79% for processes of wrong selection of team, lack skilled personnel with adequate skill, lack of clear role and responsibilities among the team and unable to resolve conflict respectively. Only minor proportions were replied agree and strongly agree though few respondents were also responded neutral. Hence, in the human resource management processes result found implies that no significant challenges have been encountered.

The qualitative discussion held with key experts as far as critical problems they faced noted that the most commonly occurred difficulties during project implementation were frequent staffs turnover, which directly created technical support gaps to project intervention areas, losing of experienced and skilled employees, eventually delay timely performing tasks, caused additional cost to hire and train new staffs, and project output quality check technical standards are poorly practiced. They added that, gaps created largely solved through working additional work by existing staffs in overstretched manner to bridge the gaps until new staffs hired and familiarized themselves to the new working environment.

This finding is consistent with study conducted by Dadi, et al., (2014), on the evaluation of the performance of local government authorities in managing development project with experience of Urban Local Government Development Projects in Oromiya study target areas. Hence, high staffs turnover and reshuffling of top management and the professional cadre which was affecting quality of infrastructure project delivery system, implementation delay, increased cost overruns.

Table (4.12) Challenges on project human resource management

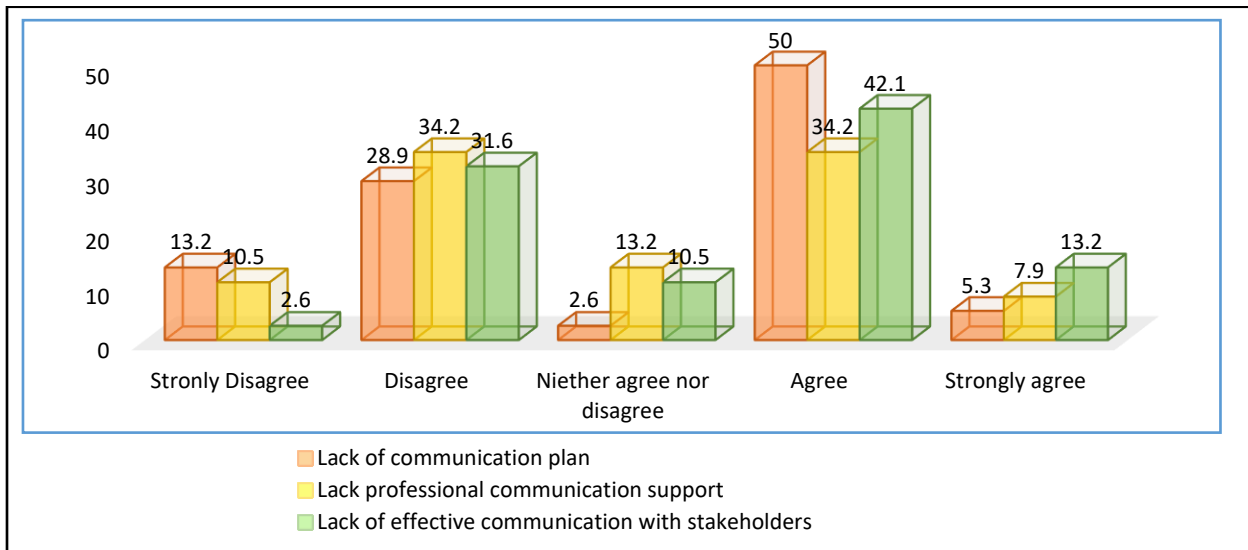
s/n	Challenges on Project Human Resource Management	Likert Scale analysis					
			Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
		N	38	38	38	38	38
			%	%	%	%	%
1	Wrong selection of team		15.8	55.3	21.1	7.9	0
2	Lack of skilled personnel with adequate capacity		18.4	55.3	15.8	10.5	0
3	Lack of clear role and responsibilities among the team		13.2	50	15.8	21	0
4	Unable to resolve conflict		13.2	65.8	7.9	5.3	7.9

Source: Computed from own survey (March, 2022)

4.4.8 Challenges on Project Communication Management

The figure below (4.12) shown that majority of the respondents answered there is a communication challenges in the process of their program/project management. Accordingly, the result showed that all three processes weighted more than 50% comprised by agree, strongly agree and neither agree/disagree compared with the value scored less than 50% by disagree and strongly disagree. Hence, the result in general explained that there are problem of experiencing proper communication plan and ineffective communication with stakeholders which is complimented by the result found in lack of professional communication support practices responded were considered as challenges in the project communication management.

Figure (4.12). Challenges on Project Communication management



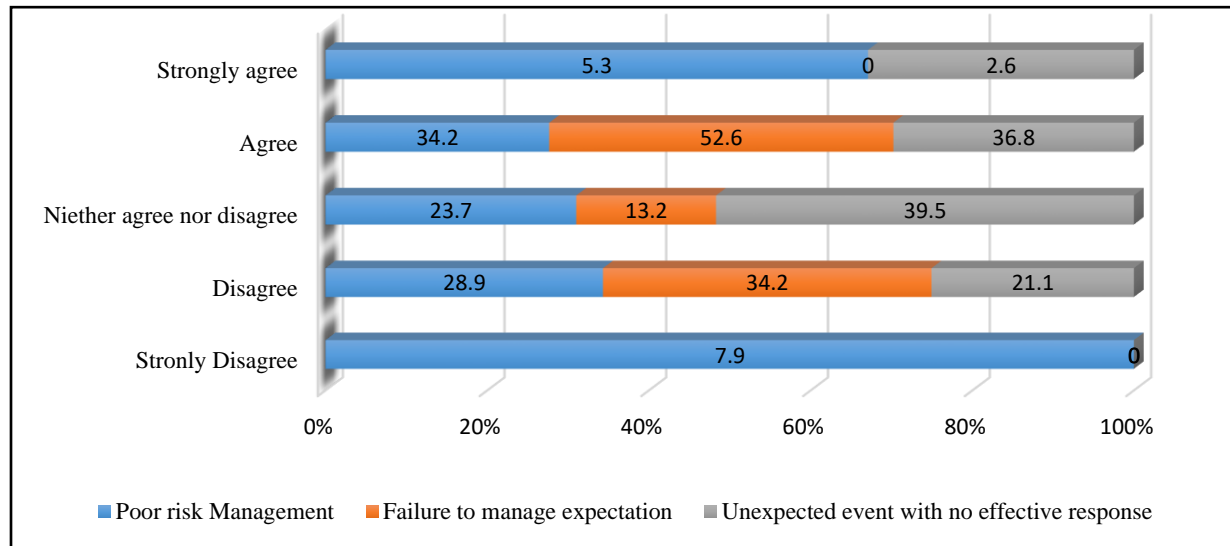
Source: Computed from own survey (March, 2022)

4.4.9 Challenges on Project Risk Management

As indicated in the Figure (4.13) the respondents were characterized by response of agree, strongly agree and neither agree nor disagree for all three processes of poor risk management, failure to manage expectation and unexpected event with no effective response scored about (64%, 67%

79%) respectively and those three processes were entirely perceived as a challenges. On the contrary, quite no of respondents reported disagree as portrayed in the graph on the three processes of challenges indicated. Thus, this implies that majority of respondents believed that there is a visible challenges on project risk management practices.

Figure (4.13). Challenges on the project risk management

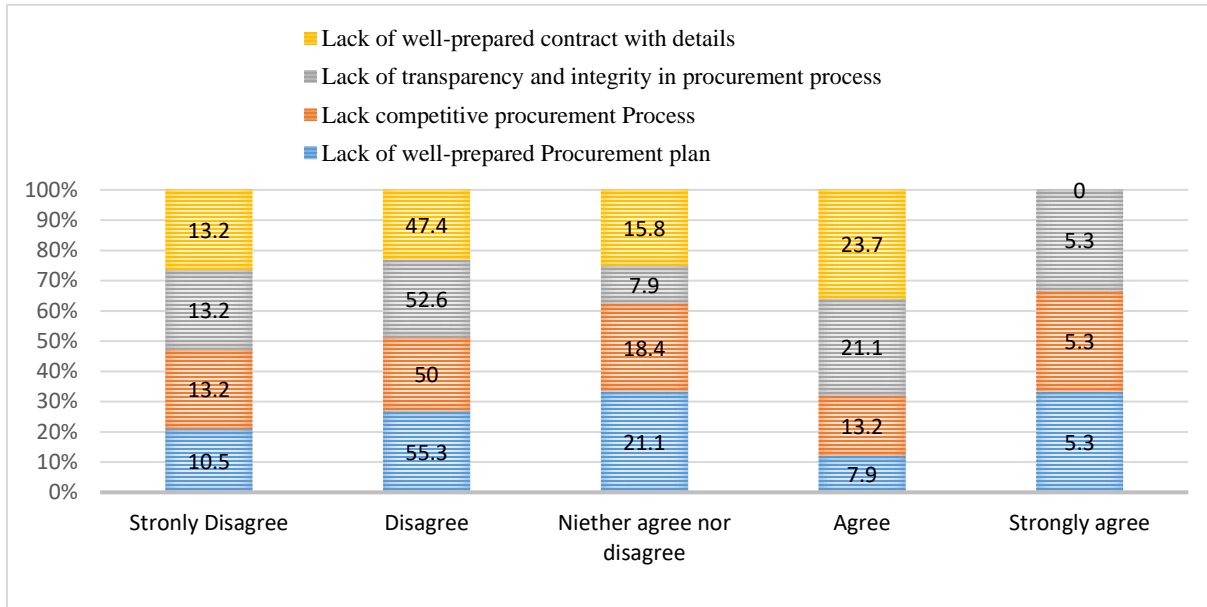


Source: Computed from own survey (March, 2022)

4.4.10 Challenges on Project Procurement Management

The study sought to know the extent of challenges on the project procurement management processes and based on the respondents' perception as indicated in the Figure (4.14), most of the respondents replied disagree and strongly disagree and jointly accounted for 61%, 69%, 63% and 66% for lack of well-prepared contract details to lack of well-prepared procurement plan respectively. Only minor proportions agree on procurement challenges pertaining to lack of well-prepared contract process. In the nutshell, procurement contract processes was not considered as a significant challenges related with contractual process to acquire goods and services.

Figure (4.14). Challenges on the project procurement management



Source: Computed from own survey (March, 2022)

4.4.11 Challenges on Project Stakeholders' Management

In the Table (4.13) below the result of the respondents' position showed that low commitment of Stakeholders to planned projects and lack of continuous support from executive relatively tends to have an understanding to agree and strongly agree along with neither agree nor disagree and their combined value scored about 63% and 65% respectively. Hence, the result demonstrating among the list of five processes at least two of them were identified as a significant challenge. Regarding late identification of stakeholders and the lack of involvement to end users majority of respondents together disagree and strongly disagree scored about 61% and 67% respectively implies no significant problem. The results of this study highlighted stakeholders' engagement processes are somehow exercised, but it is imperative to further working to strengthen and enhance stakeholders' satisfaction.

Table (4.13) Challenges on Project Stakeholders' management

s/n	Challenges on Project Stakeholders Management	Likert Scale analysis					
			Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
		N	38	38	38	38	38
	%	%	%	%	%	%	
1	Late identification of stakeholders		10.5	50	28.9	10.5	0
2	Low commitment of Stakeholders to planned projects		5.3	31.6	21.1	23.7	18.4
3	Lack of involvement end users		7.9	57.9	15.8	18.4	0
4	Lack of continuous support from executive		2.6	31.6	18.4	39.5	7.9
5	Limited/ Not obtaining stakeholder approval		7.9	39.5	28.9	23.7	0

Source: Computed from own survey (March, 2022)

4.4.12 Summary of the challenges

The finding of this study identified most of the challenges affecting the effectiveness of application of project management practices as per the analysis made on respondents' perception. Hence, based on the summated median scored 3 and above key challenges of the identified project management along processes were: Project cost management related with inaccurate cost estimation, Project time Management with scheduled delayed beyond planned, Project Quality Management in relation to quality check not performed at satisfaction level and lack of strict quality evaluation measure, Project Communication Management with lack of communication plan and lack of effective communication with stakeholders and project stakeholder management with low commitment of Stakeholders to planned projects and lack of continuous support from executives, project risk management mainly linked with failure to manage expectation of risk.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This research paper was generally aimed to assess the existing picture of the project management processes and the challenges of project management practices in the course of implementation in the selected program/projects of target organization pertaining theory of global standard project management knowledge areas. A total of 38 samples of respondents and few key informant interview using structured and semi-structured questionnaires were used to capture the required information for this study.

The summarized key result of this study is comprised by key project management practices identified against standard of 10 project knowledge areas. Accordingly, all Project management integration processes scored more than 50% jointly for highly and extensively used rating implies well practiced while only one process perceived as poorly practiced. The finding in the case of Project scope management revealed that all processes were decided as goodly practiced and the response rate was found above 50% for highly and extensively used level of measurement. In the same manner like Project integration management, the project time management processes were reported from 61% to 76% to all processes except one processes to estimate individual activities duration was considered as poorly practiced based on scoring value of 47% jointly in the highly and extensively used categories.

Correspondingly, among the four processes of cost management knowledge area, two processes were reported in the measurement of combined result of highly and extensively used level for cost estimate for project deliverable activities and budget determination through aggregating cost accounted for 53% and 63% respectively. The remaining two practices Plan cost management and

overall project cost estimate processes were reported poorly practiced which implies huge attention to be given to avert the likely risk cost variation most likely occurred during implementation period. In relation to human resource management the processes of manage the project than relationship of the project team and tracking of the project team and in procurement management processes areas procurement purchased and delivered timely were identified poorly practiced.

The Project human resource management knowledge area finding revealed that among the four processes three of them were reported as smoothly practiced with the score of 66%, 50% and 53% to processes prepare human resource plan for the team, manage the project than relationship of the project team and develop and manage team work respectively. Tracking of team performance reported poorly practiced scored about 45% in highly and extensively used level of measurement. Regarding to project communication management preparation of communication plan and manage communication for provision of information were accounted jointly 18% and 34% while Manage communication in the process of M&E scored jointly about 63% for highly and extensively level of measurement respectively that needs significant measure to be taken to improve the processes in the course practicing this knowledge area.

Generally, among the 10 project management knowledge areas six of them were perceived relatively widely practiced during project implementations considering the median value scored 3.5 and above as indicated in Table (4.2). On the contrary, the result of the survey depicted that Project quality, communication, risk and stakeholder's management processes were considered as poorly practiced as perceived and reported by the respondents, which requires vital attention to strengthen the practice of all processes under the stated project knowledge areas.

The other finding regard to challenges encountered practicing under Challenges Related to organizational Environmental factors along with challenges of 10 knowledge areas. Under the 10

knowledge areas related with Project management integration (project process and lesson learnt and lack of budget allocation for M&E were considered as a challenge among the six processes. In project scope, management late in changing requirement process identified as an obstacle in the list of processes. Similarly, under the project time management project scheduled delayed scored 63%, which is significant challenge. The other two processes of too tight scheduled and unrealistic deadline and in accurate time estimation were found and scored 50% and 53% respectively. However, these two processes still needs attention to improve the existing level of practices.

In general, situation Challenges of the project cost management practicing found that in accurate cost estimation was perceived as a constraint with score of 39%. Project Quality Management encountered with quality check that do not performed at satisfaction level and lack of strict quality evaluation measure were reported as constraints to conduct these practices with the score of 55% and 53% respectively. Communication management to lack of communication plan and ineffective communication, Risk management processes largely on failure to manage expectation of risk event with no effective response. Concerning stakeholders including Project stakeholder management with lower commitment of Stakeholders to planned projects and lack of continuous support from executive processes identified a major challenges based on summated median scored 3 and above as indicated in table (4.4).

5.2. Recommendations

According to the result of this study Project quality Management, Project Communications Management, Project Risk Management and Project Procurement Management were found poor level of practices among the 10 Knowledge areas. Eventually, the main contribution of this research is to propose possible policy recommendation to be harnessed by the pertinent organization taking into consideration the standard theories of 10 Project Management Body of

Knowledge developed by Project Management Institute. Hence, as per the survey, findings the following recommendation stated could play significant role if they are applied properly project performance and success will be enhanced and strengthened.

- 1) Project Quality Management: PM4DEV (2015), noted that Project quality management (QM) is not a separate, independent process that occurs at the end of an activity to measure the level of quality of the output. It is not purchasing the most expensive material or services available on the market. Quality and grade are not the same, grade are characteristics of a material or service such as additional features. A product may be of good quality (no defects) and be of low grade (few or no extra features). Moreover, PIM (2013) described Project Quality Management addresses the management of the project and the deliverables of the project. It applies to all projects, regardless of the nature of their deliverables. Thus, it very essential to improve the practice of all relevant project quality management processes, which fit in to the projects context. Perform proper requirement to satisfy and meet project beneficiaries, funding organizations and others stakeholders. Quality should be planned to prevent mistakes through frequent monitoring, Perform quality assurance through the process of auditing the quality requirements of the projects to ensure complying quality standard with government laws and regulation that appropriate quality standards and operational definitions are used.
- 2) Project Time Management: PIM (2013), described that Plan Schedule Management is the process of establishing the policies, procedures, and documentation for planning, developing, managing, executing, and controlling the project schedule. The key benefit of this process is that it provides guidance and direction on how the project schedule will be managed throughout the project.

Project completion delay beyond the plan was a primary challenge in these processes hence, effective and efficient use of the amount of time allocated to a project needs strong attention by all project team members in order to meet scheduled deliverables with addressing all the work required by or before the project completion date. In addition, project schedule management requires strong and consistent attentions to achieve project performance. All schedule process of establishing the policies, procedures, and documentation for planning, developing, managing, executing, and evaluating the project schedule should be implemented.

- 3) Project Cost Management: Lack of accurate cost estimate was identified as one of key challenge and it is advisable to take basic assumption and consideration of all project cost management activities from start to finish. In the PMI (2013), it is explained that cost estimates should be reviewed and refined during the course of the project to reflect additional detail as it becomes available and assumptions are tested. The accuracy of a project estimate will increase as the project progresses through the project life cycle.

Challenges of cost estimation is a persistent problem due to lack of information and uncertainty. Hence, the study conducted by (Hyukchun and Chang, 2019), recommend a method on estimating a budget for a single project, especially estimating reserves against both identified and unidentified risks to minimize cost variances by improving budget accuracy and precision. Reviewing guidance tools in the course of cost estimation and other interrelated processes is very important like project management body of knowledge to consider risk and uncertainty.

- 4) Project Communication Management: As per the PIM (2013), noted effective communication creates a bridge between diverse stakeholders who may have different cultural and organizational backgrounds, different levels of expertise, and different perspectives and

interests, which impact or have an influence upon the project execution or outcome. Hence, strong preparation communication plan, manage communication activities and conduct monitoring activities during the entire project life cycle should be undertaken to enhance project performance and success as well as ensuring stakeholders satisfaction.

- 5) Project risk management: In the PIM (2013), depicted that Positive and negative risks are commonly referred to as opportunities and threats. The project may be accepted if the risks are within tolerances and are in balance with the rewards that may be gained by taking the risks. Positive risks that offer opportunities within the limits of risk tolerances may be pursued in order to generate enhanced value. Participants in risk identification activities may include project manager, project team members, customers, subject matter experts from outside the project team, end users, other project managers, stakeholders, and risk management experts. All project personnel should be encouraged to identify potential risks.

Project risk management is not an exercise that only happens at the beginning of the project, but something that must be attended to in all of the project's life cycles. Hence, provision of training and skill development is imperatives for the professional staffs engaged in the ongoing project regard to project risk management. Active risk response plan preparation and implementation save unnecessary project delays and tackle any risky situation as soon as it occurs.

- 6) Project Stakeholders Management: Project Stakeholder management is an important activity that is used to gain mutual understanding of the objectives and expectations of all parties. As stated by PIM (2013), Stakeholder management focuses on continuous communication with stakeholders to understand their needs and expectations, addressing issues as they occur, managing conflicting interests and fostering appropriate stakeholder engagement in project

decisions and activities. Thus, Project manager/ Coordinator and project team should ensure list of stakeholder processes to be implemented through engagement of stakeholders to satisfy the interest of all parties and impact positively for project success.

- 7) Project Procurement Management: According to PIM (2013), Control Procurements is the process of managing procurement relationships, monitoring contract performance, and making changes and corrections to contracts as appropriate. The key benefit of this process is that it ensures that both seller's and buyer's performance meets procurement requirements according to the terms of the legal agreement. Moreover, Control Procurements includes application of the appropriate project management processes to the contractual relationship(s) and integration of the outputs from these processes into the overall management of the project.

Timely delivery goods and services for the projects should be required to be retained in the organization to achieve project performance as planned. Hence, Close Procurement process should be in place to fulfil the requirements of project delivery with defined agreement.

- 8) The high staff's turnover in the projects were key challenges in the ongoing projects and this is a common phenomenon in any development organization. Hence, it cannot be avoided staffs turnover, but could be reduced through offering competitive remuneration to employees', exercise recognition and rewarding for those performing well and during staff acquisition a number of questions should arise when planning the acquisition of project team members of new professional experts. Human resource management plan is part of project management plan and all activities should be implemented. Training and team building as part of human resource development should be given to project team members in comprehensive project management knowledge areas. As indicated in the PIM (2013) training includes all activities designed to enhance the competencies of the project team members. Training can be formal or

informal. Examples of training methods include classroom, online, computer-based, on-the-job training from another project team member, mentoring, and coaching.

- 9) Specific organizational Project implementation manual used as standards guidance for management of projects should be revised to incorporate key project management knowledge areas which is considered as a global standard developed by Project Management Institute (PIM) of PMBOK generally recognized as application of the knowledge, skills, tools, and techniques can enhance the chances of success over many projects.

Implications for Future Research

The finding of this study showed that Project Quality, Risk, communication and Stakeholders management were perceived and practiced at lower level and correspondingly scheduled delay beyond plan, lack of quality check at satisfaction level, lack of strict quality evaluation measure, lack of communication plan and lack of effective communication with stakeholders, and low commitment of stakeholders were identified as a challenge. These constraints ultimately affecting negatively the performance and success of the project. Hence, future research would be useful and requires to undertake impact evaluation on the performance and success of the program/projects being implemented in similar organization considering lack of proper project management practices as a limiting factors identified by this study along with key pillars or main factors like time, cost, scope and quality.

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Annex 1: Research Questionnaires

Project Management Survey Questionnaires

The purpose of this study is to assess the Project Management Practices and challenges in selected Program/projects being implemented in the Ministry of Agriculture for the partial fulfilment of MA thesis in Project Management at St Mary's University Graduate Program.

The data is collected entirely for writing research paper and your participation to respond the list of questions in the survey questionnaires is based on your willingness and cooperation.

The questionnaires response will take time to complete. Hence, your critical response and participation is very useful and valuable for this study. Please fill free and your response is secured and confidential.

The questionnaire requires you to consider each question and rank it from 1. Not used 2. Little used 3. Moderately used 4. Highly used 5. Extensively used. There are no correct or incorrect answers and you are required to answer them based upon your existing knowledge and experience you acquired while you are working in the program/project intervention on your respective organization.

Thank you very much for your cooperation.

Section 1: General Profile of the Respondent

1. Sex of the respondent: 1. Male 2. Female
2. Level of education of the respondent: 1. PhD degree 2. Master's degree 3. First degree
4. Diploma
3. Year of experience 1. 1- 5 years 2. 6- 10 years 3. 11-15 years 4. 16- 20 years
5. Greater than 20 years
4. Your role in the implementation program/ project you are working. 1. Program/project coordinator 2. Technical Expert in the project (Monitoring and evaluation, IT etc. 3. Procurement expert 4. Financial management 4. Head of coordination unit in the program/project

If any other, please indicate here _____

Section II: Project Management Knowledge area practices questions

Instructions: Please carefully read each of the question which belongs to each 10 Project Management Body of Knowledge and respond by ticking Mark “√” on the appropriate box which best suits your opinion and attitude about Project Management practices used in the program/project you are working in MoA. The liker scale is indicated in the box

Project Knowledge area	Rating based on project management body of knowledge area		Likert scale: 1. Not used 2. Little used 3. Moderately used 4. Highly used 5. Extensively used				
			1	2	3	4	5
Project Integration Management	1	Project charter has prepared to formalize the project					
	2	In the beginning our project has developed management plan					
	3	Project Managers (Coordinators) have directed and manage the project execution					
	4	Project owners Perform monitor and evaluation project work					
	5	Project owners Perform Integrated Change Control through reviewing change requests					
	6	Followed project phase by phase and close when it's done					
Project Scope Management	1	We used project scope plan and validate and controlled					
	2	Our project used to collect requirements essential for the project achievement					
	3	You used detailed description to define the scope					
	4	Your project used to create work breakdown structure (WBS) like sub-project (Activity 1----3 etc.,					
	5	The project used to validate feasibility or viability of tasks to be performed					
	6	You used to manage or control your projects scope					
Project Time Management	1	We used plan schedule management of our project, to manage the schedule					
	2	We used to define and sequence of specific activities					
	3	We used to estimate activity resources (human resource, material and equipment etc.)					
	4	We used to estimate individual activities duration					

	5	We do have developed schedule and controlled developed timetable					
	6	We used project monitoring status as per project time frame					
Project Cost Management	1	We used to plan cost management					
	2	We used cost estimate for the project deliverable activities					
	3	We used budget determination through aggregating the estimated cost					
	4	The project completed as per overall project cost based on baseline goals and targets					
Project Quality management	1	We used quality management plan to comply quality requirement for our project					
	2	We used quality assurance for our project to ensure appropriate quality standard for the deliverable					
	3	We used monitoring and recording to ensure quality activities based on standard					
Human resource Project Management	1	The project used to acquire human resource plan for the project team (responsibility, required skill etc.)					
	2	The project was more important to manage the project rather than the relationships in the project team					
	3	The project had developed and managed project team work					
	4	We used tracking project team performance, providing feedback, resolve issue					
Project Communications management	1	Project used to prepare communication plan based on stakeholder's needs					
	2	Project used manage communication (process of collecting, creating, storing and retrieving and dispose information					
	3	We used communication in the process of monitoring and evaluation to all stakeholders					
Project Risk Management	1	As a Project, we planned to identify and manage risks					
	2	Situational analysis used and implemented for project opportunities and threats					
	3	Risk analysis was made with risk response plan					
	4	Identified risks, tracked and managed accordingly					
	1	Project used Procurement plan for purchasing and supply management system					

Project Procurement Management	2	Purchasing of materials were conducted as per the plan					
	3	Procurement was made and closed in a controlled manner					
	4	Requirement essentials were purchased and delivered timely					
Project Stakeholder Management	1	Project used to identify project shareholders and plan stakeholder management					
	2	Our project used to specify tasks or prepare plan for each stakeholder engaged					
	3	We used good stakeholders' management, communicating to meet their needs/expectations					
	4	Stakeholders' engagement or their relationships is controlled/monitored as per the plan					

Section III: Questions on Challenges/obstacles to apply Projects management Practices

Instructions: Please carefully read each of the following statements and respond by ticking “√” on the appropriate box which best suits your opinion about possible challenges/obstacles you think are exist in your program/project implementation in the respective organization (MoA).

Likert scale: 1. strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree
5. Strongly agree

Project Knowledge area	Rating based on project management body of knowledge area		Likert scale: 1. Strongly disagree 2. Disagree 3. Neither agree or disagree 4. Agree 5. Strongly agree				
			1	2	3	4	5
Challenges Related to organizational Environmental Factors	1	Lack of Project Management Skills and training in project management					
	2	Lack of Information technology support					
	3	Lack of clearly defined Rules and procedures for project management					
Project Integration Management Challenges	1	Failure to assign and identify Project Manager early in the project					
	2	Lack of efficient change management					
	3	Lack of Clear vision and goals of the project					
	4	Not breaking down development into phases or clear milestones					
	5	Not prioritizing operational activities or objectives					
	6	Lack of Process for project knowledge management and capturing lessons learned					

	7	Limited resources and budgetary allocations for monitoring and evaluation					
Project Scope Management challenges	1	Changing requirements late in the project and continuing change requests					
	2	Incomplete, wrong or not defined Requirements and specification					
	3	Design discrepancies					
	4	Project requirements inadequately documented					
	5	Using a poor dividing project deliverables and project work into smaller, more manageable components.					
Project time Management challenges	1	Project schedule delays (beyond what was agreed)					
	2	Too tight project schedule and unrealistic deadlines					
	3	Inaccurate time estimations					
Project Cost Management challenges	1	Inaccurate cost estimation.					
	2	Cash flow difficulties					
	3	Lack of Cost Control/evaluation					
	4	Inadequate funding/capital or poor use of funding/capital.					
Project Quality Management Challenges	1	Use of poor initial testing techniques.					
	2	Lack of strict quality control measures					
	3	Quality checks not performed at satisfactory level					
Project Human Resource Management Challenges	1	Wrong selection of project team					
	2	Lack of skilled personnel with adequate capacity					
	3	Lacking clear roles and responsibilities among team					
	4	Being unable to resolve conflicts					
Project Stakeholder management challenges	1	Late identification of stakeholders of the project					
	2	Low commitment of Stakeholders towards planned projects					
	3	Lack of involvement of end users of the project					
	4	Lack of continuous support from executive					
	5	Limited/ Not obtaining stakeholder approval					
Project Communication Management Challenges	1	Lack of communication plan					
	2	Lack of professional communication support					
	3	Lack of effective communication between stakeholders					
	1	Poor risk management					
	2	Failure to manage expectations					

Project Management Challenges	Risk	3	Unexpected events with no effective response possible					
Project Procurement Management Challenges		1	Lack of well-prepared procurement planning					
		2	Lack of competitive procurement process					
		3	Lack of transparency and integrity in the procurement					
		4	Lack of well-prepared contracts with much detail and clear-documentation					

Thank You Very Much for Your Cooperation!!

Section IV. Key informant interview question

This question is an integral part of the Likert type presented for the respondents to portray the current program/project management practices and challenges encountered in the process of practicing. It is just to know the expert opinion on few questions as kind of triangulation on what respondents replied in the likert type questionnaires.

- What are the critical challenges in your project in the realization of project management practices, which affects the performance and success of the project?
- As per the experience you have in the project being undertaken, which one is the most series problem in the process of project management practices?
- What are the possible solution was taken to correct this problem?
- Did you provide a project management training to your team members to bridge skill and knowledge gap to enhance successful project implementation?
- Have you faced any budget constraints for the project execution if yes, why?