



**Assessment of Project Communication Practices of
Addis Ababa City Roads Authority**

By

Addisu Assefa

**A Research Project Work Submitted for the Partial Fulfillment of Master of Art
Degree in Project Management/MAPM/**

**ADDIS ABABA UNIVERSITY, COLLEGE OF BUSINESS AND
ECONOMICS SCHOOL OF COMMERCE**

PROJECT MANAGEMENT DEPARTMENT

Advisor

Solomon Markos(PhD)

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GRADUATE STUDIES PROGRAM
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Assessment of Project Communication Practice of Addis
Ababa City Roads Authority

By: Addisu Assefa

Approved By Board of Examiners

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DECLARATION

I, the undersigned, with an ID Number GSD/8875/09 declare that this research paper entitled “Assessment of Project Communication (the Case of Addis Ababa City Roads Authority)” is my original work under the guidance of Dr Solomon Markos, and all the source have been duly acknowledged and properly cited.

I also declare no part of this thesis has not been previously presented to any institution.

Declared by:

Name: Addisu Assefa

Signature_____

Date_____

CERTIFICATE

This is to certify that this project work, “Assessment of Project Communication Practice Addis Ababa City Roads Authority” undertaken by Addisu Assefa for the partial fulfillment of the award of Master’s degree in Project Management at Addis Ababa University School of Commerce, is an original work and not submitted earlier for any degree either at this Company or any other Company.

Solomon Markos (PhD)

Research Project Advisor

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Last but not least, I would like to extend my deepest gratitude for my wife Dr. Tenagne Setatrgie for her consistent encouragement throughout my study.

Abstract

The purpose of this study is to assess project communication practices in AACRA. Specifically, this study tries to assess the challenges in project communication and assess the communication methods in place. With this in mind, questionnaires were developed and distributed to 87 respondents from relevant directorates in AACRA namely own force road construction, housing projects road construction contract administration and road construction contract administration directorates. 71 questionnaires were filled out of 87 indicating a response rate of 81.6%. SPSS version 23 was used to descriptively analyze the data collected from questionnaires. Lack of familiarity and applicability of the communication strategy of AACRA, unavailability of historical lesson learned repository, failure to regularly update Project documents like issue log, lesson learned register, were the major findings worth considering. With regards to communication methods, meetings, social media, letters and are regarded as the most common means of communication whereas web portal considered as the least popular one indicating the fact that the methods of communication are mostly dependent on face-to-face and paper based medium with an exception of social media engagement. Besides, inadequately described job, poor planning, leadership commitment and communication inconsistency are found to be the most critical challenges in project communication according to the respondents. Based on PMBOK Guide, the project communication practices of AACRA fails to consistently follow and implement the project communication processes namely plan communication management, manage communication and monitor communication. Thus, the project communication management practices in AACRA is haphazardly managed and not standardized against the international bench marks.

Key words: *Project, communication management, assessment, AACR*

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Abbreviations/Acronyms

AACRA: Addis Ababa City Roads Authority

PMBOK: Project Management Body of Knowledge

SPSS: Statistical Package for Social Sciences

Chapter One

Introduction

1.1 Background of the Study

Communications is one of the key acquired skills which involves exchange of information from one person to another. It is something human beings do in a daily basis to make ends meet. In Biblical times, the mighty Babylonians degenerated into mayhem while building the Tower of Babel following communication crisis among them (Genesis 11:5-8). There are several definitions of communication. According to Keyton (2011) communications the process of transmitting information and common understanding from one person to another. Thus, for an effective communication to occur, a common understanding should be created between the sender and the receiver. It is also considered as an important key function of management because an organization cannot operate without communication between levels, departments and employees (Online Business Dictionary, 2010; Okenimpkpe, 2010).

As projects involve people with different stakes and influence, communication becomes a key success factor to realize project objectives. Communication needs to be applied effectively throughout a project's life cycle from the beginning till the end. Mei Yuen Foong (2014), regarded effective communication as the most decisive success factor in project management. It is one of the most indispensable skills expected to be possessed by the project manager since studies show that about 90% of the time of project manager is spent on communication (PMBOK, 2017). By the virtue of this, a successful project manager should be a great communicator. Communication in projects include exchange of project related information to create mutual understanding among project stakeholders using different communication mediums. (Caltrans, 2007). Poor communication results into missed deadline, omissions of critical works, misunderstanding of task assignment, quality problems, and ultimately leading to dissatisfaction of the customers. Without effective communication, projects are bound to fail.

To this end, project communication management comes to play in order to effectively coordinate, integrate and organize the project communication activities. According to PMBOK Guide (2017), project communication management includes “the processes necessary to ensure

that the information needs of the project and its stakeholders are met through development of artifacts and implementation of activities designed to achieve effective information exchange'. It is one of Project Management Body of Knowledge and substantial area of project management. Samáková et al., (2018) stated that the relationship between project management and communication is quite intertwined. According to PMBOK Guide (2017), the project communication management contains the 3 processes namely; plan communication management, manage communication and monitor communication.

Construction industry is one of the key economic sector which have significant contribution to one's economic, social and political development. construction projects like roads have multiplier effect on other sectors of the economy in addition to the direct benefit arising from the construction. According to Okoye et al. (2015), construction projects are complex by their very nature due to mobile workforce, deep-seated culture, working environment, project-based setup, diverse sub- contractors and suppliers. Thus , effective communication is vital in construction projects to address the complexity of project management. That is why Priyadharshini and Sashara (2016) regarded project communication as the soul of construction project management. They further argued that insufficient & improper communication among the project participants is one of the major contributing factor to the failure of 74% of projects. Tipili et al., (2014), evidenced that ineffective communication management system in Nigeria is the major cause of failures associated with construction projects delivery. According to press release by BSI (2003), the inefficient use and communication of information cost at least £20 billion to correct every year in the UK construction industry. Setting up an effective communication system for construction projects is quite challenging task requiring combination of soft and hard skills.

As to road construction projects, management of such projects is sophisticated and to some extent unpredictable due to the imbedded uncertainties inherent in the projects. Road projects in Ethiopia are no exceptions. Addis Ababa City Roads Authority was established as autonomous entity in 1998 mandated with the construction and maintenance of road infrastructure under its jurisdiction. Road construction projects in Addis Ababa faced with numerus challenges resulted into cost and schedule over runs. Tigist (2017) pointed out that road projects experienced schedule delays and cost overrun and failed to meet the standard. To Benyam (2019), poor communication among contract stakeholders contributed to delay in time and cost overrun of Shiromeda Hameroah project. This paper tries to assess the project communication practices of AACRA and the barriers for swift communication. .

1.2 Background of the Addis Ababa city Roads Authority

With an estimated population of 3.7 million, Addis Ababa is one of the most populous cities in Africa with an area of 520 km². Founded in 1886 by Menelik II and Empress Taitu Betul, the city is a seat to the African Union and UN Economic Commission for Africa and several diplomatic establishments which makes it the third diplomatic city in the world next New York of USA and Genève of Switzerland. Administratively, the city is divided into 11 sub-cities which are further divided into 117 weredas. The prominence of the city is quite visible in Ethiopia's historical, political, economic, and diplomatic arena. For instance, in the city's resilience strategy document, Addis Ababa contributes 30% of urban GDP and 68% of urban jobs. (Addis Ababa Resilience Strategy, 2020)

The history of road development of the city is related to the establishment of the same by the then Emperor Menelik and Empress Taitu in 1886 with the construction of a road from Addis Ababa to Addis Alem from Palace to British Embassy in 1902. During the 5 years of the Italian occupation period, the city enjoyed a fast pace of road construction which are meant to fulfill colonial aspirations. Official records show that the city's road construction had never been managed in an organized manner than the reign of Emperor Haile Selassie. Specifically, the construction of the city's road was organized under the municipality as 'Roads and Building Works' Department following the end of Italian Occupation. Then, during the transitional government period, the city roads are organized under the Bureau of Works and Urban Development. Cognizant of the fact that the complexity and extensiveness of the city road management, Addis Ababa City Roads Authority established as an autonomous entity in March 15, 1998 by regulation No. 7/1998. In 2019, it was reestablished under Proclamation No. 64/2019 of the Addis Ababa City Government Executive Organs re-establishment. Ever since its establishment, AACRA has gone through a series of structural changes the most recent one being in September, 2016. The aforementioned regulation vests the Authority with exclusive power to administer construction and maintenance of the road infrastructure under its jurisdiction. The authority is headed by Director General and responsible to Board of Directors with 5 Deputy Directors General.

Figure 2. Figure 2. Figure 2. Figure 2. According to EFY 2013 Tahisas Accomplishment report of the Authority, the authority manages above 200 projects of which 63 projects are managed and constructed by the own force construction directorate.

1.3. Statement of the problem

The term communication comes from the Latin Word ‘Communicare’ whose literal meaning is –‘to make common’ implying that a common understanding is created while communicating. It is an obvious fact that communication plays a pivotal role in fulfilling the daily routines and demand of people of all walks of life. When the communication is not effective, it gives rises to misunderstanding and ultimately conflict. People and organization devote a huge amount of their time and resources to make an effective communication in order to pursue their objectives and dreams. Project management is no exception.

In project management, communications is one of the crucial element in realizing the project objectives. As project involves people as the most important and integral part, effective communication among the management and staff should not to be left to chance. Project managers devote 90 percent of their time communication with their team members and other stakeholders for successful project outcomes. According to Zulch (2014) , communication can be referred as a lifeblood of a project since members of the project need to collaborate ,share, and integrate information and knowledge so as to fulfil objectives of the project. Project Communication management is one of the knowledge areas of human aspect of project management implemented throughout the five project management process groups namely initiating, planning, executing and monitoring and evaluation. There are ample empirical evidences indicating the importance of effective communication for the project to be successful. Hyvräri (2006) stated communication as the main contributing factor to effective realization of project objectives. Verma (1995) pointed out that communication, teamwork and leadership are the key ingredient to a project success.

According to PMBOK Guide, project communication management process involves two parts which are

- Developing a strategy based on the project and the project stakeholders to ensure communications are effective for stakeholders
- Carrying it the activities necessary to implement the communication strategy.

Addis Ababa City Roads Authority (AACRA) is one of a key executive body of the city administration mandated with the construction and administration of road infrastructure within its jurisdiction. The Authority is the largest recipient of the city's annual budget averaging almost 15 percent of the total annual budget of the city (BoF ,2020). Managing over 150 projects annually which are either outsourced or constructed by the Authority's own force construction directorate with an average outlay of Birr 6 billion. By the very nature of its mandate, AACRA has a great deal of engagement in the project management practices. Most of studies indicated (Siraw, 2011) that an overwhelming majority (80%) of projects administered by AACRA suffer dorm time and cost overruns which has become the typical characteristics of construction projects in Ethiopia. According to Shimeles (2019), poor communication is among the ten critical factors responsible for time delay of AACRA projects. Benyam (2019) has also pointed out that ineffective communication among stakeholders receives its fair share of a blame for cost overrun and schedule delay of Shiromeda-Hameronoah road project. On the other hand, Melat (2019) indicated the importance of sound project communication management for effective Monitoring and Evaluation practices in Ethiopian Roads Authority.

Despite the fact that the finding of the above studies on AACRA furnished us with the importance of communication project management, they seem to fail to clearly assess the effectiveness of communication practices of the projects under AACRA in isolation. Preliminary interview was conducted with three relevant directors namely Own force road construction Directorate Director, Road Construction Contract management Directorate Director and Housing Projects Road construction Directorate Director. All of them responded that project communication practice in AACRA is haphazardly managed, inconsistent and to some extent unscientific.

Although the Authority launched a communication strategy in 2019, the communication planning, information distribution, performance reporting and administrative closure of the communication process have not yet been fully realized. Thus, this study tries to fill the knowledge gap by assessing the communication practice in the projects administered by AACRA and the existing communication challenges.

1.4 Research Questions

The research question of this study are

- what does the project communication management practice of AACRA look like?
- What are the challenges for swift project communication endeavors?
What are the prevalent communication methods in place?

1.5 Objective of the Study

1.5.1 General objective

The general objective of this study is to assess the project communication practices of AACRA.

1.5.2 Specific objectives

- To assess the project communication practices of AACRA
- To determine the challenges for effective project communication
- To assess and analyze the methods of communication in place.

1.6 Scope of the study

The study focuses primarily on describing the project communication practices of AACRA projects which are currently undergoing in Addis Ababa. Specifically, the target population is the permanent employees under the directorates which are directly involved in the project management . The respondents are drawn from AACRA's Own force and contract administration directorate , housing road project contract administration.

1.7 Limitation of the study

Since this research is descriptive by design, it is limited to describing the communication practices of AACRA. It did not explain the level of effectiveness of the communication practices in terms of realizing project and organizational objectives. Besides, the research tried to assess the communication practice from AACRA's side due to time and budget constraint. The researcher is of the opinion that the study would have been more complete and comprehensive if it had covered the pertinent stakeholders like consultants and contractors.

1.8 Significance of the study

According to the preliminary interviews with relevant directorates of AACRA, project communication practices are not effective in realizing project objectives. Thus, it is imperative to look into the challenges in project communication so as to contribute to the successful delivery of project outputs. Specifically, the study has the following significances.

- To provide information with regards to the existing project communication practices of AACRA
- The study will identify the challenges and barriers against swift communication among project stakeholders
- It will put forward recommendation on how to improve project management practices of AACRA
- Finally, the study will provide an opportunity for future study on the subject matter

1.9 Organization of the study

The paper is organized in 6 chapters. The first chapters includes the introduction, statement of the problem, the objectives of the study, the scope and the limitation of the study. The second one entirely deals with literature review of theoretical and empirical aspects. Research methodology, research design and sampling design is going to be discussed in the third chapter. Chapter four focuses on the analysis of data. The final chapter will make conclusion from the findings and puts forwards recommendation and suggestion for further investigation in the matter under the study.

Chapter Two

Literature Review

2.1 Theoretical Review

2.1.1 Concepts and Definition

2.1.1.1 Communication

The word communication came from a Latin word *communicare* literally meaning ‘to make common’. Merriam-Webster dictionary defines communication as ‘a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior’. This definition clearly states that communication is not just about sharing of information using verbal and symbols. Rather, it involves exchange of behavior as well. Different scholars defined communication in different ways of which some of them are presented as follows.

J. Rodney Turner (2014) defined communication as ‘operating system of as society’ having similar function as operating system of computer which integrates the various systems ad programs for the use of the people. The same holds true for communication since it facilitates the efficient utilization of resources by integrating the various social interactions. Barret (2006) defines communications as “the transmission of meaning from one person to another or many people, whether verbally or non-verbally”. Based on the these definitions, it is fair to conclude that communication involves sharing of information among people using symbols and signs and behavior. It also implies that communication does not only use written and oral mediums but also nonverbal communication have their indispensable significance in conveying messages. Besides, the sent information should give meaning to the receiver of the information. If the receiver fails to understand the conveyed message, misunderstandings and conflicts might arise. Katz and Kahn (1966) also shared the idea that the conveyed message should give meaning by defining communication as ‘the exchange of information and the transmission of meaning.’ The same notion of communication is also supported by Davis (2011). According to him , communication is ‘ a process of passing information and understanding from one another.”

To Newman and Summer (1967), communication is “ an exchange of facts, ideas, opinions or emotions by two or more persons”. This definition details the aspects included in the concept of messages as facts, ideas, opinions or emotions . According to the authors, facts , ideas and opinions are not the only messages to be conveyed. Emotions also give meaning to the individuals engage in communication. Similarly, Leland Brown (1970) defined communications as , “the transmission and interchange of facts, ideas, feelings or course of action” augmenting the idea that feelings play indispensable role in the communication process. Amy M. Covey (2020) defined Communication as ‘ the process of creating, interpreting, and negotiating meaning. Communication can be verbal, nonverbal, or textual. It can be aural, visual, or even physical.” According to this definition, communication is about meaningful message transmitting through verbal, nonverbal or textual mediums.

Allen Louis (1967) defined communication from different perspective. He defined communications as “the sum of all the things one person does; when he wants to create understanding in the mind of another. It involves a systematic and continuous process of telling, listening and understanding” This definition implies that communications entails all the activities that a person does in a bid to get understood by other people. He adds that communication is an interactive and multidirectional process which involves telling, listening and understanding. Thus, according to this definition the mere sending of message cannot be considered as communication unless the message is understood through systemic process of telling , listening and understanding. Communication is not only about speaking to and hearing from people, it’s about understanding the complete message

The three basic ideas shared by all definitions about communications are listed here under

- Communication is a process. It is not a one shot activity
- It involves transmission of message or information among people through symbols, verbal and non-verbal methods
- The conveyed message should give meaning and create common understanding among the individuals engaged in the communication

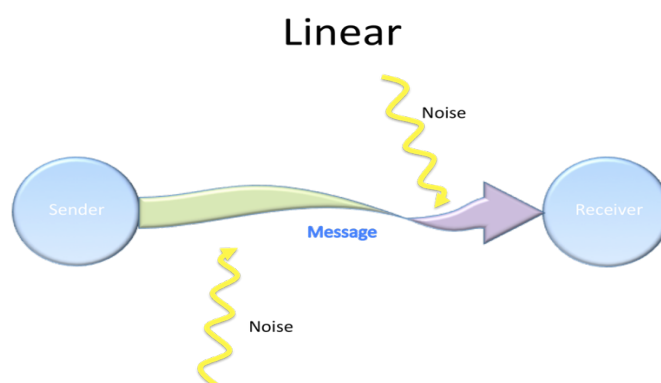
2.1.1.2 The communication process

As explained earlier, communication is a process conveying message among people using different communication mediums. So as to explain the communication, scholars have developed several models. The three most well-known models for communication are Linear, Interactional, and Transactional. According to West & Turner (2007) each model emphasizes on different parts of the communication process. The models identify the various elements of communication and portray how these elements interact to complete the communication process.

Linear Models

Initially formulated by Shannon & Weaver in 1948, communication is portrayed as a linear process. The four elements of communication are depicted in the model namely, the sender, the message, the channel, the noise and the receiver. The sender is the source of the message. The message is representation of the sounds, words, or behaviors in a communication interaction. The channel is the way through which the message is transmitted to the receiver. Noise refers to any barriers and distortions of the message in the communication process. The receiver is the target of the message sending process.

Figure 2.1:- Shannon and Weaver Model



Source:(<https://ecampusontario.pressbooks.pub/evolutionhumancommunication/chapter/chapter-1/>)

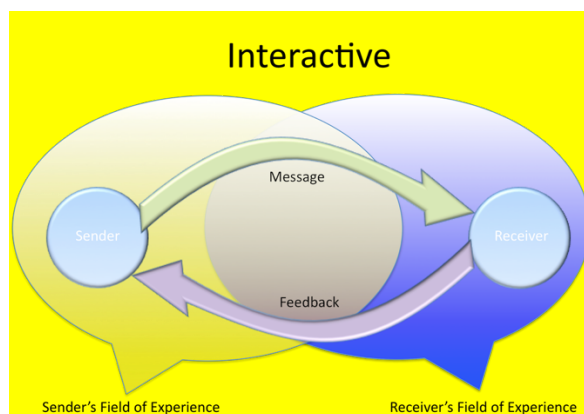
Although this model was quite popular and influential in explaining the communication process during the mid-20th century, it is very simplistic portrayal

and presentation of the communication process. The first weakness of this model is related to assumption of unidirectional communication process. it does not fit into the dynamic nature of communication which involves two way exchange of information between the sender and the receiver.. It does not recognize the importance of feedback which facilitates proper understanding on the conveyed message. Feedback is simply a response that a receiver gives to a sender. Without feedback, one cannot have common understanding and the communication process is incomplete (Daniel, 2013). The model also assumes there is only one channel of communication for one message which is quite unrealistic.

Interactional Models

More dynamic than its predecessor, interactional model have two channels to allow communication and feedback flow between sender and receiver. Above all, feedback shows understanding. These models consider communication as an ongoing process since feedback is given to the message conveyed.

Figure 2.2:- Interactional Model



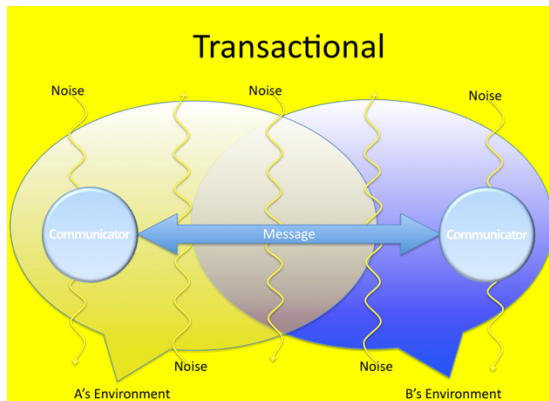
Source:(<https://ecampusontario.pressbooks.pub/evolutionhumancommunication/capter/chapter-1/>)

Additional feature is incorporated in this model which is the field of experience. The field of experience refers to how environment, experiences, culture, and even heredity can influence how a sender constructs a message. The limitation of this model is people cannot be senders and receivers at the same time.

Transactional Models

The point of departure of this model from others is that the recognition of people as communicators rather than referring them senders and receivers. In other words, people send and receive message at the same time. Unlike the linear model in which meaning is sent from one person to another, this model views communication as a transaction making it one of the most dynamic models of all.

Figure 2.3:-Transactional Model



Source:(<https://ecampusontario.pressbooks.pub/evolutionhumancommunication/chapter/chapter-1/>)

More emphasis is given to the field of experience than interactive model. The model states that for communication among people to occur, the communications must possess at least shared culture, language, or environment. This model also recognizes that messages will influence the responses, or subsequent messages, produced in the communication interaction. This means that messages do not stand alone, but instead are interrelated. The principle of interrelation states that messages are connected to and build upon one another.

According to Lunenberg (2010) , all communication process involves eight steps, regardless of the form used. It is presented as follows.

1. **Sender:** the one initiates the conversation and has conceptualized the idea that he/she intends to convey it to others.
2. **Encoding:** it is the process where the sender uses certain words or non-verbal methods such as symbols, signs, body gestures, etc. to translate the information into a message.

3. **Message:** . The message can be written, oral, symbolic or non-verbal such as body gestures, silence, sighs, sounds, etc. or any other signal that triggers the response of a receiver.
4. **Communication Channel:** the sender, then, chooses the medium through which the message is conveyed to the recipient. Due care should be given to the selection of appropriate medium in order to make effective communication. . Oral, virtual, written, sound, gesture, etc. are some of the commonly used communication mediums.
5. **Receiver:** then the message gets to the receiver and he/she tries to comprehend it in the best possible manner such that the communication objective is attained.
6. **Decoding:** at this stage, the receiver tries to interpret the sender's message and understand to the best of his/her knowledge.
7. **Feedback:** it is the final step of the process that ensures the receiver has received the message and interpreted it correctly as it was intended by the sender. It increases the effectiveness of the communication as it permits the sender to know the efficacy of his message.

2.1.1.3 Types of Communication

According to Foluke. (2018), there are generally two types of communication.

Verbal communication: this type of communication uses sounds, words, signs, language and speaking. Among them, speaking is an effective way of communicating further classified into interpersonal communication and public speaking (Aarti, 2011). Interpersonal communication deals with directly communicating with one person and the communication tends to be informal. Public speaking occurs when one person speaks to a large group. Public speaking employs formal ways of communications. Verbal communication can also be grouped into oral and spoken. Oral communication is a process whereby a speaker communicates verbally with one or more listeners, in order to influence the latter's behavior in some way or the other. Oral communication can take the form of meetings, presentations, one-to-one meetings, performance reviews and so on. Written communication is a process whereby a writer communicates verbally with

a receiver, in order to influence the latter's behavior. Written communication can take several forms such as letters, memos, circulars, notices, reports and email. One of the advantages of a written communication is it can be edited and amended many times before it is finally sent to the person intended

Non-verbal communication: Non-verbal communication can be defined as communication done without speaking or writing. The basic distinguishing characteristics of non-verbal communication is presented as follows.

- Non-verbal communication cannot be avoided due to the fact that it is not intentional like verbal communications
- Non-verbal communication is ambiguous: since it does not precise words like verbal communications
- Non-verbal Communication varies across cultures. For instance nodding a head represents an disagreement in most parts of the world. But in India , it shows an act of agreement .

2.1.2 Effective Communication

Just delivering a message is not enough; it must meet the purpose of the sender. Effective communication is nothing but conveying your messages to other people clearly and unequivocally. Prachi (2018) states that 'Effective communication is a process of exchanging ideas, thoughts, knowledge and information such that the purpose or intention is fulfilled in the best possible manner.' According to this definition, common understanding should be established for the effective communication to occur . In other word, successful communication is when both the sender and the receiver have the same understanding on the same message as a result of the communication. Feedback is one of way of ensuring a proper understanding is achieved during communication between the sender and the receiver. Feedback should be a continuous process as the audience and communicators are neither always the same persons, nor they are interacting in the same situation.

According to Rogers (1976) , for a communication to be effective, two condition should be met. The first one is the sender should be willing to convey the message. The second one is the conveyed message should give sense and meaning to the receiver of the information. In other

words, the receiver should understand the message and if there is any misunderstanding on the subject, feedback should be given to ensure proper understanding.

Cutlip and Center(1952) introduced the "Seven Cs of communication for effective communication . The seven C's are: clear, correct, complete, concrete, concise, considered and courteous.

Clear

The clearness of the message include the purpose of the message and the content of the message. The sender must be clear about the goal of the message and should avoid jargons to make it easy to understand. .

Correct

It refers to the use of factual information, language and grammar. It is very easy for the recipient to be distracted if he/she spots errors and credibility will be greatly reduced. This will reduce the effectiveness of the communication.

Complete

Completeness is expressed in terms giving all of the information to the recipient which deemed pertinent to the same.

Concrete

The sender must ensure that the arguments should be based on solid facts and opinions from credible sources along with irrefutable data to support your argument.

Concise

The messages should be short and simple by avoiding repetition of words and redundancy

Courteous

The effectiveness of your communications will increase by being polite and showing the audience that you respect them. The messages should be friendly,

professional, considerate, respectful, open and honest. The sender of the message should empathize with the audience so as to have swift exchange of information.

Coherent

The logical flow and style, tone and language should be consistent throughout.

2.1.3 Barriers to Effective Communication

As explained earlier in the model of the communication process, noise is one element of the process which hinders the effectiveness of the communication process. According to Prachi M (2018) , these barriers are categorized under three groups as follows.

Barriers Involving Words

Words are of paramount importance in expressing our ideas, emotions, intentions and so on. The following are the different types of communication barriers related to words:

- **Language:** if the sender and receiver do not share the same language or the sender uses excessive technical terms which confuses the receiver, a barrier in communication occurs.
- **Ambiguity and Overuse of Abstractions:** Even if the message is presented in a non-realistic or vague context involving a lot of notions, the receiver won't be able to connect with the idea properly.
- **Disorganized Message:** messages should be well organized to effectively communicate with the audience.
- **Information Overload:** information should not be excessively provided beyond the information need of the receiver. Excessive information will lead to the receiver's exhaustion, who won't be able to keep track of everything that is conveyed.

Barriers Involving People's Background

These barriers occur due to differences in culture, education level, gender, etc. These attributes majorly affect the efficiency of the communication process. It involves the following related obstacles:

- **Attitudinal Differences:** sometimes , people show defiance against some idea or change when they fix set their views about a particular topic. This constitutes communication barrier due to attitude.
- **Demographic Differences:** The difference in age, generation, gender, status, tradition, etc., creates a lack of understanding among people and thus, hinders the process of communication.
- **Lack of Common Experience or Perspective:** experiences matter in understanding a certain issue or views and it varies from person to person. Thus, the difference in the level of understanding and the perspective we see things hinders the communication process between the sender and the receiver. Sometimes, people
- **Jumping to Conclusions:** due to lack of patience, some people jump to conclusions hindering the effective process of communication.
- **Perceptual Barrier:** Perceptions of people differ and depend on the cultural, emotional, personal and spiritual background of the person. People usually incline to assume things rather than clearing it with the person responsible for the message. This greatly influences the effectiveness of the communication negatively.
- **Interpersonal Barriers:** refers to barriers that come as a result of the way different people relate to one another. Lack of social skills is one the main reason for such kind of barrier

Physical Barriers

It is very challenging to overcome these barriers since they are somewhat unavoidable. These include:

- **Physical Distance:** occurs when the communicating parties exchange information over long distance and they miss out the non-verbal aspect of communication, since the gestures and expressions of the receiver cannot be interpreted.
- **Noise:** refers to unwanted noise which interrupts the process of communication.

- **Physiological Barriers:** these refers to the physical disability of the people involved like hearing impairment, poor eyesight, stammering, etc.
- **Physical distractions:** These includes poor lightning, uncomfortable sitting, unhygienic room and so on.

2.1.4 Project Communication Management

Project communication is the exchange of project-specific information with the emphasis on creating understanding between the sender and the receiver. Effective communication is one of the most important factors contributing to the success of a project. (project communication handbook 2007).

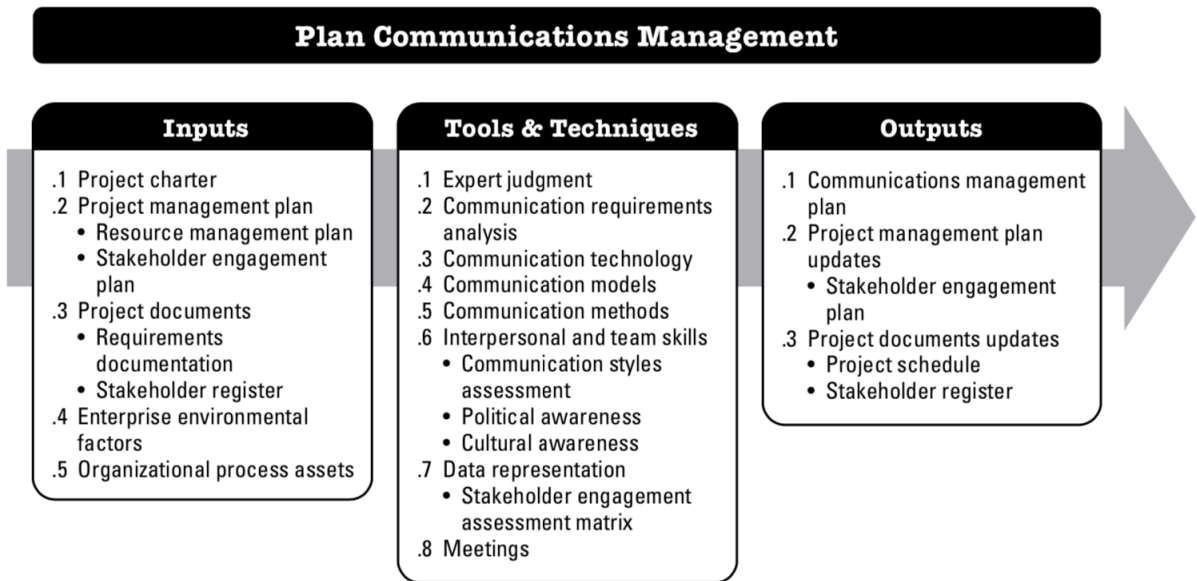
According to PMBOK (2017), project communication management ‘includes the processes necessary to ensure that the information needs of the project and its stakeholders are met through development of artifacts and implementation of activities designed to achieve effective information exchange’. It constitutes two parts;

- The first part is developing a strategy for effective communication among stakeholders
- The second part is all about implementation of the strategy.

According to PMBOK (2017), the project communication process is divided into three parts;

Plan Communications Management : it involves developing a communication plan based on the information needs of stakeholders and the project. The prime advantage of this process is a documented approach to effectively and efficiently involve stakeholders by providing pertinent information in a timely manner and on regular basis. These process is conducted periodically throughout the project life cycle as needed. the inputs , tools & techniques and outputs are presented in the following figure.

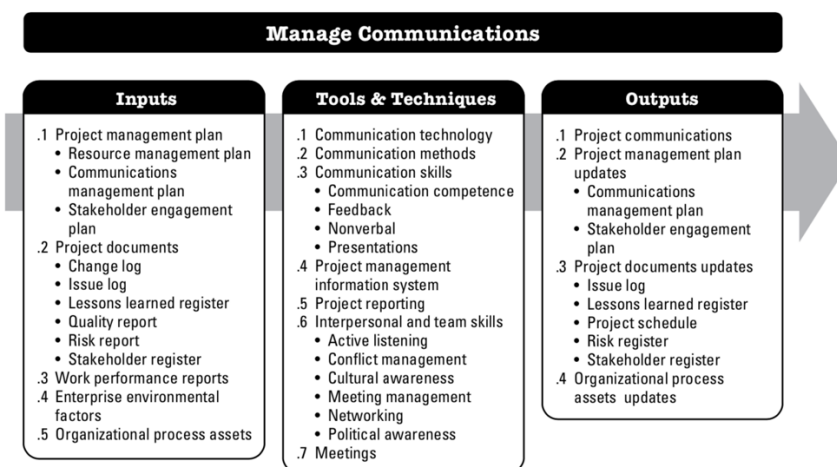
Figure 2.4:-Plan Communication Management



Source: (PMBOK , 2017)

Manage Communications, The process of ensuring efficient and effective flow of information between the project team and the stakeholders. It consists creation, distribution, storage, retrieval, management, monitoring, and the ultimate disposition of project information. Besides, it identifies all aspects of effective communication, including choice of appropriate technologies, methods, and techniques. Like project communication plan, this process is conducted throughout the project life cycle. The figure below depicts the data flow diagram of the Manage Communications process.

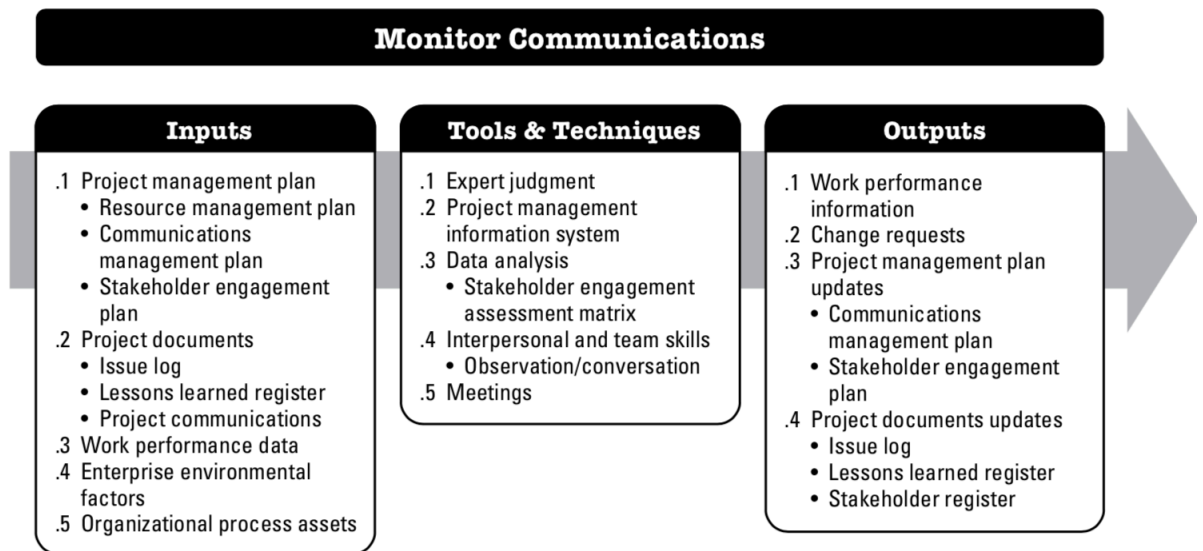
Figure 2.5:- Manage Communication



Source: (PMBOK , 2017)

Monitor Communications: This is the last part of project communication management. It focuses on making sure the information needs are effectively met. The figure below depicts the data flow diagram of the monitor communication process.

Figure 2.6:- Monitor Communications



Source: (PMBOK , 2017)

2.1.5 Communication Methods

According to PMBOK, There are several methods of communication used to share information among project stakeholders which are classified under the following groups

Interactive communication: It is a multidirectional exchange of information. meetings, phone calls, instant messaging, some forms of social media, and videoconferencing are used as artifacts of communication.

Push communication: The information is sent to a specific recipient without ensuring the recipient understood the information. Letters, memos, reports, emails, faxes, voice mails, blogs, and press releases are the common types of artifact of push communication.

Pull communication : suits best to large complex information sets, or for large audiences, and requires the recipients to access content at their own discretion subject to security procedures. The methods used are web portals, intranet sites, e-learning, lessons learned databases, or knowledge repositories.

2.2 Empirical literature

Project communication is streamlined within the project management process from initiation to closing. Several empirical studies focusing on the importance of effective communication construction project have been undertaken across the globe. some of the studies have been reviewed which are deemed relevant for the this research.

The study conducted by Project Management Institute PMI (2013) revealed that “Ineffective communications is the primary contributor to project failure one third of the time, and had a negative impact on project success more than half the time.”. This indicates a critical need for overcoming the challenges in communication practices in any organizations.

The study conducted by BG Zulch(2014) in South Africa indicated that communication skill of a project manager is vital ingredient for project success and has an impact on the effectiveness of the project management areas. He further stated that communication is a foundation which integrates cost, time and quality so as to achieve the project objectives. With regards to communication methods, the written communication turned out to be the most important communication method followed by electronic, oral, visual, and nonverbal communications respectively. When we come to effectiveness of communication methods, electronic communication ranked first with written, oral, visual and nonverbal communication ranked 3rd, 4th, 5th respectively. Thus, it can be concluded that written and oral communication are the most effective ways of communication and the project manager should be equipped with communication skills in order to effectively communicate the cost, time and quality with the stakeholders. Despite the valid findings of the study, the response rate is quite low (32%) and cannot be regarded as representative.

A Study conducted by Samáková et al (2013) focuses on the utilization of the methodology for the project communication management in industrial enterprises in Slovak republic. The major findings of the study are;

- 95% of the project manager agree and strongly agree that project communication management is vital for success of a project

- The industrial projects develop their own communication methodologies instead of applying international project management standards and methodologies (ICB[®], PMBoK[®], PRINCE2[®], 2013)
- 68% of industrial project don't have written project communication document/policy

Thus, the study highlighted the strong believe and conviction by the project managers that project communication is a key ingredient for project success. The study also stressed the importance of standard project communication documents for effective communication among stakeholders to exist.

Mei Yuen Foong (2014) shared the conviction that effective project communication is the most decisive success factor in project management. She further pointed out that one in five projects do not meet the project's original goal or intent and one- half of those unsuccessful projects are related to ineffective communication. She concluded that project communication plan , utilizing tools and putting processes in place play an indispensable role for swift and effective communication from the project initiation until project closing.

Luka Goji Tipili, Patricia Oyiza Ojeba, et al., (2014) , on another hand, presented evidences which support the fact that the major cause of failures associated with construction projects delivery in Nigeria. Many of The respondent in the study replied that lack of proper communication is one of the significant factor behind project delay. According to J. Von Meding and J. Bruen (2010), lack of management's communication commitment ranked as the fifth barrier to attaining quality in construction in Brunei. A survey conducted by Vasanthi R. Perumal and Abu Hassan Abu Bakar (2011), revealed the importance and benefits of standardization of communication instruments, plans, structures and flows in construction project.

Several researches have been reviewed with regards to the studies conducted in Ethiopia in general and AACRA in particular. Abadi (2020) conducted a research of the communication practices of IT projects in Commercial Bank of Ethiopia. Although, this study focus on the road construction projects, the findings presented in the IT project of commercial Bank of Ethiopia are worth considering. For instance, he clearly indicated the importance of formal communication, communication skills of managers, team leaders for success of the project.

Abraham (2019) proved that there is a significant relationship project communication practices and project performance in Amhara Development Association water projects. He also stated that project performance is also highly affected by communication channel, communication method and communication barriers. In the study of the role of project communication management in improving project performance of building projects: A case study of Modcon construction, Meron (2018) stated that there is a strong appreciation of the significance of communication in project performance. However, she further noted that barriers in communications like poor leadership, unclear communication objectives, unclear channels of communication, ineffective reporting system, ineffective communication among parties in the project, lack of well-trained personal and lack of professional by the clients are the reason behind poor communication .

Findings from researches conducted by Benyam (2019) and Shimeles (2019) did not directly focus on project communication. Rather, they tried to indicate the factors behind cost overrun and schedule delay. Benyam (2019) indicated that poor communication is among the factors that contributed to the cost overrun and schedule delay of Shiromeda- Hamerenoah road project. The study conducted by Shimeles (2019) also pointed out poor communication of the client and the consultant with other stakeholders was the one of the reasons behind project delay in AACRA projects.

2.3 Theoretical/conceptual framework

As discussed earlier, several theoretical and empirical evidences proved that effective project communication is the key ingredient for project success. Based on this , the following theoretical framework is developed for this specific study.

Figure 2.7:-Conceptual Framework



Source: (Self developed, 2021)

Chapter Three

Research Methodology

3.1 Research Design and approach

This study adopted descriptive design since it focuses on description of the project communication practices, challenges of communication and the methods of communication being used in AACRA. Quantitative research approach is also employed. The study uses survey method to collect data on the effectiveness of project communication practices of AACRA projects.

3.2 Source and Method of data collection

Primary and secondary data sources will be used for this study. Primary data will be collected, directors, counterpart engineers and project coordinating team leaders using questionnaires and semi structured interviews. Secondary data will be collected from meeting minutes, project status reports, and other relevant documents

3.3 Sampling Design

3.3.1 Target Population

The target population is composed of permanent staffs from three relevant directorates namely the own force construction directorate, Housing road project construction contract administration and the road construction administration directorate of AACRA which adds up to 111.

3.3.2 Sampling technique

Random sampling technique is adopted to minimize bias since all the members of the target population have equal chance of being selected. With regards to determination of sample size, the study applied Slovin formula with 95% of confidence level as suggested by Kothari (2004)

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

where n= the sample size

N= the size of the target population

E= margin of error

Therefore, the margin of error will be 0.05

$$N= 111/1+111(0.05)^2 = 87$$

Stratified sampling technique is applied to address the heterogeneity of the target population. The different departments of AACRA namely own force construction directorate, housing road project construction contract administration and the road construction administration directorate has permanent staff of 45, 30 and 36 respectively. Proportionate Random Sampling is used to proportionately determine the sample size of each stratum as follows

$$=(\text{size of each stratum} * \text{sample size}) / \text{size of the target population}$$

Table 3.1:-sample size for each directorate

Directorates 1	Sample size 2	Size of each stratum 3	Size of the target population 4	The sample size of each stratum 5=(2*3)/4
Own Force construction	87	45	111	35
Housing road project construction contract administration	87	30	111	24
road construction contract administration directorate	87	36	111	28

Source: Own survey, 2021

3.4. Method of Data Analysis

After coding the data collected from the questionnaires using SPSS Version 23, the data is summarized and presented in tables and graphs for ease of understanding. The study employs quantitative approach and is descriptive by design. Having presented the data descriptively by

using tables and charts, analysis and interpretation of the data is followed. Finally, conclusion and possible recommendations put forwarded based on the findings of the study.

3.5. Validity and Reliability

Regarding the reliability and validity of the study, the researcher tried to triangulate the data from different sources. Besides, due care was given to wording and clarity of the question in the questionnaires. Furthermore, Cronbach’s Alpha was used to evaluate the internal consistency by using SPSS Version 23.00. Accordingly, the Cronbach’s Alpha for the 5 scales turned out to be greater than 0.7 which is deemed acceptable.

Table 3.2:- Reliability Test

Scales	Cronbach’s Alpha
Project communication Practices of AACRA	0.830
for methods of communication	0.793
project communication planning	0.892
managing project communication	0.816
project communication monitoring	0.727

Source: Own survey, 2021

3.6 Ethical Consideration

The questionnaires distributed to all staff members who were willing to fill-up. The purpose of the questionnaire has been clearly indicated in the questionnaire. The names of the respondents is kept confidential. The conclusion reached and recommendation forwarded is not biased and will be purely based on the evidence.

Chapter Four

Data Analysis, Presentation and Interpretation

4.1 Introduction

This chapter deals with the findings and the analysis of the data collected from respondents of the distributed questionnaire by using descriptive statistics. To analyze the data, SPSS Statistics Version 23 was employed.

A total of 87 questionnaires were distributed to the three relevant directorates of AACRA namely own force roads construction, Housing projects roads contract administration and Road construction contract administration directorates. Among them, 71 questionnaires were filled by the respondents indicating a response rate of 81.6%. The response rate meets the requirement for further analysis according to Mugenda (2003) stating that a response rate of over 50% is sufficient to proceed with the analysis and reporting.

4.2 General Information of the respondent

Respondents' general profile related to gender, age, service years, directorates, position in organization, service years and educational background is presented in the following tables

Table 4.1:- General Information of the Respondents

		Frequency	Percent
Gender	Male	61	85.9
	Female	10	14.1
Age in years	20-30	41	57.7
	31-40	30	42.3
Educational Background	Certificate	2	2.8
	First Degree	51	71.8
	Masters Degree	18	25.4
Position in Organization	Senior Expert/Project Engineer	53	74.6
	Project Manager	5	7.0
	Team Leader	10	14.1

		Frequency	Percent
	Director	3	4.2
Service in years	1-5	46	64.8
	6-10	22	31.0
	11-15	2	2.8
	16-20	1	1.4
Respondents' Directorate	Own Force Construction	33	46.5
	Housing Road Project Construction Contract Administration	15	21.1
	Road Construction Contract Administration	23	32.4

Source: Own survey, 2021

Among the 71 respondents, only 10 of them (14.1%) are female and the male accounts for the remaining 85.9 percent of the respondents. This signals the need to empower women to engage in construction projects administration.

As it can be seen from the above table, all of the respondents are under the age of 40 of which 57.7% of them are in the age bracket of 20-30 years while the rest are between 31-40 years. Thus, all of the respondents are within the productive age bracket of 20-40 years.

With regards to educational background of the respondents, first degree holders constitute 71.8 percent of the respondents followed by master's degree holders who accounts 25.4 of the respondents. Only 2.8 percent of respondents have certificate of different disciplines. Accordingly, it is fair to conclude that the level of expertise and knowledge of the respondent is quite adequate to comprehend the project communication practice in the organization.

As to position in organization, the overwhelming majority (74.6%) of the respondents are drawn from senior expert/project engineers followed by team leaders , project managers and directors with percentage share of 14.1%, 7% and 4.2 % of the respondents respectively.

As far as years of experience is concerned, 64.8% of the respondents have 1 to 5 years of experience in AACRA. Whereas, respondents with 6-10 years’ experience accounts for 31% of the respondents. Respondents with Service years above 10 years are quite insignificant sharing only 4.2 % of the sample.

As to the respondent’s directorates, 46.5 % of them are from own force construction directorate where as 21.1 % and 32.4% of them are from housing road project construction directorate and road construction contract administration directorates respectively.

4.4 Project communication practices of AACRA

Likert type scale is employed to present the level of agreement of the respondents to the question in this section ranking 1-5 where 5= Strongly Agree, 4 =Agree, 3 =Neutral, 2 =Disagree, 1= strongly disagree. Project Communication practices of AACRA is summarized in the table below as follows.

Table 4.2:- Project Communication practices of AACRA

Items	strongly disagree	disagree	neutral	agree	Strongly Agree	Mean	Std. Deviation
AACRA has a clear and well organized communication strategy	26.8	36.6	25.4	11.3	-	2.21	0.97
All of the relevant staffs and managers are quite familiar with the communication strategy	19.7	33.8	35.2	9.9	1.4	2.39	0.963
Projects have communication management plan	9.9	15.5	40.8	32.4	1.4	3	0.971

Items	strongly disagree	disagree	neutral	agree	Strongly Agree	Mean	Std. Deviation
Projects have project charter	8.5	35.2	40.8	14.1	1.4	2.65	0.88
Project have stakeholders management plan	8.5	22.5	26.8	40.8	1.4	3.04	1.02
Project managers devote most of their time in communicating	2.8	8.5	25.4	56.3	7.0	3.56	0.857
Project manager are good communicators	9.9	32.4	16.9	35.2	5.6	2.94	1.145
There is a participatory engagement in addressing communication problems in projects	9.9	38.0	32.4	19.7	-	2.62	0.916
AACRA employs Project Management Information System which utilizes state- of - the art communication technology	18.3	47.9	22.5	8.5	2.8	2.3	0.962
AACRA has a formal knowledge management repository	40.8	29.6	21.1	7.0	1.4	1.99	1.021

Source: Own survey, 2021

The first question is about the existence of a well-organized and functioning communication strategy. As it can be seen from the above table, 63.4 percent of them strongly disagree or disagree with the presence of a communication strategy in AACRA. 25.4% of the respondents are neutral and only 11.3% of them agreed on the fact that there is a well-functioning communication strategy in AACRA. The mean score is 2.39 indicating the fact that the respondents did not agree with the statement on average that there is a well-functioning and organized communication strategy in AACRA. In my preliminary study and interview , I happened to learn that the Authority has developed a communication strategy 2 years ago.

However, most of the respondents are not fully aware of the existence of such strategy in the organization.

The second question is related to the previous one in a sense that it deals with familiarity with the communication strategy developed by the organization. 19.7 % of the respondents strongly disagree with the statement while 33.8 % of them disagree on the same making the proportion of respondents who either disagree or strongly disagree 53.5%. 35.2% of the respondents were neutral and the remaining 11.3% replied that they are familiar with the communication strategy of the organization. The mean value of 2.39 is also an indication that the most of the respondents are not familiar with the strategy. Thus, this finding shows that the respondents are not fully aware of the existence of the communication strategy and most of them are not familiar with the same. Samáková et al (2018) stated that a well-organized, processed, and familiarized communication strategy plays a vital role for effective management of projects by clearing doubts and confusions and ensuring comprehensive involvement of the stakeholders.

With regards to project communication plan, 9.9 % of the respondents replied that they strongly disagree on the presence of project communication management plan. Likewise 15.5% of the respondents disagree on the same while 40.8 % of them were neutral. 33.8% of the respondents either agree or strongly agree on the presence of project communication management plan. The mean value of 3 also suggests that most of the respondent were not certain about the existence of project communication plan for each project.

A project charter is an official and brief document that defines what the objectives are, how it will be carried out, and who the stakeholders are. According to PMBOK Guide (2017) project charter is defined as ‘a document issued by the project sponsor that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities.’

With regards to project charter, 43.7% of the respondents replied that they either disagree or strongly disagree with the statement that projects have project charter. 40.8 % of the respondents remained neutral while 15.5% of the respondents either agree or strongly agree on

having a project charter for every project. the mean score turned out to be 2.65 which is closer to neutral category

As presented in the above table, 42.2% of the respondents agree on the statement that project have stakeholders management plan. Whereas, 22.5% of the respondents disagreed on subject matter that projects have project management plan while 8.5 replied they strongly disagree on the same. Mean score is calculated to be 3.04 indicating the fact that the respondents are indifferent about the subject matter.

with regards to time spent in communication by the project managers, 63.3% of the respondents either agree or strongly agree on project managers devoting most of their time in communication. Only 11.3% of the respondents replied that they disagree/strongly disagree that project managers allocating much of their time in communication. This indicates that communication is one of the key tasks pf the project managers in AACRA. This finding is corroborated by the mean value of 3.56 signifying that most of the respondents are in agreement with the statement of project managers' devotion of much of their time in communication. This finding is congruent with the statement presented in PMBoK (2017) that project managers devote most of their time in communication. the Thus, such tendency of investing more time in communication can be regarded as a commendable attribute to be pursued sustainably.

As indicated in the table, the percentage of respondents who strongly disagree/disagree on project managers communication skill turned out to be 42.3%. 19.6% remained neutral whereas 40.8% of the respondents replied that they agree/strongly agree that project managers are good communicators. The mean value of 2.94 indicates that the respondents are neutral on average on communication skills of the project managers.

as to participatory engagement in addressing project communication , 47.9 % of the respondents replied that they do not believe there is a participatory engagement with the relevant stakeholders in addressing the communication problems while 32.4 of them turned out to be neutral. Only 19.7% of the respondents believe participatory engagement is in place to deal with communication problems in projects. A mean score 2.62 was calculated from which definitive answer could not be drawn on the subject matter

The share of the respondents who agree/strongly disagree on employment of the state of the art communication technology turned out to be 66.2%. while only 11.3 agree/strongly agree on the same. 22.5 % of them remained neutral. A mean value of 2.3 signifying the fact that the respondents did not agree on availability of state of the art project management information system. The finding identifies the weak spot of AACRA project communication which calls for due attention and execution of an uphill task in employing suitable communication technology for project management.

as far as formal knowledge repository is concerned , 40.8% and 29.6% of the respondents strongly disagree and disagree on the availability of formal knowledge repository in AACRA. Thus, 70.4% of the respondents believe that there is no formal knowledge management repository. Only 8.4 % agree/strongly agree the existence of formal knowledge management repository while 21.1 % turned out to be neutral. 1.99 was the mean score indicating the absence of formal knowledge management repository. Thus, the findings indicate that AACRA needs to take measures to establish project knowledge management repository

4.5 Assessment of communication methods

This section deals with the analysis of the popularity of communication methods practices in AACRA.

Table 4.3:-Assessment of communication methods

Communication Methods	N	Mean	Std. Deviation	Rank
Reports	71	4.82	0.593	1
Meetings	71	4.69	0.767	2
social media (facebook, twitter,telegram)	71	4.49	0.908	3
letters	71	4.21	0.844	4
video conferencing	71	3.66	1.404	5
memo	71	3.54	0.605	6
Web portals	71	2.07	1.087	7

Source: Own survey, 2021

According to the above table, reports, meetings, social media and letters are the most prevalent methods of communication in AACRA with mean values of 4.82, 4.49, 4.69 and 4.21 respectively. Conversely, web portals are the least popular methods of communication in AACRA's project communication practices. This is due to the fact that there is no functional official website of AACRA which can accommodate and store project related information. The finding is in congruence with the study conducted by Zulch (2014) in South African construction industry to some extent which ranked written communication as the highest in terms of importance in project communication.

4.6 Challenges of Project Communication

The following table summarizes the findings of challenges of project communication.

Table 4.4:-Challenges of Project Communication

Challenges in communication	N	mean	Std. Deviation	Rank
Inadequately defined job description	71	4.44	0.922	1
poor planning	71	4.17	0.971	2
Leadership commitment	71	4.04	0.963	3
communication inconsistency	71	3.96	1.02	4
Lack of communication skill	71	3.62	1.223	5
Resource constraint	71	3.46	1.106	6
Lack of avenue for feedback	71	3.3	1.235	7
Lack of trust	71	3.24	1.189	8
outdated process	71	3.11	1.022	9
use of the right technology	71	3.07	1.113	10
Interpersonal hostility	71	3.04	0.853	11
Power distance/status difference	71	2.9	0.973	12
Language constraint	71	2.77	1.198	13
Difference in cultural background	71	2.63	1.186	14

Source: Own survey, 2021

As it can be seen from the above table, inadequately defined job description is ranked first in terms of challenge of project communication with mean value of 4.44 followed by poor planning, leadership commitment, communication inconsistency, lack of communication skill with mean score of 4.17, 4.04, 3.96, and 3.62 respectively. Power distance/ status difference,

language constraint and differences in cultural background are the least challenging issues with regards to project communications. On the contrary, study by Zulch (2014) leadership skill and commitment regarded as the highest in terms of relative importance in the success of project communication followed by project managers skill to communicate on time, quality and cost aspect of project management

4.7 Project Communication Planning

According to PMBOK Guide (2017), project communication planning is ‘is the process of developing an appropriate approach and plan for project communications activities based on the information needs of each stakeholder or group, available organizational assets, and the needs of the project.’. This section analyzes the project communication planning practices of AACRA using the data collected from the questionnaires. The findings are presented as follows.

Table 4.5:-Project Communication Planning

Items	Yes	no
Are stakeholders properly and exhaustively identified?	54.9	45.1
Is the information need of the stakeholders identified according to their level of influence and stake?	53.8	46.2
Do project have organizational structure and chain of command?	93.0	7.0
Do projects have established communication channels, tools, systems?	91.5	8.5
Does AACRA has historical information lesson learned repository?	15.5	84.5

Source: Own survey, 2021

As depicted in the above table, 54.9 % replied that stakeholders are properly and exhaustively identified while the rest 45.1% of them hold the opposite view. Thus, it should be stressed that proper and comprehensive identification of stakeholders is not convincingly conducted.

The second question asked for respondents who replied yes to the previous question related to proper identification of stakeholders. Among them, 53.8% replied that the information provided is customized in accordance with the needs and influence of the stakeholders while the rest 46.2% holds the opposite view. The marginal increase of the percentage share of respondents who are in favor of customized information supply in accordance with the needs and influence of the stakeholders compared to those who disagreed with this statement indicates the fact that there is a lot to be done in this regard.

According to the above table, 93% of the respondents replied that project have organizational structure and chain of command. This indicates communication line of channel is in place in AACRA projects.

The above table also shows that the overwhelming majority of 91.5% of the respondent replied that project do have established communication channels, tools and system. Thus , it is a good and commendable practice which is need to be strengthened for effective project communication.

As to lesson learned repository, significant share of the respondents (84.5%) replied that AACRA does not have historical information lesson learned repository. This is quite worrisome and troubling finding since lessons from completed and ongoing projects should be properly documented and easily retrieved for future project implementation.

4.8 Project Communication Management

The findings of project communication management of AACRA is summarized in the following table.

Table 4.6 Project Communication Management

Items	strongly disagree	strongly disagree	strongly disagree	strongly disagree	strongly disagree	strongly disagree	strongly disagree
Reports contain standardized contents and format customized to each stakeholder		15.5	11.3	50.7	22.5	3.8	0.965
Status report are distributed as per the schedule stipulated in the contract document		23.9	15.5	43.7	16.9	3.54	1.04
Project documents (issue log, lesson learned register, project schedule, risk register, stakeholder register) are regularly updated.	23.9	36.6	26.8	9.9	2.8	2.31	1.36
Site visits are conducted on regular basis (monthly, quarterly, bi annually)	4.2	21.1	19.7	47.9	7.0	3.32	1.025
Project review meetings are conducted in an organized and scheduled manner	8.5	28.2	28.2	29.6	5.6	2.96	1.075
Meetings have rules and regulations to abide by	9.9	21.1	39.4	23.9	5.6	2.94	1.04
Meetings are always minuted	9.9	19.7	46.5	22.5	1.4	2.86	0.93
The meetings promote creativity to address problems	15.5	32.4	29.6	18.3	4.2	2.63	1.085
Decision made on the meetings are always implemented	31.0	39.4	16.9	11.3	1.4	2.13	1.027

Source: Own survey, 2021

As far as standardize reports are concerned , it can be seen from the above table that 73.2% of the respondents replied that reports are standardized and customized to each stakeholders. Only 15.5% of the respondents differ to this view while 11.3% of them are neutral. the mean value is calculated to be 3.8 This is a good sign in project communication practice of AACRA which need to reinforced by appropriate communication technology. Besides, such practice of report standardization is vital for project communication since reports are considered as the most effective means of communication in AACRA according to the majority of the respondents.

The above table also shows the response to distribution of report as stipulated in the project contract document. As it can be seen from the table , 60.6% of the respondents either agree or strongly agree that reports are distributed in a timely manner according to information need of the stakeholders while 23.9% of them replied the opposite. The mean value and the frequency signals AACRA's project related reports are timely distributed to the relevant stakeholders.

In the above table, 60.9% of the respondents are not of the opinion that projects documents are regularly updated. Only 12.7% of them believe that project documents are regularly updated. Thus, such important project documents should be regularly updated for effective communication to happen.

As to site visits, 54.7% of the respondents are in favor of the statement that site visit are conducted on regular basis while 25.4% of them believe that site visits are not timely and properly managed. 19.7 of the respondents are neutral. From the mean value and frequency distribution, it is barely possible to conclusively answer the issue of timeliness and periodicity of site visits.

With regards to review meeting , 36.6% of the respondents, meetings are not conducted in an organized and scheduled manner while 35.2% believe meetings are conducted as per the schedule and are well organized. Similar to site visits , one cannot ascertain the organized and scheduled manner of project review meeting based on the above finding.

With regards to rules and regulation meetings, 31% of the respondents have the opinion that meetings do not have rules and regulation to abide by. On the contrary, 29.5% are of the opinion that meeting do have rules and regulation to be followed by the participant of the meeting. According to the mean value and the frequency distribution, most of the respondents were uncertain about the subject matter

According to 23.9% of the respondents, minutes are minuted and documented while 29.6% of the them replied that meetings are not minuted. Significant majority (64.5%) are neutral on the subject matter. On average, the respondents were neutral on the issue indicated by amen score of 2.86.

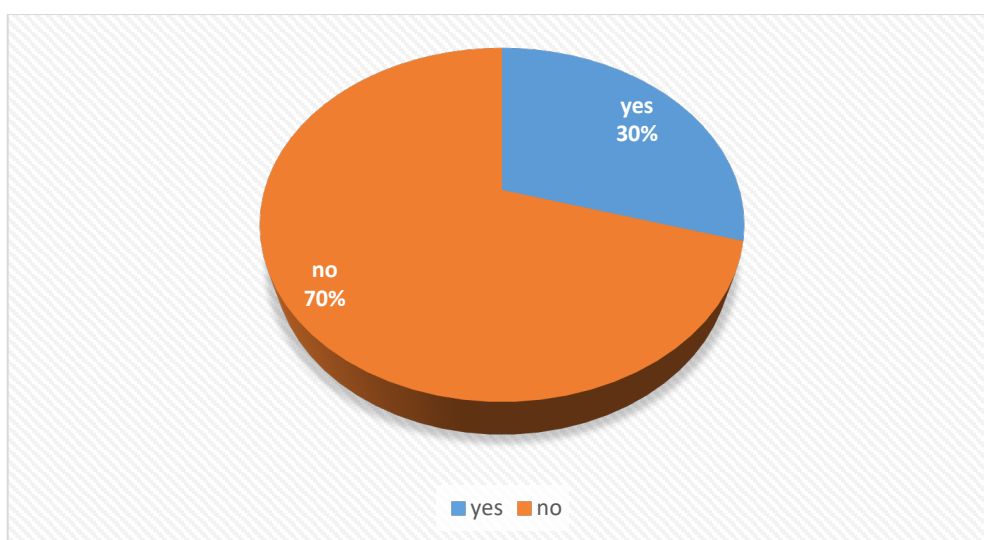
As it can be seen from the above table, 47.9% of the respondents believe that meetings failed to promote creativity to address problems while 22.5 of them are in favor of the idea that meeting create a platform for creativity. The mean value of 2.63 indicates a tendency of the respondents to be neutral on the subject matter.

finally, 70.4% of the respondents believe that decisions made on the meeting are not always implemented. On average, the respondents were in disagreement with the statement that decision made on the meeting are always implemented. This is a grave concern which need to be addressed immediately since it creates lack of confidence on the importance of meetings. Only 12.7 % of them replied that decision made on the meeting are fully implemented. Such tendency of not executing decisions made on meetings is not commendable practice since it erodes the very importance of the meeting.

5.9 Project Communication Monitoring

According to PMBOK Guide (2017), project communication monitoring involves ‘ the process of ensuring the information needs of the project and its stakeholders are met. The key benefit of this process is the optimal information flow as defined in the communications management plan and the stakeholder engagement plan’. The findings of the communication monitoring practices of AACRA is presented as follows.

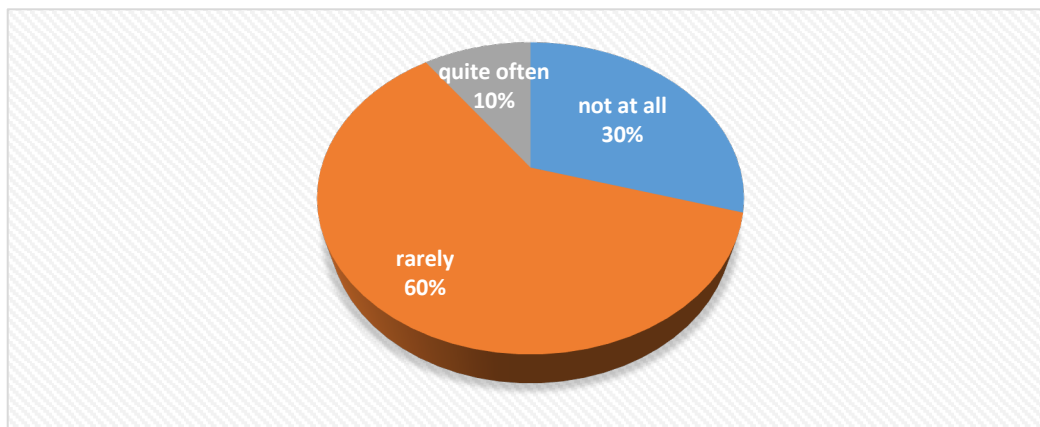
Figure 4.1:-Does AACRA conduct customer satisfaction survey?



Source: Own survey, 2021

The above figure shows responses with regards to customers satisfaction survey. 70.4% of the respondents replied that AACRA does not conducted customer satisfaction survey while the rest 29.6% believe the opposite. This shows the need for customer satisfaction survey to be conducted in order to assess the success of the projects implemented.

Figure 4.2:-How often AACRA engage with mass media outlets like TV and radio?



Source: Own survey, 2021

With regards to media engagement, 60% of the respondents replied that AACRA engage in mass media in rare instances while 30% of them replied that AACRA have not engaged in mass media at all. Only 10 believe that AACRA is very active in engagement in media . In other words, the level of media engagement rated as not satisfactory according to 90% of the respondents. Thus, AACRA’s media engagement is not adequate to address the project communication issues and build the image of the organization

Chapter Five

Summary, Conclusion and Recommendation

5.1 Introduction

This chapter deals with the summary of the findings, conclusion and possible recommendation for future consideration. The major findings are presented first followed by the conclusion inferred from the findings. Finally, recommendations and suggestions to be considered in the project communication management of AACRA is presented.

5.2 Summary of the Major Findings

The major objective of this study is to assess the effectiveness of project management practices of AACRA projects. With this in mind, questionnaires addressing the communication practices are distributed and major findings of the research is presented as follows.

- Women participation in the project management of AACRA is quite low compared to that of men.
- With regards to project communication practices of AACRA;
 - The Authority failed to effectively communicate and familiarize its communication strategy to employees, project managers and other relevant stakeholders.
 - Most of the respondents believe that project managers allocate significant share of their time in communication which is commendable trait to be strengthened.
 - AACRA's communication technology is somewhat outdated and could not accommodate the growing demands in communication.
 - Knowledge management repository practice in AACRA is very poor
- With regards to methods of communications, reports, meetings, social media and letters are regarded as the most prevalent means of communication in that order whereas web portal considered as the least popular one due to the fact that the authority does not have a functioning official web site and data center facilities.

- As to challenges to project communication, inadequately defined job description, poor planning, leadership commitment and communication inconsistency are considered as the most critical challenges in project communication.
- With regards to communication planning, the following major findings are observed
 - More than 50 percent of the respondents replied stakeholders are exhaustively identified and the information is customized in accordance with stakeholders influence and interest.
 - Projects have organizational structure, chain of command and established communication channels tools and systems
 - AACRA do not have historical information lesson learned repository
- As to project communication management
 - Reports are standardized and customized to each stakeholders needs and interests.
 - The practice of regularly updating project documents like issue log, lesson learned register, project risk register, stakeholder register is poor in AACRA projects.
 - Decision made on the meeting are not fully implemented.
- When we come to project communication monitoring, customer satisfaction survey is not conducted and the level of AACRA's media engagement is not satisfactory.

5.3 Conclusion

The general objective of this study is to assess the project management practices of AACRA. Based on the findings of the study, it is fair to conclude AACRA does not fully that the implement the processes in project communication management specified in PMBOK Guide (2017) namely plan communication management, manage communication and monitor communication.

Planning communication management is not fully implemented in a consistent manner owing to the following reasons

- Inputs to project communication plan like project charter, stakeholders management plan and stakeholder register were not consistently made available.
- The communication technology in place was not able to accommodate the ever increasing project communication demands
- Historical information and lesson learned repository is virtually non-existent in AACRA

Similarly, AACRA has also failed in managing project communication due to failure to regularly update the project documents like project documents like issue log, lesson learned register, risk register. As to project communication monitoring, customer satisfaction survey has not been conducted in AACRA for the past couple of years. This entails that the project communication monitoring is not properly undertaken. Besides, the level of engagement in the media is also of great concern since it has a huge impact on project communication practices.

As far the challenges in project communication are concerned, inadequately defined job description, poor planning, leadership commitment and communication inconsistency turned out to be the most critical challenges to be addressed for swift communication to exist. Whereas, differences in cultural backgrounds rated as the least critical one and this indicates that the projects in AACRA are very accommodative of cultural differences

As to methods of communication, reports, meetings, social media, letters and are regarded as the most common means of communication whereas web portal considered as the least popular one. The communication methods are dependent on face to face and paper based communication except social media engagement.

5.4 Recommendation.

Based on the findings of the study the following recommendation are worth considering

- The communication strategy of AACRA should get adequate publicity among the employees and stakeholders in order to familiarize and enhance the sense of ownership among project managers, employees and other relevant stakeholders.
- Information communication technology should get serious attention by the management so as to address communication problems of AACRA. Data centers should be established and manpower should get the required training on utilizing the ICT technology. official website should be developed and go live.
- Jobs should be described as exhaustive as possible to clear confusion in discharging one's duty and obligation. Without clear and adequate job description,
- Leadership commitments plays an indispensable role for effective project communication since leaders set the tone and precedence.

- Project planning should be carried out with due care and rigor in participatory manner since it well prepared plan is a recipe for effective project communication
- Documentation and lesson learned knowledge management repository should be given a high priority since it lays the foundation for knowledge base which is critical ingredient for organizational memory.
- Project documents like issue log, lesson learned register, project risk register stakeholder register should get regularly updated
- Decision made on meetings should be fully implemented since it will create a precedence of losing trust and credibility of the meeting. The meeting would turned into a colossal waste of time.
- AACRA should actively engage in mass media outlets focusing on medias with highest viewership and listeners in order to get its message across the city and to receive feedback from road users since it has significant implication on image building endeavors of the organization.
- Customer satisfaction survey should be carried out on annual basis to assess the level of satisfaction the customers.
- Based on the findings presented in this study, future studies should be conducted focusing on the impact and effectiveness of project communication practices of AACRA in realizing project and organizational objectives.

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		5	4	3	2	1
8	AACRA has a clear and well organized communication Strategy					
9	All of the relevant staffs and managers are quite familiar with the communication strategy					
10	projects have communication management plan					
11	Projects have project charter					
12	Project have stakeholders management plan					
13	Project managers devote most of their time in communicating					
14	Project manager are good communicators					
15	There is a participatory engagement in addressing communication problems in projects					
16	AACRA employs Project Management Information System which utilizes state- of - the art communication technology					
17	AACRA has a formal knowledge management repository					

Part III Questions on Communication Methods

18. Please rate the following communication methods according to their popularity

Note: 5=Very High 4=High 3= Moderate 2= Low 1= Very Low

	Communication Methods	1	2	3	4	5
18.1	meetings					
18.2	social media (facebook, twitter, telegram)					
18.3	videoconferencing					
18.4	letters					
18.5	memos					
18.6	reports					
18.7	web portals					

19. challenges of project communication

Note: 5=Strongly Agree 4= Agree 3= Neutral 2= Disagree. 1= Strongly Disagree

	challenges	1	2	3	4	5
19.1	Communication Inconsistency					
19.2	Use of the right technology					
19.3	Outdated Processes					
19.4	Lack of communication skill					
19.5	Leadership commitment					
19.6	Poor planning					
19.7	Language constraints					

19.8	differences in Cultural background					
19.9	Resource constraints					
19.10	Interpersonal hostility					
19.11	Power distance/ status difference/					
19.12	Lack of trust					
19.13	Lack of avenue for feedback					
19.14	Inadequately defined job Description					

20. questions related to project communication planning

20.1 Are stakeholders properly and exhaustively identified?

Yes No

20.2 If your answer is yes to question 21.1, is the information need of the stakeholders identified according to their level of influence and stake?

Yes No

20.3 Do project have organizational structure and chain of command?

Yes No

20.4 Do projects have established communication channels, tools, systems?

Yes No

21.5 Does AACRA has historical information lesson learned repository?

Yes No

21. Questions related to project communication management

Note: 5=Strongly Agree 4= Agree 3= Neutral 2= Disagree. 1= Strongly Disagree

		1	2	3	4	5
21.1	Reports contain standardized contents and format customized to each stakeholder					
21.2	Status report are distributed as per the schedule stipulated in the contract document					
21.3	Project documents (issue log, lesson learned register, project schedule, risk register, stakeholder register) are regularly updated.					

21.4	Site visits are conducted on regular basis (monthly, quarterly, bi annually)					
21.5	Project review meetings are conducted in an organized and scheduled manner					
21.6	Meetings have rules and regulations to abide by					
21.7	Meetings are always minuted					
21.8	The meetings promote creativity to address problems					
21.9	Decision made on the meetings are always implemented.					

22. Questions related to Project communication monitoring

22.1 Does AACRA conduct customer satisfaction survey?

Yes No

22.2 How often AACRA engage with mass media outlets like TV and radio

Quite often Rarely Not at all

If have any comment with regards to the project communication practices of AACRA, please state below in the space provided.
