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ABSTRACT

Project Failures and Factors: The Case of Four Public Sector Undertakings in Illu-Ababora Zone, Oromia Region
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Development projects are the means by which development policies and plans are translated into practice and have a lion's share in improving livelihoods of the community. In less developed countries where Ethiopia belongs to, project implementation and management is characterized by failures. Project implementation failure is explained as delivering a project late, delivering a project over budget and delivering a project which does not meet scope requirements; however a successfully managed project is the one that is completed at the specified level of quality; on or before the deadline; and within the planned budget. Additionally, client satisfaction indicates success and possibility of replication and sustainability.

The overall objective of this study is to examine whether the public sector projects are successfully implemented or fail; thereby to find out the major factors contributing to the failures; and propose some easing strategies to surmount the identified challenges for the future successful project execution in the zonal level public sectors of Illu-Ababora Zone, Oromia Region. For this, a case study research approach which employs both qualitative and quantitative data collected from various primary and secondary sources was used. In identifying respondents, purposive sampling strategy was used. Data collection tools and techniques include questionnaire, key informant interview guide, focus group discussion guide, all used to gather primary data; and a format for consolidating information from secondary data. Quantitative data were processed using SPSS while the qualitative data were narrated qualitatively. In quantitative analysis, both descriptive statistics (like Mean, Mean difference, percentages, and frequencies); and inferential statistics (like paired sample t-test, Pearson Product Moment correlation and binary logistic regression) were applied.

The findings of the study from the assessment of the three project parameters (cost, time and quality) indicated that most public sector projects undertaken by zone level public sectors are characterized by failures. According to percentages of responses; all projects (100%) were delayed for longer time than planned schedule; 72.1% were completed with quality problems; and 69.8% required additional budget for completion. Similarly, from 75 public projects implemented during the past five years (2007–2011), 70(93.3%) were completed with some problems while 5(6.7%) were totally failed (canceled). From the 70 completed projects, all of them (100%) were delayed for longer time than the planned schedule; 41(58.6%) projects required additional cost; and 40(57.1%) projects were completed with less quality than the predetermined levels. The major factors for these project failures are categorized into four major areas: Organizational/institutional related factors; Physical, climatic and infrastructure related factors; Poor project-cycle management; and Contract administration, price and contractor related factor. Moreover, among many, inaccessibility of the project sites due to lack of infrastructure development and poor project monitoring are found to be the two most influential factors.

For the future successful public project implementation and management in the zone, all of the identified challenges under the four major areas need proper treatment. Similarly, the two most influential factors (development of rural roads and bridges for accessibility of sites; and improved frequencies of monitoring for early detection of problems and keep projects on course) seek particular emphasis.

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ACRONYMS

AAU	Addis Ababa University
BIA	Business Improvement Architects
BLR	Binary Logistic Regression
BoFED	Bureau of Finance and Economic Development
BPR	Business Process Reengineering
CSA	Central Statistical Authority
ERA	Ethiopian Roads Authority
FGD	Focus Group Discussion
FTCs	Farmers' Training Centers
IRLDS	Institute of Regional and Local Development Studies
KI	Key Informants
LCDs	Less Developed Countries
m.a.s.l.	Meters above the Sea Level
MGDP	Millennium Development Goal Projects
MoFED	Ministry of Finance and Economic Development
NGOs	Non-governmental Organizations
PCTS	Performance, Cost, Time and Scope
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PRA	Participatory Rural Appraisal/Assessment
SPSS	Statistical Package for Social Sciences
T^0	Temperature
^0C	Degree Centigrade
UNCRD	United Nations Center for Regional Development
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Science and Culture Organization

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

Achieving development results, as most realize, is often much more difficult than imagined (UNDP, 2009). The results of development planning of Less Developed Countries (LDCs) have been generally disappointing. Reasons for the plan failures include deficiencies in plans and their implementation, insufficient and unreliable data, unanticipated economic disturbances (both external and internal), institutional weaknesses, and lack of political will (Todaro and Smith, 2011).

Development projects are the means by which development policies and plans are translated into practice. Thus, the need to link appropriate policies to appropriate projects is an increasingly important element of the development process. Whatsoever their short comings, projects will remain as an important mechanisms for implementing policies as they will remain demonstrations of the effects of policies at a practical level (Rondinelli, 1993; and Cusworth and Franks, 1996).

A Project can be defined in various ways as there are many different types of projects. Instead of defining, the easiest way to determine a project is to outline the common characteristics that it might be expected to have: a project involves the investment of scare resources in the expectation of future benefits; a project can be planned, financed and implemented as a unit; a project has a specific starting and finishing time in which a clearly defined set of objectives is expected to be achieved; and a project has a conceptual boundary, usually geographical but sometimes organizational (Potts, 2002; and MoFED 2006). A project is a unique endeavor to produce a set of deliverables within a clearly specified time, cost, and quality constraints. Projects are different from standard business activities as they are unique in nature, have a defined time scale, have an approved budget, have limited resources, involve an element of risk, and achieve beneficial changes (UNCRD, 2000; and Methods123, 2003).

Project implementation or execution is the third phase in the project life cycle (Project initiation, project planning, project execution and project closure) and involves the

execution of each activity and task in the project plan. This phase is typically the longest phase in terms of duration during which the deliverables are physically constructed and presented for the customer for acceptance. This phase requires careful regular monitoring and control process to ensure that quality of the final deliverable meets the acceptance criteria set by the customer (Bauma and Tolbert, 1985; Lewis, 2007; and Vargas, 2008).

The PMI (2004) definition of Project Management in the Project Management Body of Knowledge (PMBOK) is ". . . application of knowledge, skills, tools and techniques to project activities to achieve project requirements. Project management is accomplished through the application and integration of the project management processes of initiating, planning, executing, monitoring and controlling, and closing". Project management knowledge areas and components include integration management, scope management, time management, cost managements, quality management, human resource management, communication management, risk management, procurement management, change management, issue management and acceptance management (Crawford, 2002; PMI, 2004; Bediru, 2008; and Kendrick, 2011).

During project implementation, management focuses on three basic parameters: quality, cost and time. A successfully managed project is one that is completed at the specified level of quality, on or before the deadline, and within the planned budget. Client satisfaction also indicates success and possibility of replication and sustainability (UNCRD, 2000). Despite the complex formal requirements prescribed for their preparation, analysis, and management, development projects and programs continued to deviate widely from preconceived plans (Rondinelli, 1993). These deviations or failures can be grouped into two levels: level one project failure- a failure to implement the project effectively; that is on time, within budget and according to the plan; and level two project failure- is the more obvious failure where implementation has been completed but the facilities created fail to achieve the intended effects (Cusworth and Franks, 1996). The focus of this study is on the aforementioned first category of project failure.

Despite the fact that Ethiopian public sector plays important and dominant roles in the overall development process of the country, studies on implementation of public sector projects showed that most projects failed to meet the pre-set targets, a number of them

were not implemented within the planned period and estimated costs at appraisal, indicating the existence of long standing problems irrespective of their area of origin with respect to project cycle management. The causes of these failures are categorized as internal (can be controlled by the project management) and external (out of project management control) (Temesgen, 2007). According to a study conducted on Ethiopian Roads Authority (ERA), performances of the projects studied were unsatisfactory with 33.8% of cost overrun and 57.52% of time overrun (Abrham, 2004).

The study area, Illu-Ababora zone is one of the remotest zones of Oromia National Regional State located in the south-western direction (BoFED, 2011). There is no study which has so far been made in the area to identify project implementation and management challenges among zone level public sectors. Consequently, this study aims to assess the status of implementation and management of public sector projects among the four zone level public sectors engaged in public project implementation and identify the major causes of project failures.

1.2 Statement of the Problem

Davidson (2000), Wysocki and McGray (2003), Lewis (2007), BIA (2005), Melton (2007), Vergas (2008), and Habeeb (2010) have studied and indentified various project implementation and management challenges/failures. Most of these researches emphasized business/industrial projects while this research is about the public sector social projects. For instance, Business Improvement Architects (BIA) (2005) says lack of clarity in the scope of the project, shifting organizational priority, project changes not well addressed, lack of project management skills, and training of project sponsors are the top five challenges organizations face in project management. Vergas (2008) has also identified many causes for project failure which are related with timing, financing, man power, and work standards. Davidson (2000) focused on the roles of the project manager as the main cause for most project failures.

Similarly, Habeeb (2010), argues that effort to manage and implement economic development projects in Less Developed Countries (LDCs) has met with little and diminishing marginal success due to wrong socio-economic project management models, inadequate project communication, corrupt practices, cultural tendencies, bad governance,

uncertainty and infusion of scope-creep. There is also a deficit in the literature of project management failures as studies on project failures are limited both in number and scope.

Yet it is very important to link policies, development planning, and budgeting as this enables investment decisions to be systematically planned, thus making the most efficient and effective use of available scarce resources. But, the implementation of government policies in LDCs including Ethiopia often fails which would be possible if a more strategic and integrated approach had been taken (MoFED, 2004).

A very few studies have been made on causes of project failures in Ethiopian public sectors. These few studies also focused only on Federal Level Public Projects. Accordingly, Temesgen (2007) studied challenges of project cycle management in Federal level public sectors; Abrahan (2004) studied causes of project failures on Ethiopian Roads Authority; and Wubishet (2000) studied performance of roads and educational building projects in Ethiopia. All of these studies were conducted at Federal Government projects level.

So, it is safe to say that project implementation and management challenges are rarely studied in Ethiopia in general and no investigation has been made so far to find out the factors challenging project implementation and management in the public sectors at Regional Government, Zones and Wereda levels including Illu-Ababora Zone which is one of the remotest areas in the country. Nevertheless, in the public sectors of the study area, large proportions of the available scarce resources are committed for the successful implementation of public projects every year. Even though projects are the tools through which development policies and programs are translated into practice, many public sector development projects implemented by different public sectors in Illu-Ababora at zone level usually take more time, require additional budget and beneficiaries (customers) complained about quality of project outputs. There are also projects that have totally failed. These failures in project management are attributed to many reasons.

In this regard, the researcher has many years' practical development planning and project management experience in the zone and observed that public sector project implementation and management is challenged by various factors leading to project failures though not studied. So this research aims to fill the gap or absence of investigation on the causes of

project failures of public sector projects in the zone as well as contribute to the literature of project implementation and management.

A project in this research is contextually defined as construction of social institutions that are managed and implemented by the four public sectors at zone level. The projects have a common objective of service delivery to the community for livelihood improvement and human capital formation. Specifically, a project in this research refers to:

- In Education Sector- Construction of schools for improvement of access and provision of quality education for students;
- In Health Sector - Construction of health centers, clinics and health posts for improvement of health status of the society;
- In Water, Mineral and Energy Sector- shallow and deep well drilling and development, spring development, distribution schemes and river diversions for potable water supply for the community; and
- In Agricultural Development Sector- Construction of Farmers' Training Centers (FTCs), Woreda Offices, Veterinary Clinics, and development agents' houses.

All the four sectors share common characteristics and face similar problems in project implementation and management as they are governed under the same organization (Zone Administration Office), get technical assistance from the same institution (Zone Industry and Urban Development Office) and monitored and coordinated under the same sector (Zone Finance and Economic Development Office which is mandated for allocating and administering budgets, effecting payments, and monitor and evaluate progresses and results).

Generally, the researcher is limited to examining the nature of project implementation and management thereby identifying the root causes of project failures in the four public sectors (Education, Health, Water Mineral and Energy, and Agricultural Development Offices) of Illu-Ababora Zone, Oromia Region.

1.3 Research Questions

1. What is the completion status of zone level public projects (successfully implemented and managed or fail)?
2. What are the key organizational/institutional factors challenging project implementation and management in the four public institutions?
3. What are the physical, climatic, and infrastructure related challenges of project implementation in the zone?
4. How does inappropriate project-cycle management lead to project implementation failures?
5. How do the existing government contract administration rule, high inflation in the price of the construction materials, and contractors' capacity and the commitment challenge project implementation?

1.4 Objectives

Objectives of the study are classified into two categories as general and specific objectives. In the next sub-sections, the general objective and five specific objectives are presented.

1. 4.1. General Objective

The general objective of the research is to examine whether public sector projects are successfully implemented or fail; thereby find out the major project implementation and management challenges/factors; and propose some easing strategies to surmount the identified challenges for future successful project execution in the four zone level public sectors of Illu-Ababora Zone, Oromia Region.

1.4.2 Specific Objectives

The specific objectives of the research are the following:

1. To examine whether public sector projects are successfully implemented or fail;
2. To identify the key organizational/institutional challenges/factors of project implementation and management related to the implementing public sector;
3. To assess the physical, climatic and infrastructure related challenges/factors of project implementation and management;

4. To explore the major challenges/factors associated with inappropriate project-cycle management; and
5. To assess the effects of Contract administration rule, inflation, and contractors' capacity and commitment on project implementation and management.

1.5. Research Methods, Materials and Procedures

This section deals with research design, data sources and collection methods, sampling techniques, and methods of data analysis.

1. 5.1. Research Design

The design of this research is a cross sectional case study design. Case study method is chosen as the research problem is specified to only four public sectors at zone level. Project implementation and management is not effective in the selected public sectors and the researcher developed a special interest to find out the root causes behind the problems. This case study method is also selected as it enables the researcher to gather much more detail information and present the collected data via multiple methods to provide a complete history. This method is again justified as appropriate method to save both time and cost required to conduct the study. Still, the results of this case study can be scaled up to similar situations elsewhere. The study also employs both quantitative and qualitative methods of design where both qualitative and quantitative methods of data gathering from both primary and secondary sources were applied.

1.5.2 Data Sources and Collection Methods

The study used both primary and secondary data to answer the research questions as well as achieve research objectives. To obtain sufficient and relevant data that helped answer the research questions and achieve research objectives, both quantitative and qualitative data were collected from different primary and secondary sources.

The primary sources of data were employees (professionals) of the six zone level public sectors selected for the study. The main tools used to gather the primary data from the primary sources include semi-structured questionnaire, key informants' interview guides and focus group discussion guidelines.

Questionnaire – primary data was collected using self-administered semi-structure questionnaire (appendix 1) composed of mostly close-ended questions. The questionnaire was first pilot-tested in the field and improved based on feedbacks. One focal person, (totally 6), was assigned to each six public sector selected for this study after provision of brief orientation on the questionnaire by the researcher.

As shown in the sampling frame below (table 1.1), one enumerator coordinated and collected the filled-in questionnaire from 15 respondents. To this effect, the researcher plaid a supervision role. The questionnaire was divided into seven major parts: general information about the respondent, assessment of project parameters, organizational/institution related challenges, physical climatic and infrastructure related factors, challenges related with project-cycle management, contract administration price and contractor related factors and general open-ended questions.

Key Informants (KIs) Interview Guide - This guide (appendix 2) consisted of 20 general open-ended questions that were used to gather more of in-depth qualitative data from the key informants. The key informants were four project focal persons from the four project implementing public sectors (Education, Health, Water, Mineral and Energy and Agriculture).

Focus Group Discussion (FGD) Guide – A discussion guideline (appendix 3) consisting of 19 very general and guiding questions was prepared and used by the researcher on the focus group discussions. A group consisting of five high professional directly working on project implementation and management were purposively selected for the group discussion. This discussion was managed at three public sectors.

Secondary data- were gathered from the four project implementing public sectors using a uniform format (appendix 4) prepared by the researcher. Contents of the format include parameters like name and year of the project, planned and revised budget, planned and actual time of completion, and quality status. Accordingly, information was gathered on 75 public projects on which full/complete data could be obtained. These projects were implemented during the past five years (2007-2011) in different areas of the zone. Moreover, organizational structure/lists of job positions, available project documents including agreement, plans and reports were reviewed.

1.5.3. Sampling

To select the respondents for the questionnaire and focus group discussion, a purposive sampling strategy was employed. This sampling method was chosen as an appropriate method because it allowed the researcher to focus on a limited number of informants that were selected purposively so that their in-depth information and knowledge of the research problem provided optimal insight. They were selected based on their education level, experience, information and knowledge they have about project implementation and management challenges in their respective organizations.

To determine the sample size from the total population of 124 employees of the six public sectors, Krejicie and Morgan (1970) table of sample size determination was used. According to this table, at 95% confidence level, for a population of 120, a sample size of 92 is recommended. But for convenience, a sample size of 90 is used for this study.

Thus, 15 respondents equally were selected purposively and strategically for the questionnaire (a total of 90 respondents) including organizational leaders, process owners, project/program managers, key experts, and construction supervisors/engineers from each public sector. In doing so, list of employees with their job positions starting from the head to the final security guard was used. Based on the list, the top 15 professionals were selected.

Similarly, five members each were selected for the three focus group discussion. Members included organizational leaders, process owners, project focal persons, and two key experts who have ample experience and knowledge of project implementation and management. One key informant (project focal person) was selected and consulted at the four public sectors (appendix 5). The purposive sampling method enabled to include only the professionals and exclude the non-professionals.

Generally, respondents for the questionnaire, members of the FGDs and Key Informants were managed as per the following sampling frame.

Table 1.1 Sampling Frame

No.	Name of Organization/Public Sector	Total Employees	Sample Size		
			Questionnaire	FGD	KIs
1	Education Office	19	15 (all returned)	5	1
2	Health Office	21	15 (13 returned)	-	1
3	Water, Mineral and Energy Office	20	15 (all returned)	5	1
4	Agricultural Development Office	18	15 (14 returned)	-	1
5	Industry and Urban Development Office	19	15 (14 returned)	-	-
6	Finance and Economic Development Office	27	15 (all returned)	5	-
	Total	**124**	**90 (72.6%) 86 (95.6%) returned**	**15**	**4**

Source: Developed by the researcher (2012).

1.5.4 Methods of Data Analysis

After collecting all required data using the abovementioned instruments from the identified sources, both qualitative and quantitative methods of data analyses were applied. For quantitative data analysis, Statistical Package for Social Sciences (SPSS) version 15.0 for windows was used. After organizing, coding, and defining variables, responses of the 86 cases were entered into the software. Moreover, data collected about the 75 completed projects, which were carried out (implemented) by four public sector offices of the zone (Education, Health, Water Mineral and Energy, and Agricultural development) in the past five years (2007-2011), was defined, coded and recorded using the software. Then for analysis, both descriptive and inferential statistical methods were used. From descriptive statistics, frequencies, percentages, means, and mean differences were used. From inferential statistics, paired sample t-test, Pearson Product Moment Correlation and binary logistic regression were applied. Results were presented using tables and figures. Qualitative data gathered from FGDs, KIs and open ended questions were qualitatively narrated and used to triangulated quantitative findings.

1.6 Scope of the Study

The study is limited to only four public institutions (Zone Education Office, Zone Health Office, Zone Water Mineral and Energy Office, and Zone Agricultural Development Office) engaged in public project implementation and management and two others zone level public sectors (Zone Industry and Urban Development Office and Zone Finance and

Economic Development Office) mandated to provide technical and financial supports to the implementing institutions in Illu-Ababora Zone, Oromia Region.

The study is also limited to level one project failures - a failure to implement the project effectively; that is on time, within budget and according to the plan. General scope of the study with respect to content include examining whether public projects are successfully implemented or fail; and find out the major causes of project failures divided under four main categories- organizational/institutional challenges; physical, climatic and infrastructure related challenges; problems related with project-cycle management; and contract administration, price and contractors' related challenges.

1.7 Significance of the Study

Successfully managed and implemented development public/social projects play a key role in the livelihood improvement of the needy people. They improve enrolment and quality of education, access to potable water supply, improved human and animal health status, and contribute to improved productivity. Yet, successful management and implementation of these projects is challenged by many factors in Ethiopia in general and in the study area in particular. These challenges resulted in project failures.

Nevertheless, no study has so far been conducted to identify project implementation and management factors that are causes for project failures both at region and zone levels. However, the existing scarce resources allocated for project implementation every year have to be effectively and efficiently managed for achievement of development policy goals.

Since there is a research gap in the field, this study is considered to be a paramount importance in that its outputs can contribute to improved implementation and management of public sector development projects. This research also aims to add to the existing literature and findings in the area of project implementation and management challenges/factors and contribute to the academic sphere as it has an applied dimension.

Moreover, it is believed to provide insight to development policy makers, political leaders, development program/project designers, development practitioners, donors, non-governmental organizations (NGOs), researchers and all relevant actors of development

practices for successful design, implementation and management of development projects that contribute to the livelihood improvement of the people.

Moreover, it may serve as opening point towards further studies in the area and in the region as it is a new attempt of its kind.

1.8 Limitations of the Study

This study is limited to Illu-Ababora zone and has used only four public sectors engaged in public project implementation and management as cases. These cases were selected purposively. So, some of the conclusions emanating from the results may not apply to all projects implemented at all levels like at wereda levels, other zones, Regions and Federal level. Moreover, only public sector projects are assessed in this study however, development projects are also implemented by other development agents like non-governmental organizations (NGOs) and other aid organizations. This study is also limited to only project owners while actors in project implementation and management are many which include contractors and the beneficiaries (the community) among others. Moreover, this study focused on level one project failures (i.e. the failures to implement projects on time, within budget and according to specifications). But level two project failures (where implementation has been completed but the facilities created fail to achieve the effects intended), are not included. Other limitation was lack of well documented data on projects.

1.9 Organization of the Study

This thesis is organized into five chapters. The first chapter presents introduction of the paper. It includes background of the study, statement of the problem, research questions, objectives, research methods, materials and procedures, scope, significance and limitation of the research. Chapter two covers review of the literature - both theoretical and empirical. Description of the study area is covered in the third chapter. Chapter four is about discussions and findings of the study which constitutes the main body of the document. Conclusion and recommendations are presented in the final chapter.

CHAPTER TWO

2. LITERATURE REVIEW

This chapter is categorized into two major parts: the first part deals with theoretical concepts related to development policies, plans, programs and projects; while the second part highlights empirical evidences on project implementation and management experiences based on practical findings of various researchers.

2.1 Theoretical Literature

This theoretical literature review part covers the relationship among development policies, plans, programs and projects; meaning and types of projects; project implementation in the project life-cycle; project management principles; and project failures and successes.

2.1.1 Development Policies and Plans

Countries design various policies for development which involves an intricate process. Implementation of these policies also manifested involving multiple actors and factors. Both the policy design and implementation are interconnected: the policy design phase must be followed by transition to implementation phase in order to complete a life-cycle. Policy implementation is where ideas are translated into reality. It is the execution or carrying out government policies and involves public and private sectors and the general public (Bacon and Wilson, 2008; and Park and Antje, 2010).

A new development policy is interpreted and executed some times by one agency, sometimes by many, sometimes by a network of public and private providers. Whoever the implementer may be, implementation of a policy is where the rubber meets the ground. Successful policy implementation is realized when the goals of the policy are accomplished and/or the public is institutionalized. Conversely, implementation fails when the actors are capricious and inefficient and the goals of the policy are not well defined (Ibid).

Most development plans have traditionally based initially on some formalized macroeconomic models. Such models can be divided into two basic categories: aggregate growth model (involving macroeconomic of planned changes in principal economic variables); and multi-sectoral input-output, social accounting and computable general

equilibrium models (which ascertains the production, resources, employment, and foreign exchange implications). The most important component of plan formulation, however, is the detailed selection of specific investment projects within each sector through the technique of project appraisal and social cost-benefit analysis (Todaro and Smith, 2011).

The vast majority of day-to-day operational decisions with regard to allocation of limited public investment funds are based on a macroeconomic technique of project appraisal whose methodology is placed on the theory and practice of social-cost benefit analysis (Belli et al., 2001; and Todaro and Smith, 2011). In the Social-cost-benefit analysis of public projects (e.g. Construction of road, school, water, heath institution, irrigation etc) are expected to yield net benefits both to the private and the public sector. It is a methodology developed for evaluating investment projects from point of view of the benefits to the society (Mukoko, in UNCRD, 2000; and Moore, 2002).

Good goal setting for development requires good planning. UNDP (2009) defines development planning as a process of setting goals, developing strategies, outlining the implementation arrangements and allocating resources to achieve these goals. Good development planning combined with efficient monitoring can play a major role in enhancing the effectiveness of development programs and projects. Good planning involves looking at a number of different processes: identifying the vision, goals, or objectives to be achieved; formulating the strategies needed to achieve the vision and goals; and outlining implementation arrangement (Ibid). Successful policy implementation is realized when the goals of the policy are accomplished and/or the policy is institutionalized. Conversely, implementation fails when the actors involved are capricious and ineffective and the goals of the policy are not well defined (Bacon and Wilson, 2008; and Schultz and Strauss, 2008).

2.1.2 Development Programs and Projects

The terms 'plans', 'Programs' and 'projects' refer to aggregates of inter-related activities that are taken by governments and organizations to achieve certain intended development 'outcomes' or 'results' (Pandey, 2010). To achieve the intended development results and changes in the quality of people's lives, government and other development partners often

develop a number of different plans, strategies, programs, and projects (UNDP, 2009; and Pries and Quigley, 2009).

It is important to distinguish between projects and programs because there is a tendency to use them interchangeably. A program is an on-going development effort or plan and is wider concept than projects while a project refers to an investment activity where resources are used to create capital assets that produce benefits over time, and has a beginning and an ending with specific objectives. A program may include one or several projects at various times whose specific objectives are linked to the achievement of higher level of common objectives (UNCRD, 2000).

Yong (2007) also illustrates on the difference between a program and a project based on the confusion in using them interchangeably. In recent years the term 'program' has entered the project environment and, not unexpectedly, caused considerable confusion. Originally a program was conceived as a management tool, as a convenient way of grouping some projects together so that they all come under the responsibility of one senior manager. Others also saw a program as an on-going specialized activity with no clear end point.

A program is defined by Wysocki and McGay (2003) and Yong (2007) as a collection of interdependent projects managed in a coordinated manner that together will provide the desired business or development outcome. Because programs comprise many projects, they are larger in scope than projects. That is, a program is a collection of projects and the projects must be in a specified order for the program to be considered complete. Unlike projects, programs can have multiple goals (Ibid).

A program is a collection of interdependent projects managed in a coordinated manner that together will provide the desired outcomes. But do not collect projects together into a program just for reporting and management convenience as this could be reason for failure of one or more projects (Yong, 2007). However, if a project yields a deliverable that may subsequently have an additional use either internally or for a customer, then you can still include it in your management (Ibid). Thus, the interdependence of all the projects is an integral part of the program (Wysocki and McGay, 2003). There are also some projects

which are not linked with others to form a program. These types of projects are sometimes referred to as "stand-alone" projects (UNCRD, 2000).

Projects can be planned to contribute towards a multiple development objectives or, conversely, multiple projects can be planned or coordinated to contribute to a single goal without duplication of work or contradictory results (Dastidar, 2006). The project plan however, will have identified the time, cost, and resources availability needed to deliver the scope and quality of project. That is, the project is in equilibrium at the completion of the project planning session and approval of the commitment of resources to the project (Wysocki and McGay, 2003).

Benefits from projects usually start when the project is completed. Benefits from programs, however, will often start to occur when the first project or even a sub-project is completed. As more projects and sub-projects are completed, the benefits grow until the last project is completed and starts to yield benefits. Then, the program should start to yield the total planned benefits (Yong, 2007).

Generally, it is very important to remember that a project is part of a program and a tool or step towards achieving a development goal(s). It is not the goal by itself. It contributes to the overall development goal. If a development goal has not been properly set or has been over-simplified, projects can achieve their expected results without, in any way contributing to development (Dastidar, 2006). Good intentions, large programs and projects, and list of financial resources are not enough to ensure that development results will be achieved unless associated with successful program and project management (UNDP, 2009; and Thomsset, 2010).

2.1.3 Meaning and Types of Projects

There are many definitions of project and there are equally many descriptions of the overall life-cycle of projects (Melton, 2007). Kosura, in UNCRD (2000) defines a project as a complex set of activities where resources are used in expectation of returns and which leads itself to planning, financing and implementation as a unit. A project is a unique endeavor to produce a set of deliverable within clearly specified time, cost and quality constraints (Methods123, 2003). Lerwis (2007) similarly says a project is a temporary endeavor undertaken to produce a unique product, service or result as well as a problem

scheduled for solution. A project can also be defined as a sequence of unique, complex and connected activities having one goal or purpose and that must be completed by a specific time, within budget, and according to specification (Wysocki and McGary, 2003).

Nevertheless, it is very difficult to put a universally accepted definition of a project as there are different types and definitions of projects. It is better to list the common characteristics of most projects to better understand what a project is. These common characteristics of most projects according to different scholars are:

- A project is a non-repetitive enterprise, characterized by a clear and logical sequence of events, with a beginning, middle and end, focused on the accomplishment of a clear and defined objectives on deadlines with costs, resources, and quality parameters specified (Vargas, 2008).
- A project is a distinct package of scope which when delivered will enable the organization to realize a distinct package of benefits and has a starting point, an end point and specified target to achieve (Melton, 2007).
- All projects are constrained by performance, time, cost, and scope requirements in which only performance, time, and cost can have values assigned while scope must be determined by the project team (Lewis, 2007).
- A project involves the commitment of resources now to obtain extra resources in the future (Curry and Weiss, 1993).
- A project is a temporary endeavor (every project has a definite beginning and end) undertaken to create a unique product or service (the product or service is different in some distinguishing way from all other products or services) (PMI, 2004).
- Projects require evaluation, have an outcome (which is not necessarily known at the outset and is very often a product of some kind) and projects involve people (Heyworth, 2002).
- The main project characteristics are temporariness (that is all projects present a defined start and end), individuality (the accomplishing of something not done before) of the product or service to be developed by the project, complexity and uncertainty (Vargas, 2008).

Thomsset (2010) illustrates that a project has different meanings in each organization and may also vary from one department to another. According to Bauma and Tolbert (1985), it is fortunate that successful project work does not demand a universally accepted definition of what constitutes a project, since none exist.

For simplicity, a project cab best defined in two ways (that is by comparing a project to a routine and by knowing the operational constraints associated with projects). This comparison between projects and routines can be divided into four parts (Ibid):

1. A project is a exception- unlike routines, projects involve investigation, compilation, arrangement and reporting of findings in some way of that provides values;
2. Project activities are related, regardless of departmental routines. Projects are rarely so restricted in nature that they involve only one department;
3. Project goals and deadlines are specific. Recurring tasks invariably are developed with departmental goals in mind; and
4. The desired results are identified in projects than in routines. A project is well defined only when a specific result is known. By comparison, departmental routines involve functions that may be called process maintenance.

Similarly, Method123 (2003) adds projects are different from standard business operational activities as they are unique in nature, have a defined timetable, have an approved budget, have limited resources, involve an element of risk, and achieve beneficial change. Because a project is a practical activity carried out beyond normal operations, a different approach is needed to the work involved to achieve the desired results (Yong, 2007; and Fewings, 2005).

Curry and Weiss (1993) identified three types of projects depending upon how new resources committed to them relate to existing economic activities. These include:

1. **New investment projects** - are types of projects which are designed to establish a new productive process independent of previous lines of production. These types of projects often include a new organization that are financially independent of existing organizations;

2. **Expansion projects** - these types of projects involve repeating or extending an existing economic activity with the same output, technology, and organization; and
3. **Updating projects** - involve replacing or changing some elements in an existing activity without a major change of output, but can involve some changes in technology.

Many organizations have classified projects based on such project characteristics as: risk (high, medium, low), business value (high, medium, low), length (3 months, 3-6 months, 6-12 months, etc), complexity (high, medium, low), technology used (well-established, used somewhat, basic familiarity, unknown, etc), and number of departments affected (one, few, several, all) (Wysocki, 2003). Based on these characteristics, four types of projects are identified by the same author:

1. **Type 'A' projects**- are the high-business-valued, high complexity projects and are the most challenging projects that use the latest technology, and with high probability of risk.
2. **Type 'B' projects**- are shorter in length of time, have good business value and are technologically challenging. Many product development projects fall in this category.
3. **Type 'C' projects** - are projects occurring most frequently in an organization. They are short by comparison and use established technology.
4. **Type 'D' projects** - meet the definition of a project and may require only a scope statement and a few scheduling pieces of information. Involves making a minor change in an existing process.

The value of classifying projects by type is that each type of project utilizes a specific subset of the project management methodology (Wysocki and McGary, 2003). Projects can also be classified as business and social projects, private sector projects and public sector projects. Whatever the types may be, Projects form the basic building blocks of the process of economic development and accordingly their evaluation, planning and implementation need important skills for potential practitioners in the process (UNCRD, 2000).

2.1.4 Project Implementation in the Project Life-Cycle

A cycle is a sequence of events which a project follows. The project life cycle refers to a logical sequence of activities to accomplish the projects' goals or objectives. The concept of a life cycle implies that projects have lives. They are born (initiated), grow, mature, die (terminate) and can start again either a fresh or as a new continuation. That is, projects have phases implying that different types of activities take place at different times during its execution (UNCRD, 2000; and UN-HABITAT, 2003).

It is also possible to think of project works taking place in several distinct stages which are commonly referred to as the 'Project-Cycle' to make the point that they are closely linked to each other and follow a logical progression, with the later stages helping to provide the basis for renewal of the cycle through subsequent project work (Bauma and Tolbert, 1985). Because projects are unique undertakings, they involve a degree of uncertainty. Therefore, organizations performing projects will divide each project into several projects phases commonly called project life-cycle to improve management control (PMI, 2004).

Gawler (2005) stated that the project life-cycle has a number of distinct components. Accordingly, many versions of the project cycle have been produced by different scholars; all of them having the idea that projects go through a number of clearly defined stages in the process of their establishment. Whatever their differences, models of the project cycle consist of all or most of the following important stages: programming, identification, formulation (or preparation), appraisal, implementation and evaluation (Widerman, 2003).

Bauma and Tolbert (1985), Methods123 (2003), Lewis (2007), and Vargas (2008) agree on the following five phases of a project-cycle: Identification/initiating phase, preparation/planning phase, execution/implementation phase, monitoring and evaluation/controlling phase, and closing phase.

1. Identification/Initiating Phase:

This is the initial stage at which the project idea is generated. Sources of Project ideas can be unsatisfied needs, demand for goods and services, underutilized resources (both human and physical), investment opportunities, and pursuit of national policies and objectives (MoFED, 2004; and UNCRD, 2000). At this initial phase of the project cycle, a certain

need is identified and transformed into a structure issue to be solved. The projects mission and purpose are defined and the best strategies are identified and selected (Vargas, 2008).

2. Preparation/Planning Phase:

The most important point in the project cycle is the designing or planning phase because it is at this initial junction that the direction, objectives, tactics and scope of the project are defined (Gawler, 2005). Here, everything that will be performed by the project is detailed, with schedules, cost reviews etc. At the end of this phase, the project will be sufficiently detailed to be executed without difficulties and obstacles. The auxiliary communication, quality risk, procurement and human resources are also developed at this stage (Vargas, 2008).

3. Executing/Implementation Phase:

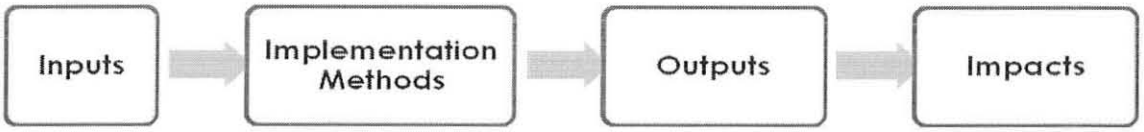
Project execution or implementation is the third phase in the project life-cycle which involves the actual execution of each project activity and task listed in the project plan (Methods123, 2003). Everything planned is carried out at this phase; an error in the previous phases will be evident during this implementation phase. Similarly, a large number of the projects budget, time and effort are consumed in this phase (Vargas, 2008).

This phase is the crucial stage of any project since the objective of the earlier effort in the former stages was to have projects to be undertaken. At this stage, activities of the project are actually carried out and funds are disbursed to facilitate the activities; thus the management should ensure that the project is executed according to the design (UNCRD, 2000). Methods123 (2003) states this phase as typically the longest phase in terms of duration; the deliverables are physically constructed and presented to the customer for acceptance. Therefore, the project manager monitors and controls customers' requirements (Ibid).

Project implementation phase in the project life-cycle is defined in a simplified form by Joseph and Michael (1994) as the transformation of project inputs, through a set of technical and organizational systems and procedures that produce a specified volume and quality of project outputs. Project inputs are financial, human, and material resources available to implement the project as planned; while project outputs refer to the services or

the products that a project delivers to a target population to produce the expected impacts (Ibid). This process can be shown by a simplified model as follows:

Figure 2.1 Simplified Model of the Project Implementation Process



Source: Joseph and Michael (1994:P19)

4. Monitoring and Evaluation/Controlling Phase:

Parallel to the operational planning and project executing, is tracking and controlling everything carried out by the project, so as to propose corrective and preventive actions in the least time possible after the detection of an abnormality. The purpose of control is thus to compare the present project status with that foreseen by planning and to take corrective actions in case of deviation (Vargas, 2008). Monitoring and controlling should be an on-going activity during project implementation. The aim of this work should be to ensure that the activities of the project are being undertaken on schedule to facilitate implementation as specified in the project design (UNCRD, 2000).

Project Monitoring refers to systematic and continuous process of assessing the progress of a project/program over a certain period of time, usually using pre-determined indicators or recurrent questions. Project evaluation however, is a periodic assessment and refers to a process of identifying the broader positive and negative outcomes of programs/projects to reach a conclusion about its overall value and whether objectives have been met (MoFED, 2008; and UNDP, 2009).

5. Closing Phase:

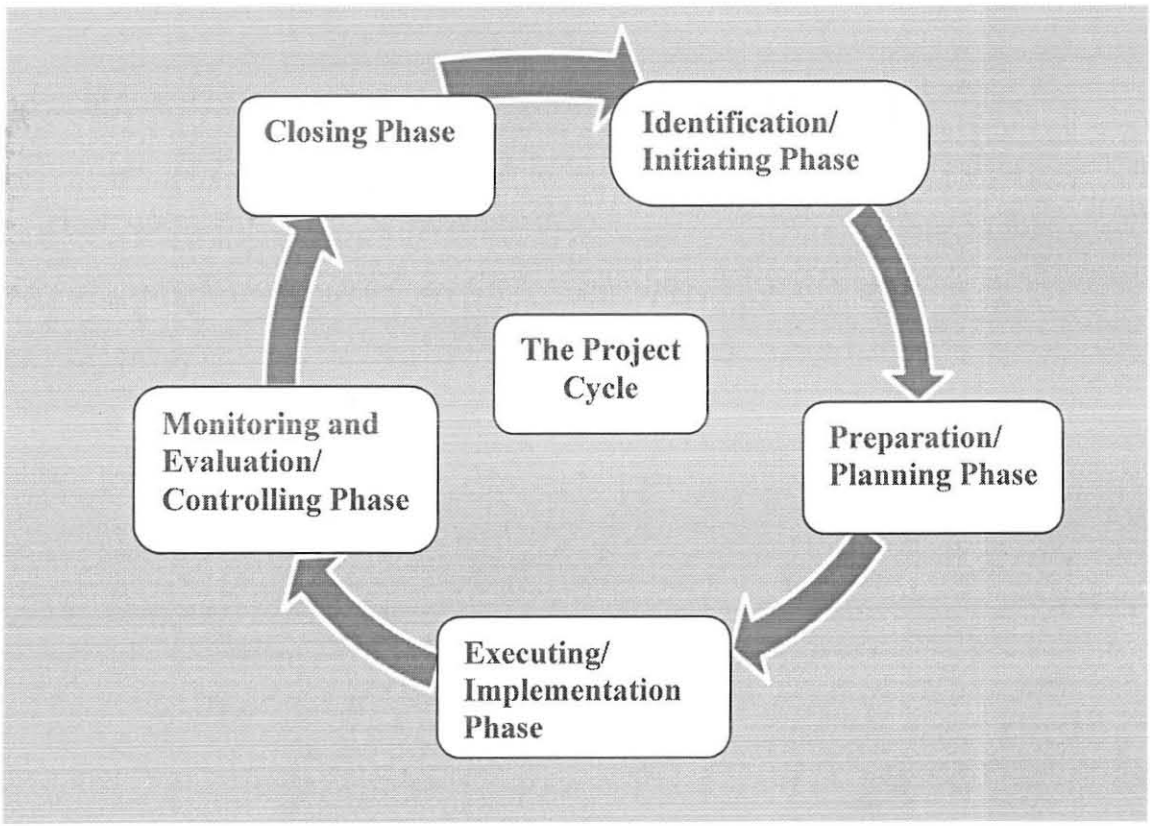
Once all the deliverables have been produced and the customers have accepted the final solution, the project is ready for closure (Methods123, 2003). Before closing the project, execution of the work is evaluated through internal or external (third party) auditing, the books and project documents are closed, and all the failures during the project are

discussed and organized to prevent similar errors from occurring in new projects (Lewis, 2007; and Vargas, 2008).

Generally, the project life-cycle phases depend significantly on the nature of the project. Its description can be generic, represented by a single chart, or detailed, including several charts, flow charts and tables specific to each activity. However, knowledge of the life-cycle phases provides several benefits for any type of project. Vergas (2008) mentions some of the benefits as follows:

- A correct project life-cycle review determines what has, or has not been executed for the project;
- The life-cycle helps evaluate project development until a certain point in time; and
- It allows the determination of exact project status at a certain point in time.

Figure 2.2 The Project Life-Cycle, 5 Stages



Source: Adapted from Bauma and Tolbert (1985), Methods123 (2003), Lewis (2007), and Vargas (2008).

Yuker, cited in Widerman (2003:P9) illustrates more on The World Bank Projects cycles as follows:

> *"The development cycle for World Bank projects . . . defines six sequential steps: identification, preparation, appraisal, negotiations, implementation and supervision and ex-post evaluation. Other organizations use slightly different terms but most think of the process as a cycle. In reality, even though one can learn from experience, one can never return to the past. So the cycle is really a spiral, circling through the required steps but always moving on to new projects. The cycle consists of a series of steps separated by decision points. The process moves toward implementation and start-up of operations. Evaluation is an ex-post look to seek if the objectives were accomplished and if they were the right objectives."*

Generally, many versions of the project cycle have been produced; all of them having the idea that projects go through a number of clearly defined stages in the process of their establishment. Whatever their differences, models of the project cycle consist of all or most of the following important stages: programming, identification, formulation (preparation), appraisal, implementation and evaluation (UN-HABITAT, 2003).

2.1.5 Project Management

Project management is the fastest growing professions because every effort and every other profession needs project management. Everyone and every organization needs project management because projects offer an avenue for the accomplishment of human effort. The application of project management is vital in business, industry, government and personal activities. Therefore, everyone needs project management (Methods123, 2003; Badiru, 2008; and Habeeb, 2010).

Project management is defined by different scholars at different times from different perspectives. Lewis (2007) defines project management as an application of knowledge, skills, tools, and techniques to project activities to achieve project requirements. Bediru (2008) says project management is the process of managing, allocating, and timing resources to achieve a given goal in an efficient and expeditious manner. Project management can also be defined as the application of knowledge, skills, tools and techniques to project activities to create a unique product or service in order to meet or exceed stakeholder needs and expectations (PMI, 2004). Project management comprises a set of skills (specialist knowledge, skills and experiences), a suite of tools and a series of

processes to undertake a project successfully (Methods123, 2003; and Entrepreneur Press, 2006).

Project management is illustrated by PMI (2004:P6) in a comprehensive manner in project management body of knowledge (PMBK) as follows:

> *Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. It is accomplished through the use of processes such as initiating, planning, executing, controlling and closing. The project team manages the work of the projects and the work typically involves: competing demands for scope, time, cost, risk, and quality; stakeholders with different needs and expectations; and identified requirements. It is also important to note that many of the processes within project management are interactive in nature.*

Yong (2007) looks into project management as a dynamic process that utilizes the appropriate resources in a controlled and structured manner to achieve some clearly defined objectives identified as strategic needs. It is different from other management roles because it is a temporary role only for the period of the project life cycle; the team membership is flexible and changes as project needs vary; and it is a time and resource limited activity (Greenwood, 1998; and Thomsset, 2010).

Thus, to accomplish projects successfully, the role of the project manger is great. Project managers are those individuals who remain accountable for the achievement of project objectives. Traditionally, project managers have focused on the management and control of scope (quantity, quality and function), cost and time. Now, project managers also need to understand the environment in which the project is to be delivered. Therefore, project managers are considered to be: accountable for achievement of the project objectives (cost, scope and time); responsible for the delivery of the benefits enablers (the things that allow the benefits to be realized); and responsible for developing the project team and managing the project stakeholders through good people management (Greenwood, 1998; Melton, 2007; and Kendrick, 2011).

The PMI (2004) in project management body of knowledge Guide, (PMBOK) identified nine knowledge areas that project managers should be familiar with in order to be considered professionals. These are presented as follows:

1. **Project integration management-** insures that the project is properly planned, executed, and controlled including the exercise of formal project change control. Every activity must be controlled or integrated with every other one in order to achieve the desired project outcomes.

2. **Project scope management –** scope management includes authorizing the jobs, developing a scope statement that will define the boundaries of the project, sub-dividing the work into manageable components with deliverables, verifying that the amount of work planned has been achieved, and specifying scope change control procedures. Changes to project scope are often the factors that "kill" a project; thus needs careful management.

3. **Project time management–** involves developing a schedule that can be met, then controlling work to ensure that this happens. It is simply scheduling and can be called scheduling management. It is also the process within which time spent by staff undertaking project tasks is recorded against the project. A timesheet register can be used which provides a summary of time currently spent on the project and enables the project plan to be kept fully up to date .

4. **Project cost management-** deals with estimating the cost of resources, (including people, equipment, materials, and such things as travels and other support details). After this is done costs are budgeted and trucked to keep the project within that budget. Similarly, in methods123 (2003), project cost management is stated as the process by which costs or expenses incurred on the project are formally identified, approved and paid. To this end, expense forms are completed for each set of related project expenses and are approved by the project manager and recorded within expense register for audit purposes.

5. **Project quality management-** involves both quality assurance (planning to meet quality requirements) and quality control (steps taken to control results to see if they conform to requirements) techniques to keep the quality of project deliverables (outputs). Quality can be defined as the level of conformance of the final deliverable to the customer's requirements. Quality reviews are frequently undertaken and the results recorded within quality register. One cause of usual

project failure is that quality is overlooked or sacrificed so that a tight deadline can be met. It is not very helpful to complete a project on time, only to discover that the thing delivered will not work properly.

6. **Project human resource management**– involves identifying the people needed to do the job, defining their roles , responsibilities , and reporting relationships, acquiring those people, and then managing them as the project is executed. However, managing human resources is usually overlooked in projects and this leads to project failure.
7. **Project communication management**– deals with planning, executing, and controlling the acquisition and dissemination of all information relevant to the needs of all project stakeholders, these include project status, accomplishments, events that may affect other stakeholders, or projects, and so on; not the actual process of communicating with someone.

Bediru (2008) in his book entitled Triple 'C' Model of Project Management (Communication, Cooperation and Coordination) emphasizes that effective accomplishment of cost, time and performance can only be sustained with effective Communication, Cooperation and Coordination. Methods123 (2003) illustrates more on project communication management as the process by which formal communication messages are identified, created, reviewed and communicated within a project. The most common method is status report. Kendrick (2011) on the other hand says project communication management requires both formal reports, and team meetings and periodic informal conversations.

Project communication management is much related and supported with project documentation. All projects thus need some level of documentation. Every project must at least meet the documentation standards mandated by the organization, and may also need documents required by regulatory requirements , industrial standards and methodology needed (Kendrick, 2011).

Most project documents are relate to definition, planning or status: definition documents will usually include project chapter and overall project definition; deliverable requirements (including priorities, measurable specifications, and evaluation criteria); and team roster

(with roles and contact information). Status information will evolve as the project progresses and normally will consist of a sequence of versions of status reports, change logs, issue-tracking logs, life–cycle and other reviews, project presentations, testing results, meeting minutes and other formal communications. Documents related with overall progresses and methods include specification change process, testing standards, methodology and standard definitions, configuration control procedures, and project infrastructure decisions and practices (Norrie 2006; and Kendrick, 2011).

Moreover, every project is different, so there can be enormous variations from project to project for documentation. Nevertheless, once the project manager has proper and adequate project documentation, project communication of any type will be easy and can contribute to successful implementation (Ibid).

8. **Project risk management**– is the systematic process of identifying, quantifying, analyzing and responding to project risk. It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to project objectives. Project risk management is an extremely important aspect of project management that sometimes is overlooked by novice project managers. Risk may be identified at any stage of the project and needs proper management.

9. **Project procurement management**– deals with procurement of necessary goods and services for the project which is logistics aspect of managing project job. It involves deciding what must be procured, issuing requirements for bid or quotations, selecting vendors, administering contracts, and closing them when the job is finished.

In addition to earlier mentioned nine project management knowledge areas by PMI (2004), Methods123 (2003) explains the importance of other three more project management processes. These include:

10. **Change management** – is the process by which changes to the projects scope, deliverables, timescales or resources are formally defined, evaluated and approved prior to implementation. This helps to manage change within the project successfully through understanding the business and system derivers requiring the

change. To formally request a change, change forms are completed and details are recorded within a change register.

11. **Issue management** – is the method by which issues currently affecting the ability of the project to produce the required deliverables are formally managed. After completion of the issue form, each issue is evaluated by the project manger and a set of actions undertaken to resolve the issue at hand.

12. **Acceptance management**– is the process by which deliverables produced by the project are reviewed and accepted by the customer as meeting his/her specific requirements. At the end, acceptance form is completed.

Moreover, project managers must understand the mission and vision of the organization first, then they must see how the project they are managing meshes with the organization mission and they must steer the project to ensure that the interests of the organization are met (Lewis, 2007). Specific to the project, the primary responsibility of a project manager is to ensure that all project work is completed on time, within budget and scope, and at the correct performance level or quality (Ibid). The term project management generally implies the broad conceptual approach used to mange projects within the constraints of time, cost and performance expectations to attain project goal. The goal can be achieved through an integrative synergy between people, tools and process (Badiru, 2008).

In addition to the aforementioned ones, Vergas (2008:P2) lists the following main benefits of project management:

- Avoids surprises during the execution of works.
- Allows the development of competitive advantages and new techniques, because the entire methodology is structured.
- Anticipates problematic situation that may be found, so preventive and corrective actions can be taken before such situations become actual issue.
- Adopts the work to the consumer market and to the client.
- Makes the budget available before the expenditure starts.
- Expedites decisions, as the information is structured and made available.

- Increases management control on all phases to be implemented, thanks to previous detailing.
- Facilitates and guides project formwork reviews arising from changes in the market or in competitive environment, thus enhancing the projects adaptation capabilities.
- Optimizes the allocation of necessary people, capital equipment, and material.
- Documents and expedites future project budgets.

Finally, excellent project managers have the capability to bring projects in on time, within budget and as per the set quality standards while average or poor project managers may not (Davidson 2000; and Melton, 2007).

2.1.6 Project Implementation Failures and Factors

Achieving development results, as most realize, is often, much more difficult than imagined (UNDP, 2009). When it comes to projects, there is a high probability that things will accidentally go wrong and lead to project failure than that they will accidentally go right and lead to project success (Lewis, 2007).

Melton (2007) explains project failure as delivering a project late, delivering a project over budget and delivering a project which does not meet scope requirements. Most projects have a fixed and defined target completion date, if this date is missed and the project delivered late, then the organization may not be able to realize the benefits. A project budget is a key part of the organizational contract; the benefits which will be realized are directly related to the investment moneys approved. The third characteristic of project failure is delivering a project that does not meet the scope requirements. A project delivers a specific amount of scope at a specified level of quality with certain functional requirement. If this is not delivered, then the completed project may not be able to deliver the anticipated benefits (Ibid).

Reason for project failure may vary from project to project. But, Vargas (2008:P2-3) lists the following common reasons why most projects fail:

1. Targets and objectives are poorly defined or are not understood by the lower ranks;

2. There is little acknowledgment of the projects complexity;
3. The project includes many activities with not enough time to accomplish them;
4. Financial estimates are poor and incomplete;
5. The project is based on insufficient or inadequate data;
6. The control system is inadequate;
7. The project lacks a project manager or has too many, thus creating power circles parallel to those previously established;
8. There is excessive dependence on project management software;
9. The project estimates are based on the intuitive experience, or gut feeling, of the people involved with little importance given to the historical data of similar projects or statistical analysis;
10. Training and development are inadequate;
11. The project manger lacks leadership;
12. No time is spent on revising and improving the estimates;
13. The need for personnel, equipment, and material have not been evaluated;
14. Integration of the key elements of the project scope has failed;
15. The client and the project team have different, often opposite expectations;
16. The key areas of the project are unknown ;
17. Nobody has checked whether the people involved in the activities have the necessary knowledge to perform them; and
18. People are not working to the same standards, or work standards have not been estimated.

Other writers also agree with most of the above lists of reasons for project failure. Lewis (2007) says most projects tend to fail due to inadequate project planning. PMI (2004) focuses on the project management team for project failure and says projects tend to fail

because the team does not take time to ensure that they have developed a proper definition of the problem being solved.

Moreover, if the 'technical' differences between projects are ignored, the reason why most projects fail can be summarized as: no robust business case (no answer to 'why?'); no robust statement of scope (no answer to 'what ?'); no robust project delivery plan (no answer to 'how ?' or 'who?' or 'when?'); a lack of control during delivery (no answer to ' will we succeed?); and a lack of delivery of business benefits (no answer to 'so why did we do this ?') (Melton, 2007). Similarly, five constraints operate on every project (scope, quality, cost, time and resources); these constraints are interdependent; a change in one can cause a change in another constraint, to restore the equilibrium of the project to mange failure (Wysocki, 2003).

Project failure is usually associated with a consequence. In the ancient times, project failures had grave consequences; literally "an eye for an eye." In our modern era, consequences may not exceed penalties and loss of future opportunities. However, deliberate or accidental project failures can lead to catastrophes and loss of lives. Thus, the use of proper planning, organizing, and tracking/control are always very important to avoid or minimize project failures (Morris 1986; Curry, 1993; and Badiru, 2008).

2.1.7 Project Success

Bauma and Tolbert (1985) say success in public project implementation requires political commitment of the government, simplicity of project design, careful preparation and good project management. These writers focus on political or government commitment for project success particularly public sector projects. Political or government commitment of project success refers to the continuing interest and achieve support of those agencies and individuals who are in a position to influence attainment of the projects objectives, whether through allocation of human, material and financial resources (Ibid)

To increase the chance of success, attention needs to be placed on some of the common areas of weaknesses in programs and projects. UNDP (2009:P5-6) identified four main areas of focuses for project success:

1. **Planning and program and project definition** – projects and programs have a greater chance of success when the objectives and scopes of the programs and projects are properly defined and clarified. This reduces the likelihood of experiencing major challenges in implementation.
2. **Stakeholder involvement**– higher level of engagement of users, clients and stakeholders in program and projects are critical for success.
3. **Communication-** good communication results in strong stakeholder buy-in and mobilization. Additionally, communication improves clarity on expectation, roles and responsibilities, as well as information on progress and performance. This clearly helps to ensure optimum use of resources.
4. **Monitoring and evaluation**– programs and projects with strong monitoring and evaluation components tend to stay on tracks. Moreover, problems are often detected earlier, which reduces the likelihood of having major cost overruns or time delays later.

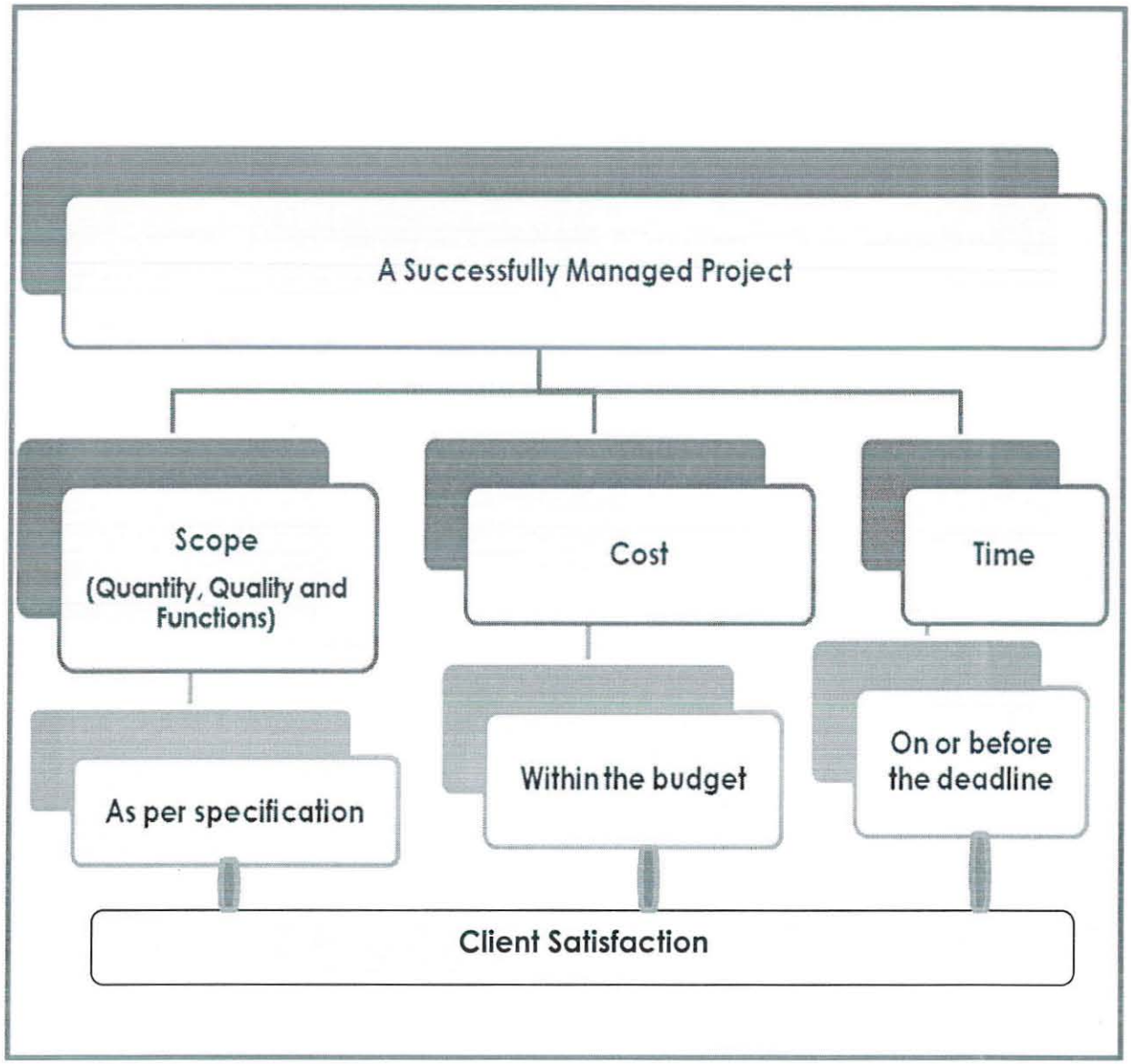
According to Melton (2007:P12), successful projects have the following common characteristics:

- Have a business rationale for the project as the organization needs it.
- Have well defined scope linked to cost and schedule – they know what to deliver and its link to business benefits.
- Are delivered in control- the project manager has 'certainty of outcome', he/she knows how likely success is, and there is no fire-fighting.
- Have delivered the business benefits – through understanding the change that are needed or caused within the business.
- Are built on sound relationships and effective people management.

On the other hand, unlike traditional projects, the success of contemporary evaluated on the basis of several factors ranging from being useful, beneficial, practical, appropriate, customer oriented, cost effective, performance driven, time sensitive, and necessary to being human centric (Paul 1983; Morris 1986; and Badiru, 2008).

Generally, during projects' life, management focuses on three basic parameters: quality, cost and time. A successfully managed and completed project is the one that is completed at the specified level of quality, on or before the deadline, and within the planned budget. Additionally, client satisfaction indicates success and possibility of replication and sustainability (UNCRD, 2000:P34).

Figure 2.3 Characteristics of a Successfully Managed Project in Diagram



Source: Adapted from UNCRD (2000:P34)

2.2. Empirical Literature

The empirical literature provides empirical evidences of development plan and project failures, and project failures and factors in Ethiopia. Additionally, at the end of this section the conceptual framework of this study is presented.

2.1.1 Plan and Project Failures

Though it is usually associated with less developed countries, plan and project failures are not limited to less developed countries. A research conducted in United States of America (USA) by the Standish Group (www.standishgroup.com) as cited in Lewis (2007) has found out that only about 17% of all software projects done in the USA meet the original performance, cost, time and scope (PCTS) target, 15% must have the targets changed-meaning they are usually late, over spent, and have performance requirements reduced-and the remaining 33% are actually cancelled. To implement these projects, 250 Billion Dollars were spent in one year implying 80 Billion Dollars was completely lost on cancelled projects in a year. The main reason for these failures is found to be inadequate project planning (Lewis, 2007).

In addition to poor planning, most project failures are attributed to the roles of the project manager. There are hundreds and hundreds of ways to fail as a project manager among which Davidson (2000) has identified the following seven ways that happen too often in work places: Failing to address issues immediately; Rescheduling too often; Be content with reaching milestones on time but ignore quality; Too much focus on project administration and not enough on project management; Micromanage rather than manage; Adapt new tools too readily; and Monitor project progresses intermittently.

A study conducted in Vietnam by Nghi (2007) also focuses on the effect of the role of project management for project failures in developing countries. The problem of project management could be mitigated through successful project implementation provided via effective transfer of project management expertise from more industrialized, developed countries of the world. In the case of Vietnam, whose situation can be applied to other developing countries as well, negative issues of significant importance are presented as follows (Nghi, 2007:P2):

Frequent contradiction in terms of projects' planned completion dates and existing available capabilities resulting in unrealistic project plans and scheduled completion forecasts; lack of team work concept due to individual team member's monetary interest and ambitions; ineffective and inefficient management of subcontractors; rigid vertical organizational structures and staff assignment unsuitable for a market economy; poor project control implementation; low level of professional training in project management from institutions of higher learning; current methodologies for managing projects are useless for effective, efficient and practical application; lack of active exchanges of ideas pertaining to project management training concepts and methodologies; and lack of suitable training materials and piecemeal training in modern project management body of knowledge, mostly in the mode of fire fighting covering such areas as international procurement and selection and evaluation of development projects.

Consequently, urgent need exists in Vietnam, as well as in other developing courtiers, to improve all facets of project management operations as this developing country is accelerating its strategy of industrialization and modernization through effective execution of projects of all types (Ibid).

The role of project stakeholders is vital for implementation success. A study was conducted among project managers in Norway to collect their views on stakeholder management. The research finding indicated that client and end users are the most important project stakeholders. That is, clients, end users, contractors/suppliers, line organizations, and public authorities are equal when it comes to causing problems and uncertainty for the project; and more efforts should be made to provide new insights into project stakeholder management (Karlsen, 2002).

2.2.2 Project Failures and Factors in Ethiopia

Ethiopia has started planned economic management since mid 1930s. This management system has varied with socio-economic and political systems (feudo-capitalist, socialist oriented and market oriented with decentralized management). In all the three systems, the public sector has plaid and still is playing dominant roles in the implementation of development plans mainly through the design and execution of development projects. Progress reports on the implementation of these public sector projects showed that most projects failed to meet the pre-set targets for a given fiscal year as well as their life and a number of them were not implemented within the planned period and estimated costs at appraisal (Temesgen, 2007).

Temesgen (2007), furthermore, identified four major types of problems contributing to project failures in Ethiopian public sectors at Federal level:

1. **Technical Problems-** these category include absence of baseline survey information for project identification, loose linkages of problems with sector policy and strategy, poor definition of project objectives (poor project design), lack of proper costing of inputs and outputs of projects, lack of properly designed project proposals for final review (appraisal), lack of supporting facilities to undertake various aspects of project analysis, weak negotiation skills and techniques, unclear donors' conditions, absence of pre-set indicators for impact evaluation, evaluation methods etc.
2. **Institutional/Management Problems-** incomplete involvement of implementing agencies in project identification, lack of community participation either for institutional approach (means to an end) or developmental approach –participation as an end in itself (empowerment), no integration among planners and beneficiaries during project planning, weak sharing of responsibility among stakeholders, absence of tried objective mechanisms for project appraisal, failure to take development policy priority in project planning, weak follow-up, monitoring and evaluation, poor project coordination, poor recognition to ex-post evaluation and the role it plays in future project design.
3. **Resource Problems-** shortage or non-existence of adequately trained and skilled human, financial, and material resources such as vehicles, computers and construction materials- are resource problems which contributed to unsuccessful implementation of development projects in Ethiopian public sectors. Furthermore, misuse of available skilled human resources within the organization is wastage of resources which is the worst problem.

All the three problems presented above (technical, institutional/management and resource problems) are considered to be internal causes of unsuccessful projects.

4. **Policy Related Problems-** are external problems as they are outside the control of the project management. These categories of problems include stringent conditionality set by donor agencies, little room to adjust on donors' conditionality on the part of the government, leaders' interest to accept or reject the project, low emphasis and poor

recognition to ex-post evaluation, imposition of existing political environment and external funding agencies' interest in project identification etc.

Getachew (2010) on the other hand focuses on the problems of plan/project evaluation as major reason for project failures in Ethiopian public sectors. That is, project evaluation system of the country is facing many challenges which include inadequate attention given to evaluation, both at strategic and grass root level; unclear roles and responsibilities among evaluating units at different levels; lack of commitment - this fundamentally emerges from the attitude of looking evaluation as an imposition from development partners and international financial institutions; poor quality and irrelevant information - mostly outreach, effect and impact of policies, programs and projects are ignored in designing information collection platforms; poor accountability for failures; lack of integration between different actors in the evaluation systems at different level; problems of mainstreaming lessons drawn from evaluation results; narrowing down the scope of evaluation just to financial and physical dimensions; a system heavily dependent on reports than first-hand information gathering and cross-referencing mechanisms; poor evaluation capacity – both at individual and systemic level; poor integration between different components of the system; and poor culture of evaluation as a society and as a nation.

Weak project monitoring and evaluation systems and practices are among the major factors for public sector project failures in Ethiopia. However, a well-designed and properly functioning project monitoring and evaluation system is crucially essential so as to take rectifying measures, maintain intended level of efficiency, keep the project on course and assess whether or not the project is achieving or has achieved its objectives (MoFED, 2008).

Accordingly, MoFED (2008:P10-11) identified the following common problems and critical gaps which will be addressed concerning public sector project monitoring and evaluation systems to bring about project success in Ethiopian public sectors:

- Inadequate attention to monitoring and evaluation during project design and subsequently insufficient resource allocation for the same. Monitoring and evaluation units are usually under-staffed or staffed with insufficient skill and experience;
- Unclear role and responsibilities of the monitoring and evaluation units;

- Lack of commitment- Project monitoring and evaluation is often seen as an externally imposed obligation;
- Monitoring and evaluation may be seen as mechanical exercise of filling in forms for managers and project managers seeing monitoring only as a form of data collection for writing reports;
- Problem of sustaining the system- Monitoring and evaluation systems initiated by donors are sometimes seen collapsed following the termination of donor assistance;
- Monitoring system that has been introduced too hurried, and hence deficient with relevant issues;
- Over ambitious monitoring and evaluation system that demands collection of too much information;
- Poor quality and irrelevant information produced through monitoring. Such information could focus on financial and physical aspects of the project, while ignoring project outreach, effect and impact;
- Lack of feedback/insufficient and untimely feedback;
- Overlooking the monitoring and evaluation needs and potentials of stakeholders (like beneficiaries, community based and other local cooperating institutions);
- Lack of integration and cooperation between project monitoring and evaluation and project management;
- Poor accountability for failures;
- Differentiation of monitoring from evaluation activities, with evaluation being contracted out. This leads to monitoring and evaluation not being an integral system for improvement-oriented critical reflection; and
- Problem of mainstreaming lessons drawn. Monitoring and evaluation findings of previous projects are not often considered in the designing of new projects.

Based on the abovementioned common problems of monitoring and evaluation systems in Ethiopian public sectors, Ministry of Finance and Economic Development prepared a comprehensive national project monitoring and evaluation guideline in 2008 to provide a common basis for the Federal and Regional Government institutions to manage and implement development projects properly (MoFED, 2008).

Abrham (2004) in his study conducted on Ethiopian Roads Authority with regard to project implementation identified that the performance of the projects studied were unsatisfactory with an average of 33.87% of cost overrun and 57.52% of time overrun. The general reasons for the failures are scarcity of finance among contractors, lack of financial management skill, lack of experience and the capacity to undertake major road projects which requires big sum of money and high technology, and lack of skilled manpower and professionals in the field.

Specifically, the major causes for the 57.52 % time overrun are scarcity of resources (lack of skilled professionals, old equipment and frequent breakdown, and foreign resource dependence); force majeure issues (changing project scope, inclement weather, budget reduction or cancellation, insecurity and emergencies); procurement policy and regulations (past record of contractors performance, direct award, least cost); long and tedious office processing time (timely payment, decision making, claim analysis and approval); poor project definition and monitoring (lack of detailed assessment, poor prediction and estimation, less involvement of stakeholders, no use of feedbacks during planning and monitoring); poor information management (no transparency, fragmentation of information, poor documentation and reporting systems); and weak organization (poor teamwork environment, less experience in the business, and no commitment) (Abrham, 2004).

Likewise, reasons for cost overrun are discussed as follows: scarcity of resources (lack of skilled professionals, old equipment and frequent breakdown, and foreign resource dependence); force majeure issues (changing project scope, inclement weather, budget reduction or cancellation, insecurity and emergencies); procurement policy and regulations (past performance, direct award, least cost, contract not clear, price escalation); long tedious office processing time (untimely decision making, approval of design, claim analysis); poor cost estimation (lack of detailed assessment, inaccurate estimation, less involvement of stakeholders, desires to win contracts, not enough time for bid processing); frequent design change (poor sharing of information, poor stakeholder involvement, poor buildability); and weak organization (poor teamwork environment, less experience in the business, lack of motivation, no commitment and right of way problems) (Ibid).

Wubishet (2000) in his doctoral Thesis on Federal Roads and Educational Building Projects in Ethiopia similarly identified that several projects fail to deliver the full initial scope, time and budget. As a result, resources and efforts are wasted, and expectations unachieved. Reports and studies of many other projects also indicate that poor performance prevail if not total failures.

In the regional state of Oromia, projects are designed to operationalize government development plan objectives though challenged by many factors. One of the constraints faced by Oromia Regional state (the Study region) in its endeavor to undertake development activities in the region is severe shortage of well-trained manpower in project planning and management (Ngau, in UNCERD, 2000).

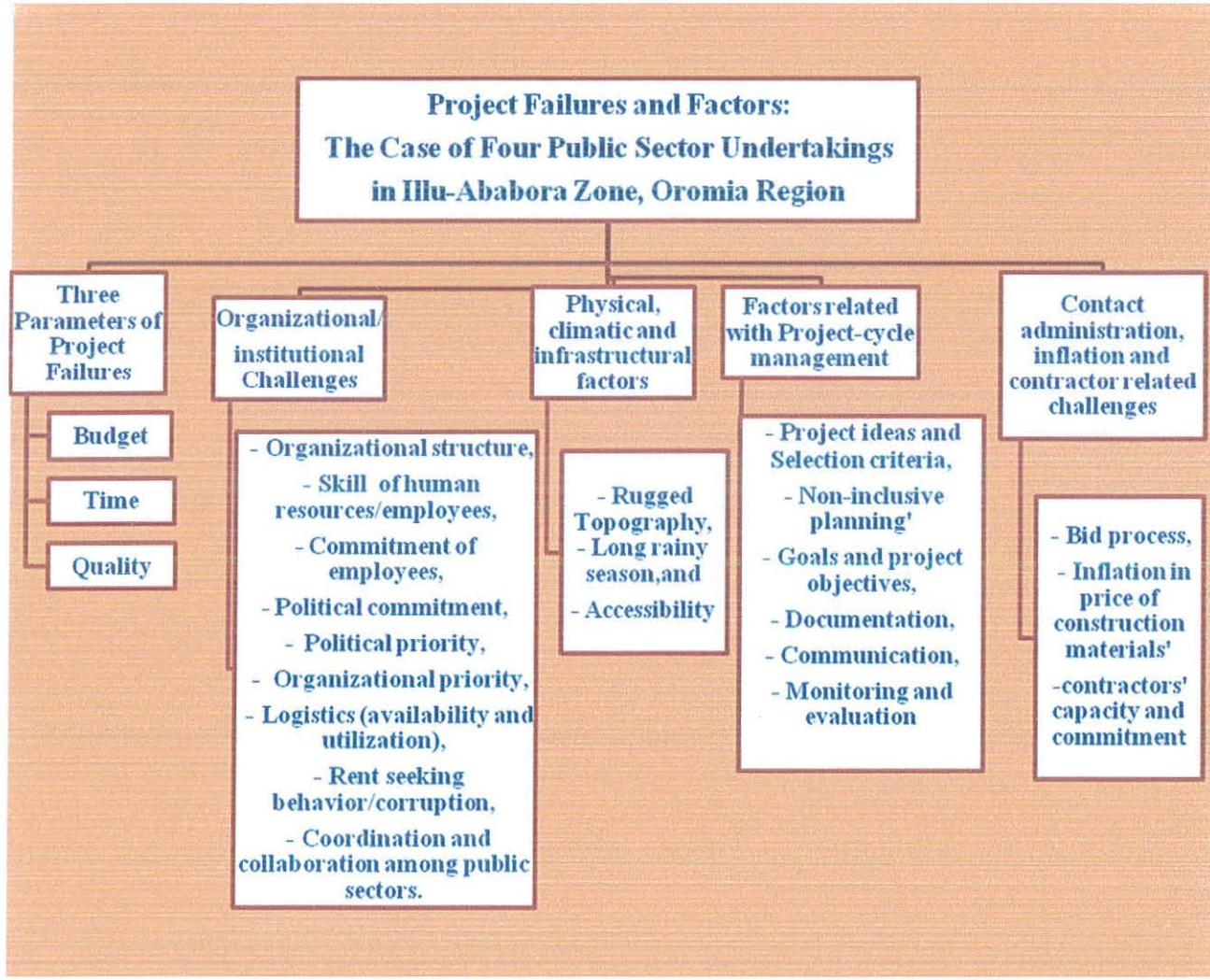
Some of the problems faced in project planning and management in Oromia Region are listed as follows (Wasse, in UNCRD, 2000): lack of good project ideas (generation of good project ideas requires experience and skills in analyzing situations and putting up project proposals, but sectors request budget for some activities without good knowledge of the actual socio-economic effects and benefits); lack of skill in project preparation (there is emphasis on the technical side of projects with limited or no attention to social, economic, financial analysis, and environmental effects); and lack of project evaluation (this is a serious problem both in the region as well as in the country, projects are implemented, huge resources are committed, but whether these schemes have achieved their goals is usually unknown).

At Federal level, studied projects submitted to MoFED for appraisal have tended to exhibit heterogeneous formats and procedures of formulation, and at times failed to address relevant project aspects. However, a well prepared project should fall within the scope of identified priorities (i.e. in line with development objectives and sectoral priorities); address clearly identified problems and target groups; be technically feasible, have realistic implementation schedule; be accurately costed using accepted pricing methods; be manageable given resource and management capacity constraints; be socially desirable and economically viable; be environmentally sound; and be sustainable after project completion. To solve the heterogeneity of formats and approaches in planning projects among Federal public sectors, MoFED has prepared a guideline for the preparation of public sector projects (MoFED, 2006).

Conceptual Framework of the study

The conceptual framework of the study is first assessing the three Parameters of Project Failures (Budget, Time and Quality), and then followed by examination of four major areas of project implementation and management challenges: Organizational/institutional Challenges; Physical, Climatic and Infrastructural Factors; Factors Related with Project-Cycle Management; and Contact Administration, Inflation in the Price of Construction Materials and Contractors' Capacity and Commitment Problems. The following figure shows the details of the conceptual framework:

Figure 2.4 Schematic Conceptual Framework



Source: Developed by the Researcher (2012).

CHAPTER THREE

3. DESCRIPTION OF THE STUDY AREA

In this part of the Thesis, Illu-Ababora Zone is briefly described in terms of location and size, bio-physical characteristics, and socio-economic condition with regard to and implication on project implementation and management.

3.1 Location and Size

The study is conducted in Illu-Ababora zone which is one of the current nineteen (19) zones of Oromia National Regional State. The name 'Illu-Ababora' is said to come from two Oromo language words 'Illu' and 'Ababora'. *Illu* is the name of the large Oromo clan living in the area and 'Ababora' is horse name of *Chali Shone* (local king of the area). The zone is located in the south-western part of the region (figure 3.1), characterized by poor development of infrastructure and having irregular shape elongated from east to west (BoFED, 2010).

Illu-Ababora zone is found between $34^0$52'12" E to $41^0$34'55"E longitude and $07^0$27'40"N to $09^0$02'10"N latitude. It is surrounded with two National Regional States (Gambella National Regional State in the west and Southern Nations Nationalities and Peoples', SNNP, National Regional State in the south); and three zones of Oromia National Regional State (Jimma zone in the south-east, Kellem Wellega zone in the north-west, and west and east Wellega zones north-east) (BoFED, 2011).

The total area of the zone according to current border delimitation is about 17,052.09 square kilometers. This accounts for about 4.8 % of total area of Oromia Region (BoFED, 2009). The zonal capital (administrative center) is Mettu town. Mettu is located 600 kilometers from Addis, and 265 kilometers from Jimma town on the main highway joining Addis Ababa with Gambella Region. As indicated in figure 3.2, the zone is administratively divided into 22 rural and 2 urban weredas (districts) having 518 administrative sub-divisions (Kebeles) (BoFED, 2010).

Figure 3.1 Location Map of Illu-Ababora Zone

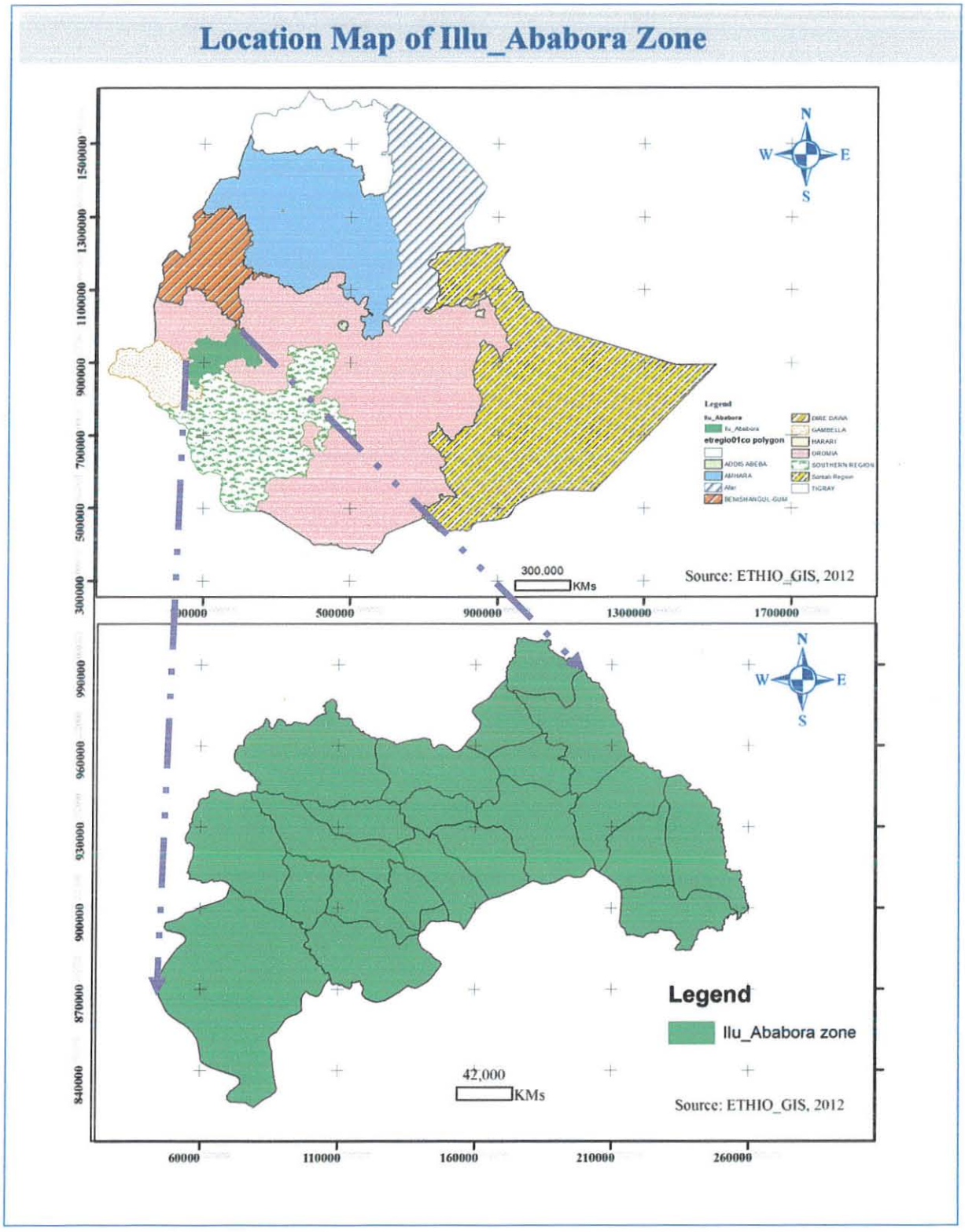
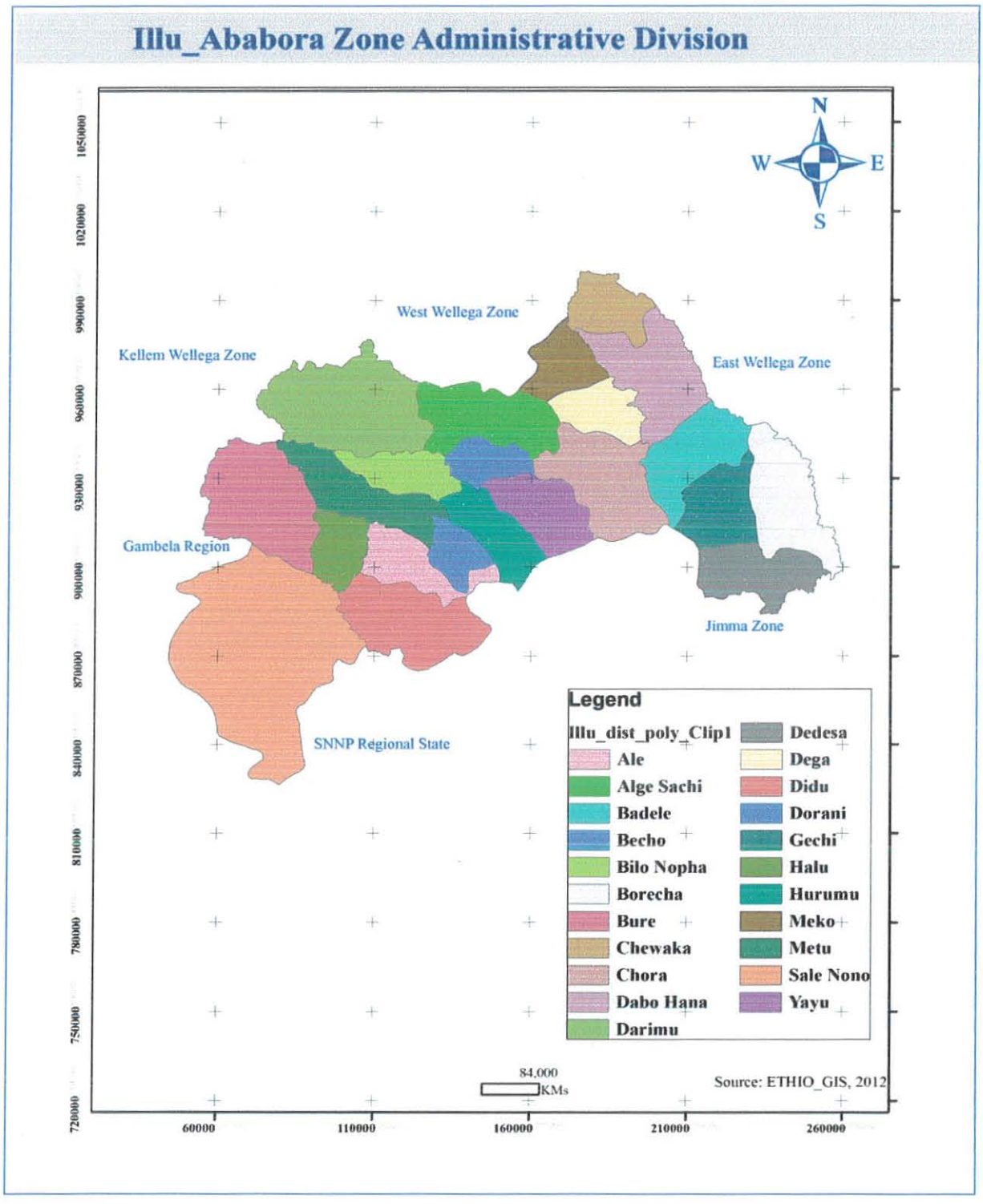


Figure 3.2 Administrative Division Map of Illu-Ababora Zone



3.2 Bio-Physical Characteristics

Under this sub-section, topography, climate, drainage, soil, vegetation cover and wildlife conditions are briefly discussed.

3.2.1 Topography, Climate and Drainage

Illu-Ababora zone has great physiographic or relief diversity revealed by highlands, lowlands, rugged areas, river valleys, and top flatted plateaus. The present day land configuration is the result of denudation of the past high and extensive Afro-Arabian plate and the past natural forces of erosion and tectonic movements that occurred over time to put emphasis on the coverage of the surface (BoFED, 2011). As a result of the past geological activity, the zone falls under the central lava highlands and massifs of division. The highland is made of rising and falling landscape, broken by mountain ranges and highly categorization incised river valley of *Didessa* and *Geba* tributaries. The relief condition of the zone decreases from about 2,581 m.a.s.l. (i.e. *Say* Mountain) to a lower rugged area into less than 809 m.a.s.l. (i.e. *Ganji*) (Ibid).

Based on its agro-ecology, the zone is divided into three: Temperate Rainy, Tropical Rainy, and Dry Arid. These three divisions are locally called *Beda, Bedadare* and *Gamoji* covering 16%, 61%, and 23% of the total land area respectively. The zone receives rainfall twice a year. The main rain season is summer being in June, July, August, September and even October covering the greatest portion of the zone. The small (spring) rain is received in February, March, April and May. The mean annual rainfall ranges from 2,400mm in southern Mettu and Southern Gore towns to 100mm in arid areas of Bedele wereda (BoFED, 2010).

Temperature of the zone is modest despite its latitudinal location in the tropics as modified by its altitude. The altitudinal effect created seasonal and temporal variations in temperature that plays a significant role on vegetation adaptation, agricultural production, and population settlement. The highest mean annual temperature of the zone ranges from 26^0C in lowland area of *Chewaka* and *Gechi* weredas to 10^0C in most highland parts of *Chora* wereda (Ibid). The following table summarizes altitudinal range, average T^0 in ^{0}C, average rainfall in mm, and areal coverage of the zone by agro-ecological division.

Table 3.1 Agro-Climatic Zones, Altitude, Rainfall, and Areal Coverage

Agro-Climatic Zone	Altitude Range in m	Average T^0 in ^0C	Average rainfall in mm	Area in hectares	% from total
Temperate Rainy *(Beda/Dega)*	2,400-3,300	16-20	173-2,400	9,575	16
Tropical Rainy *(Bedadare/Weyinadega)*	1,800-2,400	18-25	112-2,275	583,264	61
Dry Arid *(Gamoji/Kolla)*	500-1,800	20-26	100-1,836	241,908	23

Source: Illu-Ababora Zone Agricultural Development Office in BoFED (2010).

Illu-Ababora zone has many rivers that descend from the various highlands and drain to the surrounding lowlands. They have rapids and falls along their course, seasonal fluctuation in their volume of water, and formed steep sided river valleys and gorges. The rivers are tributaries of the large known rivers of Ethiopia like *Didessa* into *Abay* and *Sor* into *Baro*. Generally, the surface drainage system of the zone is divided into two: the *Baro* drainage system (covers about 70% of the total area of the zone and includes main rivers like *Gaba, Birbir, Sor, Gumaro* and *Ganji*); and *Abay* drainage system (covering about 30% of the area and includes rivers like *Didessa* and *Dabena*). There are also many frequent small rivers joining the main ones. In addition to surface water, the zone is said to be rich in terms of underground (sub-surface) water though less investigation has been made (BoFED, 2011).

3.2.2 Soil, Vegetation Cover and Wildlife

Soil diverse properties and development potentials are the results of the variations in parental materials, physiographic, climate and vegetation cover of the various agro-ecological zones. In this regard, Illu-Ababora zone has fertile soil of volcanic origin in most of the landmass. There are about nine different soil types identified in the area. These include Vertisols, Nitosols, Acrisols, Dystric Notosols, Fluvisols, Lotosols and Orthic Acrisols among others which have varying characteristics (BoFED, 2011).

The zone has high vegetation cover in Oromia region and stated place in the national and international levels. The dense natural forest of *Geba-Dogi* area registered by UNESCO which is found in Yayo wereda is an evidence for prevalence of high natural forest cover.

The current combinations of natural forest of the zone comprise all types ranging from high dense forests to bushes and shrubs. The specious diversity includes Aningeria, Podocurpus, Coudia-Africa, Alibitus, Junipurus, Acacia, and Savanna among others. From the total land area of the zone, about 24.17% is covered with natural forest. This zone is also known for its forest coffee and various spices. The occurrence of the natural forest also made the zone suitable for beekeeping activity and honey production. Though not supported by scientific research, deforestation is becoming a major issue (BoFED, 2010).

In Illu-Ababora zone, there is no any park, Sanctuary, Wildlife reserved areas and controlled hunting areas to protect the existing wildlife resources. In spite, there are still many types of wildlife volume and specious. The available specious types are mammals (like Monkey, Ape, Hyena, Pig, Panpkeuin etc), big animals (like Lion, Cheetah, Elephant, Buffalo, Hippopotamus, Swine, Crocodile, Tiger etc), and small sized animals (like Bush-buck, Bush-duiker, Civet, Water-buck, Warthog etc). Evidences show that these wild animals are changing their residences to more forested surrounding areas due to increased deforestation and human intervention. The zone has also many varieties and volumes of different bird specious (Ibid).

3.3 Socio-Economic Conditions

This part is about demographic characteristics, livelihood conditions, education levels and services, human health situation and services, water and energy supply, transportation and communication, and major development problems and potentials of Illu-Ababora zone.

3.3.1 Demographic Characteristics

The 2010 projected population of the zone based on the 1999 Population and Housing Census result is 1,381,112 of which 1,246,983 (90%) is rural agrarian society and 137,578 (10%) is urban non-farming community. The crude population density of the zone based on the above data is 81 persons per square kilometer. Sex composition of the population shows that 670,858 (48.8%) are males and 692,573 (51.2%) are females. The age structure of the population shows that children under age of 15 years account for 47.5%, economically active population (age 15-64) account for 49.5% and the remaining 3% are old age population (BoFED, 2010).

The ethnic composition of the population indicates that 88% are Oromo, 7% are Amhara, 1% Guragie and other ethnic groups (Somalie, Yem, Walayita, Tigray, Hadiya, and Sidama) together account for 4%. In terms of religion, 47.5% are Muslims, 30.4% are Orthodox Christians, 17.7% are Protestant Christians, 3.3% are followers of traditional religions, 0.5% are Catholic Christians and 0.6% are followers of other religions (Ibid). This total population of the zone accounts for 4.7% of the total Oromia region population (BoFED, 2009). The two major reasons for high population growth in the zone are increased immigration as a result of population resettlement (both planned and spontaneous) and high natural increase (high fertility and low mortality rates) (BoFED, 2010).

3.3.2 Livelihood of the Population

Livelihood of the 90% rural population is dependent up on subsistence agriculture. Most of the farmers practice mixed farming techniques as the two sub-sectors (crop production and animal husbandry) support each other. The total land area cultivated by annual crops during the past five years (2007-2011) is about 40.7 % of the total land area. The major types of crops produced include cereals, pulses, coffee, and oil seeds. Yield of these crops has been increasing over the years indicated above as a result of improved agricultural input utilization. The livestock production sub-sector also plays a significant role on livelihood of the population. They serve as sources of food (meat, milk, egg, etc), means of generating income, used for cultivation and transportation purposes, and also serve as saving, kept as wealth and indication of status. Types of livestock reared in the zone include Cattle, Sheep, Goats, Horses, Mules, Donkeys, Poultry and Beekeeping. Occurrence of different types of crop and animal diseases, deforestation, soil erosion, lack of improved technology, and shortage of skilled professionals at wereda levels are among the major agricultural problems of the zone (BoFED, 2010).

3.3.3 Education Services

Human resource development through provision of quality education is crucial for overall development of any country. To achieve this goal, education services have been provided at all levels and in all areas in the zone mainly by the government and also by non-

government bodies. Accordingly, achievements in the education sector in the year 2010 are summarized below (BoFED, 2010).

Pre-school education-there were 30 public kindergartens where 3,399 children (1,745 males and 1,554 females) got access to pre-school education by 82 teachers (4 males and 78 females) (Ibid).

Primary education- there were 359 lower primary (grade 1-4) schools in the zone in which 179,027 students (93,089 males and 85,938) females were enrolled. Gross Enrollment Ratio (GER) at this level was 125.08 % (130.51% for males and 119.65 % for females). Similarly, at the 238 higher primary (grades 5-8) schools, 95,381 students (49,531 males and 45,850 females) were enrolled. GER of this level was 73.27 % (78.75% for males and 67.79 % for females). Generally, there were 597 primary (grades 1-8) schools which provided primary education services to 274,408 students (142,620 males and 131,788 females) in their mother tongue using 4,824 teachers (2,953 males and 1,871 females). GER for the complete primary education level (grades 1-8) was 101.23 % (106.68 % for males and 95.71 % for females) (Ibid).

Secondary education- this is the level at which students' participation starts decreasing particularly among girls. There were 20 high schools (grades 9-10), number of students' enrolled was 26,547 (14,818 males and 11,729 females). GER at this level was 37.33 % (44.1 for males and 30.55 for females). Similarly, there were 6 preparatory (grade 11-12) schools in the zone where only 938 (738 males and 199 females) were enrolled showing GER of 1.21 % (1.87 % for males and 0.56 % for females). In all the secondary level schools (Grades 9-12), 872 teachers (592 males and 101 females) had been managing the teaching-learning process (Ibid).

High decrease in students enrollment especially that of girls as grade levels increase, poor quality of education at all levels in all parts of the zone, and poor management and implementation of education sector projects are among the major challenges of education sector in the zone (Ibid).

3.3.4 Human Health

In 2010, there were 1 government hospital, 23 health centers, 478 clinics and 505 health posts rendering health services to the community. In the same year, 9 doctors, 744 nurses, 81 health assistants, 58 health officers, 74 laboratory technicians, 5 X-ray technicians, 34 sanitarians, 16 pharmacists, 60 pharmacy technicians, and 922 health extension workers had been working in the above health institutions. According to the data obtained from Zone Health Office, there is a significant increase in the number of health institutions and number of health professionals during the past five years. The country follows a prevention focused health policy and the introduction of health posts with health extension workers contributed a lot in health and sanitary improvement of the population. However, according to zone health office, lack of safe and adequate water supply, poor personal and environmental sanitation, shortage of experienced senior health professionals, poor management systems, poor infrastructure development, AIDS related complex infections and opportunistic infections, and high prevalence of HIV/AIDS are the major health problems of the zone (BoFED, 2010).

3.3.5 Water and Energy Supply

Illu-Ababora zone is one of the least zones of Oromia region in terms of potable water supply to the community despite its endowment with sufficient surface and sub-surface water resources. In the year 2010, potable water supply coverage of the zone was only 54 %. To increase this coverage, different projects like deep wells, shallow wells, hand-dug wells, spring developments and river diversions have been implemented every year. Implementation and management of these projects is challenged by many internal and external factors. Generally, in 2010, there were 22 deep wells, 99 shallow wells, 286 hand-dug wells, 1,278 developed springs, 9 distribution schemes, and 4 diverted rivers providing potable water to 54 % of the community. The remaining 46 % of the population are still dependent up on unprotected wells, rivers and springs which are not safe. The available distribution is also not even between urban and rural areas and among woredas (BoFED, 2010).

Power is very important for development and day-to-day life of people. In 2010, 32 towns and 2 small urban villages of the zone were supplied with hydro-electric power generated

by *Sor* and *Gilgel* Gibe rivers. Provision was for 24 hours per day except for dry seasons when water volume decreases. Many small urban villages and all rural population were devoid of electric supply thus dependent on wood, animal dung, and kerosene for light and cooking purposes (Ibid).

3.3.6 Transport and Communication

All kinds of movements are limited to road transport in the zone however availability and quality of roads is very poor. In 2010, there were only 877 kilometers of different kinds of roads in the zone out of which 55 kilometer is asphalt and the remaining is gravel and rural gravel type of road. Shortage of road infrastructure is one of the major development challenges of the area. Connecting kebeles with woredas, woredas with woredas and zone is challenged by shortage of road and absence of bridges on the frequent rivers. This condition affected transportation and marketing of agricultural products and also challenged implementation of development projects by hindering accessibility. The main road network is limited to the main highway joining Addis Ababa with Gambella region via zonal capital Mettu (BoFED, 2012).

Communication services provided in the zone are telephone, telegram, fax, internet and postal services. The first four services are rendered by Ethiopian Telecommunication Corporation while the last one is provided by Ethiopian Post Office. In the present situation, provision of these services is expanding to rural areas though not coping with the available high demand and significance. Generally, in 2009, there were 14 automatic and 14 pay telephone stations with 114 employees and 7,897 subscribers. In the same year, there were 4 regular and 18 agent post offices in the zone (Ibid).

In summary, agriculture remains the main economic base in Ill-Ababora Zone but its productivity is said to be weak. It is practiced mainly for subsistence except production of some cash crops like coffee and spices sent to the central market. In spite of being the mainstay of the economy, this sector is dependent on backward and traditional technologies in production, storage and marketing. Non-demarcation of grazing and farming land, degradation of densely populated areas, inadequate supply of agricultural inputs, rainfall variability (in terms of season and intensity), occurrence of animal and crop

diseases, and deforestation are among the key challenges of this leading sector (BoFED, 2010).

Among the major problems of social situations, high population growth, shortage of educational facilities, furniture, and library, limited employment opportunity, limited access to transportation and communication facilities, un-even distribution of education, health and water supply services, and shortage of educated and experience professionals both at zone and wereda levels are listed to be the most significant ones (Ibid)

In terms of development potentials, Ill-Ababora Zone is one of the potentially rich areas of Oromia region. Endowment with agricultural resources including fertile cultivable land, irrigable land, good condition for livestock rearing and beekeeping, high coverage of natural forest, availability of excess surface and sub-surface water, cheap productive labor force, mineral resources, potential tourist attraction areas like for eco-tourism, waterfalls, and many others are untouched and have high potential for development (Ibid).

CHAPTER FOUR

4. DISCUSSIONS AND FINDINGS

This chapter is divided into three main sub-sections: general information about respondents, assessment of the three project parameters, and findings on project implementation and management factors.

4.1. General Information about the Respondents

The study population is composed of 124 employees of the six zone level public sectors involved in public project implementation and management. From this population, a sample of 90 was taken using Krejicie and Morgan (1970) table of sample size determination. Next, the 90 professionals (15 from each) were purposively selected for this study. Then, 90 self-administered questionnaires were distributed to the selected professionals from which 86 (95.6%) were fully filled-in and returned. Out of these 86 respondents, 78 (90.7%) were males and 8 (9.3%) were females.

Age category of the respondents shows that 28 (32.6%) are 20-30 years, 24 (27.9%) are 31-40 years, 23 (26.7%) are 41-50 years, and the remaining 11 (12.8%) are above age of 51 years. In terms of maximum education levels attained, 5 (5.8%) are diploma holders, great majority of the respondents, 77 (89.5%) have degrees (B.A, BSc, BED, and all equivalent), and only 4 (4.7%) attended M.A, MSc and above.

With regard to number of professional service years, 20 (23.3%) have job experience of 1-5 years, 14 (16.3%) served for 6-10 years, 12 (14.0%) served for 11-15 years, 10 (11.6%) have 16-20 years' services, 11 (12.8%) served for 21-25 years, 13 (15.1%) served for 26-30 years, and 6 (7.0%) have job experience of more than 30 years.

Positions that respondents currently hold in the organizations are grouped into three major categories as performer/expert, process owners/middle management, and organization heads/top management. Accordingly, 73 (84.9%) hold performer/expert positions, 9 (10.5%) were process owners/middle management members, and 4 (4.7%) were top managers (organizational leaders).

Categorization of respondents into the six public institutions under study indicates, 15 (17.4%) belong to Zone Education Office, 13 (15.1%) belong to Zone Health Office, 15

(17.4%) belong to Zone Water Mineral and Energy Development Office, 14 (16.3%) belong to Zone Agricultural Development Office, 15 belong to Zone Finance and Economic Development Office, and finally 14 (16.3%) were from Zone Industry and Urban Development Office (table 4.1).

Table 4.1 General Information about the Respondents

Attributes	Category	Frequency	Percent
Sex of Respondents	Male	78	90.7
	Female	8	9.3
	Total	**86**	**100.0**
Age of Respondents	20-30 Years	28	32.6
	31-40 Years	24	27.9
	41-50 Years	23	26.7
	51-60 Years	11	12.8
	Total	**86**	**100.0**
Education Level of Respondents	Diploma	5	5.8
	Degree (BA, BSc, BED and all equivalent)	77	89.5
	MA, MSc, and above	4	4.7
	Total	**86**	**100.0**
Number of Service Years of Respondents	1-5 Years	20	23.3
	6-10 Years	14	16.3
	11-15 Years	12	14.0
	16-20 Years	10	11.6
	21-25 Years	11	12.8
	26-30 Years	13	15.1
	>30 Years	6	7.0
	Total	**86**	**100.0**
Current Position of Respondents	Performer/Expert	73	84.9
	Process Owner /Middle Management	9	10.5
	Heads/Top Management	4	4.7
	Total	**86**	**100.0**
Name of Respondents' Organization	Zone Education Office	15	17.4
	Zone Health Office	13	15.1
	Zone Water, Mineral and Energy Office	15	17.4
	Zone Agricultural Development Office	14	16.3
	Zone Finance and Economic Development Office	15	17.4
	Zone Industry and Urban Development Office	14	16.3
	Total	**86**	**100.0**

Source: Field Work (2012).

4.2 Assessment of Project Parameters

To assess the status of most projects with respect to three major project parameters (Cost/budget, time/schedule, and quality), secondary data was gathered from the four public sectors on projects implemented during the past five years (2007–2011). This helped to support the information acquired from primary sources. Accordingly, full data could be obtained on 75 projects implemented during the past five years. From these 75 projects, 70 (93.3%) were fully completed and are rendering services to beneficiaries while 5 projects (6.7%) were totally failed/canceled (table 4.2).

Table 4.2 Completion Status of Projects (Is The Project Completed or Totally Failed?)

Completion Status		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completed	70	93.3	93.3	93.3
	Totally failed	5	6.7	6.7	100.0
	Total	**75**	**100.0**	**100.0**	

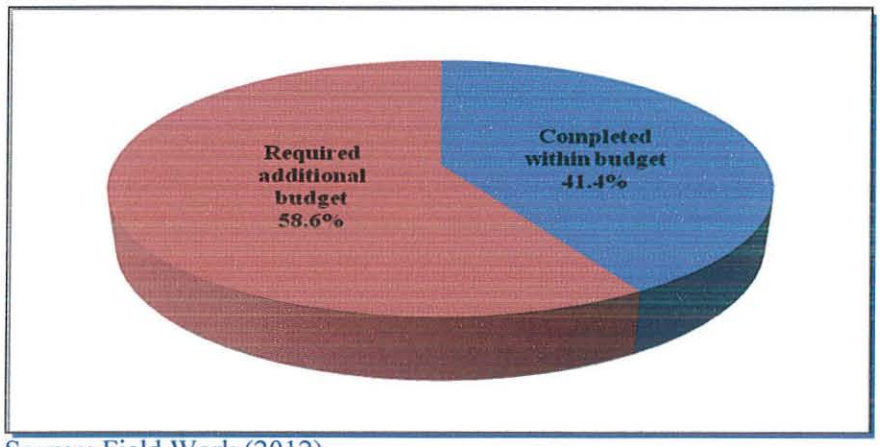
Source: Field Work (2012).

In the subsequent sub-sections, status of the 70 completed projects will be assessed using the three project parameters (Cost/budget, time/schedule, and quality).

4.2.1 Project Cost (Budget)

By excluding the five projects that were totally failed, from the 70 completed projects, completion of 41 projects (58.6%) required additional budget, while 29 (41.4%) were completed within the initially planned budget (figure 4.1).

Figure 4.1 Completion Status of Projects With Regard to Budget (Cost)



Source: Field Work (2012).

To check whether the mean difference between planned/approved budget and revised/actual budget of projects is statistically significant or not, paired sample t-test was employed on the two parallel measurements (planned and revised budget). At 95% confidence level, the calculated t-value is -1.759; Mean of planned budget was Birr 868,505.76; Mean of revised budget was Birr 1,008,728.36; implying Mean difference of Birr 140,224.6. The P (value) is 0.083. So, since P(0.083) is greater than α (0.05), the difference between planned and actual budget of completed projects is statistically insignificant. Even though, the difference between the two means is tested to be statistically insignificant, there is 140,224.60 Birr average difference per project between planned and revised/actual budget. That is, there is an average of Birr 140,224.60 budget overrun per project. Yet, this difference ranges from a lower of Birr 18,847.529 to an upper of Birr 299,296.729 (tables 4.3 and 4.4)

Table 4.3 Paired Samples Statistics (Budget)

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Planned Budget of the Project	868,503.76	70	805,105.625	96,228.528
	Revised/Actual Budget of the Project	1,008,728.36	70	1,025,103.500	122,523.303

Source: Field Work (2012).

Table 4.4 Paired Samples Test (Budget)

Paired Samples Test		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Upper	Lower			
Pair 1	Planned Budget of the Project - Revised/Actual Budget of the Project	-140,224.6	667,132.499	79,737.585	-299,296.729	18,847.529	-1.759	69	0.083

Source: Field Work (2012).

Respondents were also asked about their organization's experience in managing projects' cost (budget). From frequencies of responses, it is seen that 26 (30.2%) of the respondents believe most projects are completed within the planned budget; however, 60 (69.8%) agree that completion of most projects required additional budget. Moreover, respondents that agree on budget overrun (the 60 respondents) were farther asked to estimate the amount of budget overrun in percent of planned budget. Accordingly, (table 4.5), 14 (16.3%) respondents estimated less than 15% increment, 28 (32.6%) estimated 15-30% increment,

13 (15.1%) estimated 31-50% increment, and 5 (5.8%) estimated more than 50% budget overrun per project.

Table 4.5 If Completion Required Additional Budget, Haw Much Was That?

Estimates of Additional Budget Required		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<15%	14	16.3	16.3	16.3
	15-30%	28	32.6	32.6	48.8
	31-50%	13	15.1	15.1	64.0
	>50%	5	5.8	5.8	69.8
	Not applicable	26	30.2	30.2	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

Moreover, according to key informants and discussion with the focus groups, these budget revisions were made without any increment in project scope (amount and quality of outputs). The complaint for budget revision is almost common on all projects, however it is very difficult to treat all as public budget is earmarked for specific activities every year. It is in extreme situations that these revisions were made after careful analysis.

4.2.2 Project Time (Schedule)

Result of the assessment on the completion time of the 70 projects showed that all of them (100%) are characterized by time overrun (delay) than the scheduled project period.

Paired sample t-test is again employed for the two parallel measurements (planned time and actual completion time of projects in months) to test whether the mean difference between the two is statistically significant or not. Accordingly, at 95% confidence level, the following results were obtained: calculated t-value is -27.918; Mean of planned time is 5.20 months; Mean of actual completion time is 13.06 months; Mean difference is -7.857 months; and P(value) is 0.000. Therefore, as P(0.000) is less than $\alpha(0.05)$, there is statistically significant difference between the means of planned time and actual completion time of projects in months. Moreover, every project has been completed behind schedule by 7.857 months on average while the differences in delay of the completion time of projects varies from a minimum of 7.296 months to a maximum of 8.419 months (tables 4.6 and 4.7).

Table 4.6 Paired Samples Statistics (Time)

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Planned time of the Project in Months-	5.20	70	3.775	0.451
	Actual time of completion of the project in months	13.06	70	4.166	0.498

Source: Field Work (2012).

Table 4.7 Paired Samples Test (Time)

Paired Samples Test		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Upper	Lower			
Pair 1	Planned time of the Project in Months - Actual time of completion of the projects in months	-7.857	2.355	0.281	-8.419	-7.296	-27.918	69	0.000

Source: Field Work (2012).

Responses from the respondents similarly support the above finding. They were asked about experience of their organization in managing project schedule (time). All of the 86 (100%) respondents agreed that all projects usually delay than the scheduled and agreed time. They were again asked to estimate length of the delay time. Consequently, 63 (73.3%) of the respondents estimated the project delay time to be for about triple and more than triple of the initially agreed time (table 4.8).

Table 4.8 If Most Projects Need Additional Time, for How Long They Usually Delay?

Delay in Project Schedule		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For about 50% of the planned time.	9	10.5	10.5	10.5
	For about double of the planned time	14	16.3	16.3	26.7
	For about triple of the planned time	30	34.9	34.9	61.6
	More than triple of the planned time	33	38.4	38.4	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

From the focus group discussions and key informants, it was again confirmed that the extreme delay in project completion schedule occurred without any addition in project scope as well as without any revision in agreement.

Moreover, the researcher assumed the presence of positive relationship between increase in project completion time (which was taken as independent variable) and budget revision (the dependent variable). Thus, an attempt was made to check whether there is any relation between delay in project schedule and requirement of additional budget (budget revision). For this, Pearson Correlation was calculated (table 4.9). Values show, R=0.035 with significance/P(value) = 0.774 for the 70 projects. Therefore, from R(0.035) the relationship between delay in project completion time and requirement of additional budget is positive but weak (low).

Table 4.9 Pearson Product Moment Correlation for Budget and Schedule Difference

Pearson Correlation		Budget Difference in Birr	Schedule Difference in Months
Budget difference	Pearson Correlation	1	0.035
	Sig. (2-tailed)		0.774
	N	70	70
Schedule difference in months	Pearson Correlation	0.035	1
	Sig. (2-tailed)	0.774	
	N	70	70

Source: Field Work (2012).

4.2.3 Project Quality

Project quality problem is one of the major challenges in project implementation and management in the zone. From the 70 projects analyzed from secondary data, only 30 (42.9%) were completed as per pre-determined specification of quality, while on 40 (57.1%) qualities of outputs were complained by clients for not being completed as per pre-determined designs and specifications (table 4.10).

Table 4.10 Quality Status of Completed Projects

Quality Status of completed Project		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	As per agreement	30	42.9	42.9	42.9
	Complained by client	40	57.1	57.1	100.0
	Total	**70**	**100.0**	**100.0**	

Source: Field Work (2012).

When project quality problem is seen at individual implementing organization level (table 4.11), the highest quality complaint is observed at Zone Education Office (64.5%), followed by Zone Agricultural Development Office (60.0%), Zone Health Office (53.8%), and finally Zone Water Mineral and Energy Office (43.8%). This last sector is relatively better in keeping projects' quality which could be the result of regular monitoring (relative) by a professional as this sector is the only sector having a hydraulic engineer.

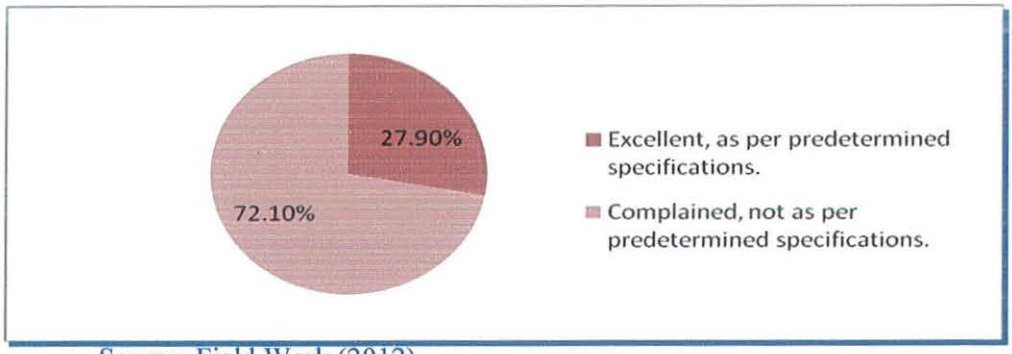
Table 4.11 Quality Status of Projects by Sectors

Name of Project Owner/Implementer	Quality Status		Frequency	Percent	Valid Percent	Cumulative Percent
Zone Education Office	Valid	As per agreement	11	35.5	35.5	35.5
		Complained by client	20	64.5	64.5	100.0
		Total	**31**	**100.0**	**100.0**	
Zone Water, Mineral and Energy Office	Valid	As per agreement	9	56.3	56.3	56.3
		Complained by client	7	43.8	43.8	100.0
		Total	**16**	**100.0**	**100.0**	
Zone Health Office	Valid	As per agreement	6	46.2	46.2	46.2
		Complained by client	7	53.8	53.8	100.0
		Total	**13**	**100.0**	**100.0**	
Zone Agricultural Development Office	Valid	As per agreement	4	40.0	40.0	40.0
		Complained by client	6	60.0	60.0	100.0
		Total	**10**	**100.0**	**100.0**	

Source: Field Work (2012).

Likewise, respondents were asked to judge/evaluate quality level of most projects implemented by their organizations. From response rates, it is observed that only 24 (27.9%) agreed for excellent qualities of completed projects while 62 (72.1%) of them said qualities of most completed projects are complained by the client for not being done as pre-determined level of quality (figure 4.2).

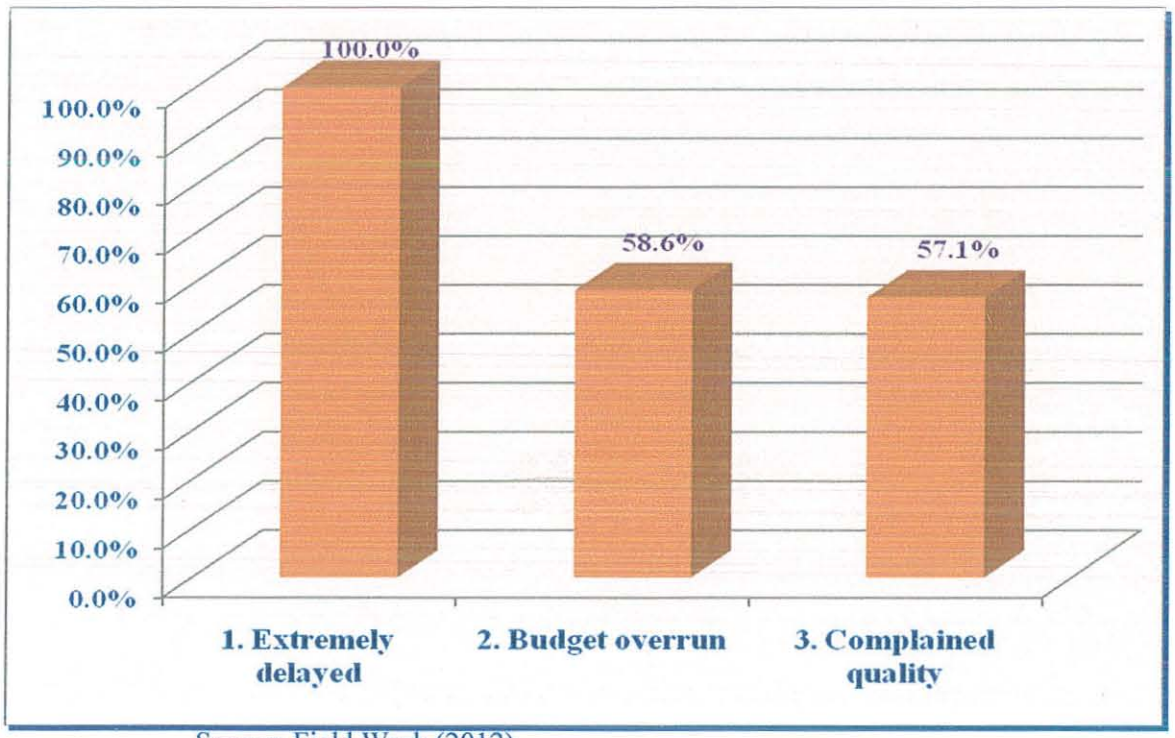
Figure 4.2 How Do You Judge Quality Level of Most Completed Projects?



Source: Field Work (2012).

In summary, from the 75 assessed projects, 70 (93.3%) were fully completed (with some problems) and are rendering services to beneficiaries while 5 (6.7%) were totally failed (canceled). According to percentages of responses from respondents on projects implemented during the past five years (from primary data), all project (100%) delayed for long than planned schedule, 72.1% were completed with quality problems, and 69.8% required additional budget for completion. Similarly, from the 70 completed projects (from secondary data), all of them (100%) delayed for long, 41 (58.6%) required budget revision, and 40 (57.1%) were completed with less quality than designed and agreed.

Figure 4.3 Graphic Presentations of Project Failures



Source: Field Work (2012).

4.3 Project Implementation and Management Challenges/Factors

Factors that have contributed to project failures in the zone are categorized into four major parts. These are organizational/institutional related factors; physical, climatic and infrastructure related factors; factors related to project-cycle management; and contract administration, price and contractor related factors. Moreover, two most influential factors are identified among many. In the subsequent sections, each of them is presented in details.

4.3.1 Organizational/Institution Related Factors

This sub-section includes organizational structure, experience and education of workers, employees' commitment, political commitment and political and organizational priority, logistics availability and utilization, rent seeking behavior and levels of occurrence, and coordination and collaboration failures among the institutions.

4.3.1.1. Organizational Structure, Experience and Education of Workers

Respondents were asked about the content of their organizational structure with reference to project management posts. For this question, 53(61.6%) responded that the organizational structure has neither a project manager/coordinator nor an engineer/construction supervisor posts; while 33(38.4%) said the organizational structure has either of the two posts. Those who said their organizational structure has position related with project management were asked to respond whether it was properly filled with manpower or not. Accordingly, 21 (63.6%) responded the positions were not filled with manpower while 12 (36.4%) believed the positions were filled with irrelevant manpower. Reasons for these problems include lack of organizational commitment (33.3%), problem in assigning people to relevant positions (30.8%), shortage of skilled manpower from market (17.9%), shortage of budget (5.2%), and other problems (12.8%) like political considerations in assigning people.

Due to the aforementioned problems, people working on project implementation and management in the organizations lack both relevant education and experience in project management (51.2%), 27.9% of the respondents responded that they have relevant experience but lack related education, while 14% said they have relevant education but lack related experience in project implementation and management. Only 6 (7.0%) of the

respondents agree that people working on project implementation and management have both relevant education and experience (table 4.12).

Table 4.12 Experience and Education of People Working On Project Management

Experience and educational of people working on project management		Frequency	Percent	Valid Percent	Cumulative Percent
1	Have both relevant education and experience in project implementation and management	6	7.0	7.0	7.0
2	Have relevant education but lack direct experience in project implementation and management.	12	14.0	14.0	20.9
3	Have relevant experience but lack related education in project implementation and management.	24	27.9	27.9	48.8
4	Lack both relevant education and experience in project implementation and management.	44	51.2	51.2	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

One of the major issues raised during FGDs was the assignment of people by mere consideration of political commitment. According to these discussions, even if employees with relevant education and experience could be found, they may not be offered such positions without political commitment consideration.

Moreover, the researcher observed during document review that the organizational structures/lists of job positions of all six organizations lack positions for project coordinators/managers and only that of water, mineral and energy office and industry and urban development office have two positions for engineers. During this study period, only one of the two posts was filled with manpower in both institutions.

4.3.1.2. Employees' Commitment

Employees' commitment is another factor for project success. Respondents were asked to group level of employees' commitment into three ordered categories. From frequencies of responses it is seen that, 25 (29.1%) agreed on the occurrence of high commitment, 50 (58.1%) said employees are partially/seasonally committed, and 11(12.8%) selected absence of employees' commitment (table 4.13).

Table 4.13 Employees' Commitment for Project Implementation and Management

Levels of Commitment		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly committed.	25	29.1	29.1	29.1
	Partially/seasonally committed.	50	58.1	58.1	87.2
	Not committed.	11	12.8	12.8	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

The major reasons for presence of partial/seasonal or absence of employees' commitment for project implementation and management are identified as low awareness about project objectives and goals (31.4%), lack of incentives (20.9%), and lack of knowledge about project management (18.6%) (table 4.14).

Table 4.14 Reasons for Employees' partial or absence of Commitment

Reasons		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lack of incentive.	18	20.9	20.9	20.9
	Low awareness about project objectives and goals.	27	31.4	31.4	52.3
	Lack of knowledge about project management.	16	18.6	18.6	70.9
	Not applicable	25	29.1	29.1	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

Moreover, most KIs associate partial or absence of employees' commitment with low salary and high costs of living.

4.3.1.3. Political Commitment and Political and Organizational Priority

Frequencies of responses on level of political commitment among organizational political leaders for project implementation and management shows 34.9% high commitment, 60.5% partial/seasonal commitment, and 4.9% absence of commitment (table 4.15). Moreover, comparing level of political priority given to project management with other issues indicated that other organizational issues have high priority with 57(66.3%) frequencies of responses. Similarly, organization level prioritization of activities showed that project works have less priority (34.9%) as compared with other organizational issues (65.1%).

Table 4.15 Political Commitment among Organizational Political Leaders

Political Commitment		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly committed.	30	34.9	34.9	34.9
	Partially/seasonally committed.	52	60.5	60.5	95.3
	Not committed.	4	4.7	4.7	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

4.3.1.4. Logistics Availability and Utilization

Availability of logistics like vehicle and monitoring budget are very important for project success particularly during the implementation phase. However, according to 41(47.7%) of the respondents, their organization lacks both vehicle and monitoring budget. Additionally, 20(23.3%) said their organization has some monitoring budget but lacks vehicle, and 6(7.0%) said their organization has vehicle but no monitoring budget (table 4.16).

Table 4.16 Does Your Organization has Enough Logistics for Project Monitoring?

Logistics availability		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, has both vehicle and budget	18	20.9	20.9	20.9
	Has vehicle but no budget	6	7.0	7.0	27.9
	Has budget but no vehicle	20	23.3	23.3	51.2
	Lack both vehicle and budget	41	47.7	47.7	98.8
	Others	1	1.2	1.2	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

Respondents were also asked to judge about utilization of the available project resources and 36 (41.9%) said that project resources are used for other purposes (table 4.17).

Table 4.17 Utilization Purposes of Project Resources

Utilization of Project Resources		Frequency	Percent	Valid Percent	Cumulative Percent
1	Project resources are mainly used for project implementation purposes	22	25.6	25.6	25.6
2	Project resources are used for other purposes	36	41.9	41.9	67.4
3	Others	4	4.7	4.7	72.1
4	Not applicable	24	27.9	27.9	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

4.3.1.5 Rent Seeking Behavior and Level of Occurrence

For the question 'how do you feel about the presence of rent seeking behavior/corruption in project implementation and management in your organization?', 51(59.3%) respondents felt the presence of rent seeking behavior/corruption, 28(32.6%) felt absence of rent seeking behavior/corruption, and 7(8.1%) have no any clue (table 4.18).

Table 4.18 Presence of rent seeking behavior/corruption in project implementation

Presence of rent seeking behavior		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I feel there is rent seeking behavior/corruption	51	59.3	59.3	59.3
	I feel there is no any rent seeking behavior/corruption	28	32.6	32.6	91.9
	Do not have any clue	7	8.1	8.1	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

Those who felt the presence of rent seeking behavior/corruption were further asked to identify levels of occurrence using multiple response set questions. The result shows that (table 4.19), 62.7% occurs during implementation at middle and immediate supervisors level, 17.6% during effecting payments at all levels, and 15.7% at top management level during processing tender.

Table 4.19 Occurrence Levels of Rent Seeking Behavior/Corruption

Level of Corruption(a)	Responses		Percent of Cases
	N	Percent	N
1. During tender process at top management level	8	15.7%	15.7%
2. During implementation at middle and immediate supervisors' level	32	62.7%	78.4%
3. During effecting payments at all levels	9	17.6%	96%
4. Others	2	3.9%	100%
Total	**51**	**100.0%**	**162.7%**

a Dichotomy group tabulated at value 0.

Source: Field Work (2012).

From the 51 respondents who felt the presence of rent seeking behavior/corruption, 30 (58.8%) estimated that it has moderate negative impact on projects while the remaining 21 (41.2%) estimated high negative impact.

4.3.1.6. Coordination and Collaboration Failures

Respondents were asked to evaluate the presence of coordination and collaboration among different public enterprises involved in public projects implementation at zone level. Accordingly, 61(70.9%) believe that there is no coordination and collaboration, while only 25(29.1%) believe the presence of good coordination and collaboration. The major reasons for coordination and collaboration failures (table 4.20) are poor coordination and collaboration skills among sectors (41.9%), low awareness among sectors about the benefits (2.4%), and no will among sectors to be coordinated and to cooperate (4.7%).

Table 4.20 Reasons for Coordination and Collaboration Failures

Reasons for Coordination and Collaboration Failures		Frequency	Percent	Valid Percent	Cumulative Percent
1	Poor coordination and collaboration skills among sectors	36	41.9	41.9	41.9
2	No will among sectors to be coordinated and to cooperate	4	4.7	4.7	46.5
3	Low awareness among sectors about the benefits	21	24.4	24.4	70.9
4	Not applicable	25	29.1	29.1	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

4.3.2. Physical, Climatic and Infrastructure Related Factors

This particular section has three components: rugged topography, long seasons of rainfall, and accessibility of sites.

4.3.2.1. Rugged Topography

Unlike the central and peripheral areas of the country, Illu-Ababora zone is characterized by great physiographic/relief diversity revealed by highlands, lowlands, rugged areas, river valleys, and top flatted plateaus which are results of denudation of the past denudation, tectonic movements and natural forces of erosion (BoFED, 2011). Respondents were asked on multiple response bases on how these physical features (rugged topography, mountains, valley and gorges) affect project implementation. As percent of cases show (table 4.21), the first factor is by challenging transportation of construction materials (32.1%); then by challenging monitoring (26.8%); by hindering accessibility in general (21.1%); and by creating shortage of labor force on sites (18.9%).

Table 4.21 How Topography Affects Project Implementation

How does topography affect project implementation?		Responses		Percent of Cases
		N	Percent	N
1	By hindering/challenging accessibility in general	56	21.1%	65.1%
2	Challenging transportation of construction materials	85	32.1%	98.8%
3	Challenging monitoring	71	26.8%	82.6%
4	Shortage of labor force	50	18.9%	58.1%
5	Others, Specify	3	1.1%	3.5%
Total		**265**	**100.0%**	**308.1%**

a Dichotomy group tabulated at value 0.

Source: Field Work (2012).

4.3.2.2. Long Season of Rainfall

The study area receives rainfall twice a year (for about nine months); the main rain season being in summer (June, July, August, September and even October) covering the greatest portion of the zone. The small (spring) rain is received in February, March, April and May (BoFED, 2010). Respondents also agree with this profile in that 64 (74.4%) estimated 6-9 months rainfall and even 2 (2.3%) estimated more (table 4.22).

Table 4.22 How Long is the Duration of Annual Rainfall in Your Most Project Sites?

Length of rainfall in months		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3-6 months	20	23.3	23.3	23.3
	6-9 months	64	74.4	74.4	97.7
	>9 months	2	2.3	2.3	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

The implication of long rainy season to project implementation according to frequencies of respondents (based on multiple response) include hindering transportation of construction materials (98.8%); limiting working hours (80.2%); limiting monitoring work (73.3%); and by hindering accessibility of manpower (labor) to sites (52.3%).

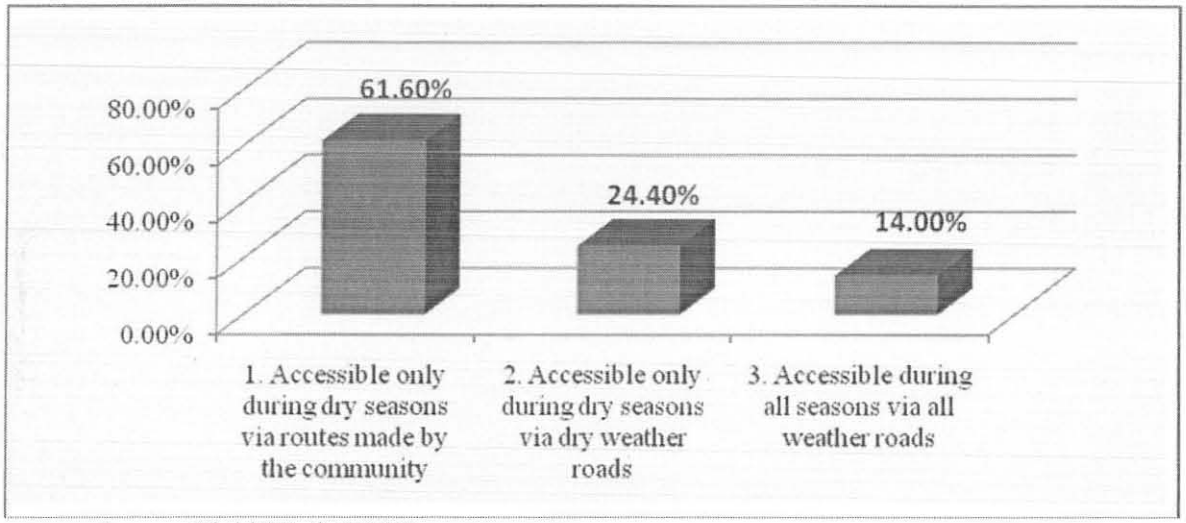
4.3.2.3. Accessibility of Sites

Illu-Ababora zone is one of the remotest zones of Oromia Region where development of road infrastructure is very poor. In 2010, there were only 877 kilometers of different kinds of roads in the zone however all kinds of movements are limited to road transport. As a

result, connecting kebeles with woredas, woredas with woredas and zone is challenged by shortage of road and absence of bridges on the frequent rivers (BoFED, 2011).

Most public sector development projects are constructed in remotest rural Kebeles and Weredas where roads are absent. Respondents were asked about accessibility of most project sites by road and 53 (61.6%) said project sites are accessible only during dry seasons via routes made by the community; while 21 (24.4%) said accessible only during dry seasons via dry weather roads (figure 4.4). Common to both is project sites are accessed only during dry seasons which is only for 3-4 months per annum. However, most projects have life time of more than 5 months.

Figure 4.4 Accessibility of Most Project Sites by Road



Source: Field Work (2012).

Another very important factor on determining accessibility of sites is the absence of bridges on the frequent perennial rivers; 81(94.2%) respondents agree with the absence of bridges on those rivers. This adversely affects project implementation by hindering transportation of construction materials (86%) and limiting monitoring work (7%). Respondents were asked on how these problems have been addressed so far using multiple responses sets of questions; 96.4% of cases showed that Sites are reached only during dry season which is only for about four months. Other options like transporting materials by pack animals and by the community is rarely used (20.5%); changing designs and making construction using locally available materials is almost not used (2%).

4.3.3. Factors Related with Project-Cycle Management

These categories of factors include Project Ideas Sources and Selection Criteria; Non-inclusive Planning and Implementation; Project Objectives and Link with organizational Objectives; Inappropriate Documentation; Project Communication Failures; and Poor Project Monitoring and Evaluation.

4.3.3.1. Project Ideas Sources and Selection Criteria

Government policies and development plans are identified to be the main source of project ideas in the organizations as selected by 66 (76.7%) respondents. Other project idea sources like local leaders, technical specialists from need assessment, were not chosen by most respondents. Next to sources, respondents were asked about the type of project selection model commonly used in their organization where the sacred cow model (that is suggested and imposed by senior and powerful individuals) is chosen by 53 (61.6%) respondents (table 4.23). This shows that projects are selected and decided by powerful individuals than by conducting feasibility studies and appraisals. On the other hand, Comparative benefit model (development merit list made for different projects) is found to be the second type of project selection model as chosen by 21 (24.4%) respondents.

Table 4.23 Models Used for Public Sectors Project Selection

Models of public sectors project selection		Frequency	Percent	Valid Percent	Cumulative Percent
1	Sacred cow model (suggested and imposed by senior and powerful individuals)	53	61.6	61.6	61.6
2	Operating necessity model (to keep a system in operation against hostile situations)	3	3.5	3.5	65.1
3	Competitive necessity model (to maintain a competitive edge over other organizations)	2	2.3	2.3	67.4
4	Product line extension model (to develop and distribute new product/services)	6	7.0	7.0	74.4
5	Comparative benefit model (development merit list made for different projects)	21	24.4	24.4	98.8
6	Others	1	1.2	1.2	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

According to the key informants and information from the focus group discussions, comparative benefit model of project selection is used only in donor driven projects. For projects run by government budget, the sacred cow model is usually used. This finding is

in line with UNCRD (2000) which says many projects in the public sectors of developing countries have been initiated using the sacred cow approach. Usually the projects are initiated by powerful politicians such as Ministers but such projects may not pass rigorous analysis. However, in this study area, they are approved and implemented without thorough analysis.

4.3.3.2. Non-inclusive Planning and Implementation

The most frequently used project planning type as agreed by 53.5% of respondents is the top-down non-participatory approach (table 4.24). However, the top-down project planning approach is criticized by MoFED (2006) for concentrating power at the top over resources and decision making and being less sensitive to local needs, resources and capabilities than the bottom-up and blended top-down and bottom-up approaches.

Table 4.24 Types of Project Planning Approach Applied In the Organizations

Types of project planning approach		Frequency	Percent	Valid Percent	Cumulative Percent
1	Bottom-up and participatory	7	8.1	8.1	8.1
2	Top-down and non-participatory	46	53.5	53.5	61.6
3	Mixture of both bottom-up and top-down	33	38.4	38.4	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

Moreover, respondents were asked about levels of stakeholders' involvement in project planning and implementation. Results showed that, only 14 (16.3%) respondents agreed with always presence of stakeholder involvement while 72 (83.7%) said stakeholders are involved either sometimes or not involved at all in project management process. Those who agree about the presence of involvement specified the type to contribution of resources only (62.6%). According to this group of respondents, stakeholders' participation in planning, implementation, monitoring and evaluation and sustainable management is insignificant.

So, from the usually applied project planning approach (i.e. top-down and non-participatory); and very limited stakeholders' involvement in project cycle management, it is possible to say project planning and implementation process is non-inclusive in the sectors. Members of FGDs and the KIs also confirmed this finding. Projects are planned at region and at zone levels. Weredas and the community are communicated only upon implementation particularly for land provision and materials supply.

4.3.3.3 Project Objectives and Link with organizational Objectives

During the initial stage of the study, it was suppose that most projects lack clear objectives and there is no good link between project objectives and organizational goals and objective. The finding on this specific part, however seems positive. 50 (58.1%) of the respondents agreed that projects have clear objectives while the remaining 36 (41.9%) disagree with this and say projects have no clear objectives. When it comes to the relation between project objective and organizational objectives, 48 (55.81%) believe that they are clearly linked while 38 (44.2%) disagree and say they are not clearly linked (table 4.25). Taking the ideas of the higher proportion, it seems projects have clear objectives that are clearly linked with organizational objectives and goals. So the challenge lies in other factors not objective setting and linking problem from the higher proportions of responses.

Table 4.25 Project Objectives and Link with organizational Objectives

Project Objectives and Link with organizational Objectives		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Projects have clear objective and goals	50	58.1	58.1	58.1
	Projects do not have clear objectives	36	41.9	41.9	100.0
	Total	**86**	**100.0**	**100.0**	
Valid	Are clearly linked	48	55.8	55.8	55.8
	Are not clearly linked	38	44.2	44.2	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

4.3.3.4 Inappropriate Documentation

According to 35 (40.7%) respondents, project related documents (proposals, agreements, progresses, monitoring and evaluation results) are rarely documented; while 33 (38.4%) believe a total absence of any kind of project documentation (table 4.26).

Table 4.26 How is project related documents made in your organization?

Project Documentation		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Properly and regularly documented	18	20.9	20.9	20.9
	Rarely documented	35	40.7	40.7	61.6
	There is no any kind of project documentation	33	38.4	38.4	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

The main reason for the presence of inappropriate documentation is lack of documentation systems and skills (64%) in the organizations (table 4.27).

Table 4.27 Reasons for Inappropriate Project Documentation

	Reasons	Frequency	Percent	Valid Percent	Cumulative Percent
1	Lack of documentation systems and skills	55	64.0	64.0	64.0
2	Lack of documentation materials (computers and other materials)	3	3.5	3.5	67.4
3	Low awareness about the importance of documentation	9	10.5	10.5	77.9
4	Other reasons; specify	2	2.3	2.3	80.2
5	Not applicable	17	19.8	19.8	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

This problem of inappropriate project documentation was practically faced by the researcher during data collection for this study. It was very difficult and even impossible in some cases to get any information about completed projects.

Members of FGDs and the KIs blame the present business process reengineering (BPR) structure for underestimating and excluding the former documentation center from the new structure. Due to this effect, even it is not known where the former documents are stored /put adding their doubts of permanently missing the documents.

4.3.3.5 Project Communication Failures

This section focuses on how project processes, challenges, and lessons are communicated with all stakeholders. The main problems with this regard (table 4.28) are absence of regular and proper communication (57.0%) and rare and occasional communication (30.2 %).

Table 4.28 How are project issues communicated with all stakeholders?

Condition of Project Communication		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Regularly and properly communicated	11	12.8	12.8	12.8
	Rarely and occasionally communicated	26	30.2	30.2	43.0
	No regular and proper communication	49	57.0	57.0	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

The major identified cause of project communication failures (table 4.29) is low priority given to project works particularly communication (61.6%).

Table 4.29 Main Reasons for Project Communication Failures

Reasons for project communication failures		Frequency	Percent	Valid Percent	Cumulative Percent
1	Lack of communication skills	12	14.0	14.0	14.0
2	Low awareness about importance of communication	6	7.0	7.0	20.9
3	Low priority to project work particularly communication	53	61.6	61.6	82.6
4	Other reasons; specify	4	4.7	4.7	87.2
5	Not applicable	11	12.8	12.8	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

According to the KIs, project communication is limited to quarter and annual reports that are sent to concerned organs. Other types of project communication like review meetings, sharing monitoring reports and feedbacks, project related minutes and decisions, sharing successes, challenges and lessons acquired during implementation are missing. The other challenge in communication is that it is not shared among all stakeholders.

4.3.3.6 Poor Project Monitoring and Evaluation

Monitoring is an integral project activity, an essential part of good management, and therefore, an integral part of day-to-day activity. It provides relevant information to indicate whether project objectives are being achieved and, more practically the operation and performance of a project are "on course" (MoFED, 2008). To see the status of public sectors' project monitoring in the study area, respondents were asked about presence and duration in frequencies of project monitoring in their organizations' project management. Response rates showed that 47 (54.7%) believe absence of regular monitoring; and 31 (36.0%) estimated project monitoring being carried out within 6-8 weeks time (table 4.30).

Table 4.30. How often is Project Monitoring Made to Sites in Your Organization?

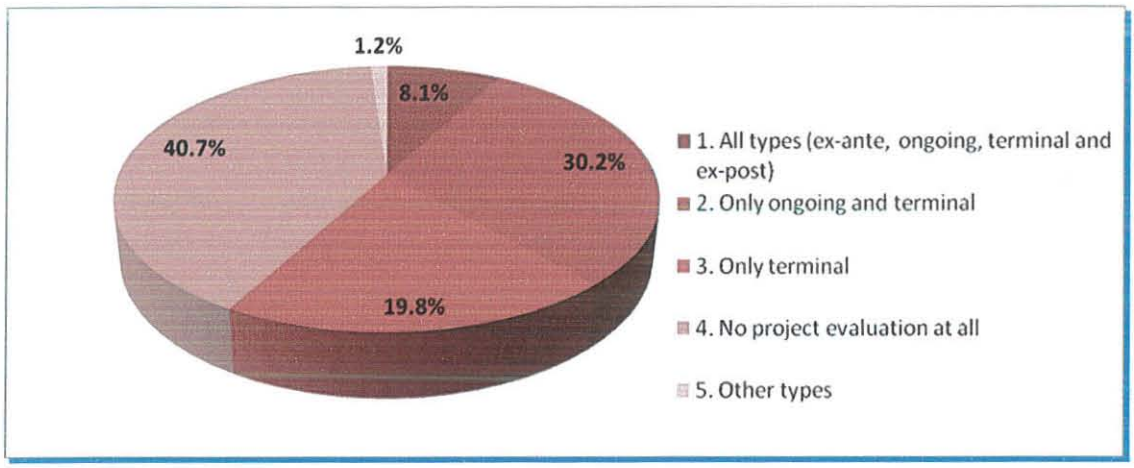
Frequencies of project monitoring work		Frequency	Percent	Valid Percent	Cumulative Percent
1	There is no regular monitoring	47	54.7	54.7	54.7
2	Within 6-8 weeks	31	36.0	36.0	90.7
3	With 4-6 weeks	4	4.7	4.7	95.3
4	Within 2-4 weeks	2	2.3	2.3	97.7
5	Every two weeks and less	2	2.3	2.3	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

From table 4.30, it is evident that there is no regular monitoring or it takes long time to monitor a project. Based on this finding, a project whose life is three months has the chance of either being not monitored at all or monitored only once during its lifetime. As indicated in the preceding sub-sections of this study, most organizations lack proper manpower and logistics (vehicle and budget) for monitoring.

Project evaluation is an instrument for an in-depth review to assess the degree to which objectives have been achieved and to measure net impact of development intervention. It can be formative (during implementation for improvement) and/or summative after completion for drawing lessons (MoFED, 2008). Limited Project evaluation is found to be another challenge in project management practice of the zone. 35 (40.7%) respondents felt projects are not evaluated at all; while 26 (30.2%) limited the type of project evaluation to only on-going and terminal; and 17 (19.8%) say projects are evaluated only upon termination (figure 4.5). Whatever the type of evaluation conducted may be, 57.9% of respondents agree that there is no proper utilization of evaluation findings.

Figure 4.5 Types of Project Evaluations Made in the Organizations



Source: Field Work (2012).

According to KIs, the whole concept of project evaluation is limited to donor driven projects. Members of FGDs added that public sector projects are not evaluated at all but some donors conduct terminal evaluations of projects because it is part of funding requirement.

4.3.4. Contract Administration, Price and Contractor Related Factors

The impact of contract administration rule, high inflation in the price of construction materials, and contractors' capacity and commitment on project implementation are covered under this section.

4.3.4.1. Contract Administration Rule

For a significant number of respondents, 70 (81.4%), the current government procurement and contract administration rule adversely affects project implementation and management (table 4.31).

Table 4.31 Impact of contract administration rule on project implementation

Impact of contract administration rule		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Good, has positive contribution	16	18.6	18.6	18.6
	Challenge, adversely affect project implementation	70	81.4	81.4	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

On all FGDs and KI interviews the same result was obtained. According to this discussions and interviews, this rule considers only least price. That is, after processing formal open bid, if someone or organization is found to be least bidder, it will automatically followed by awarding the tender. There is no any room to consider other issues like historical profile and capacity (technical, financial and logistics) of bidders (contractors).

The above mentioned majority of respondents further justified on how the rule practically affects project implementation. From high percentage of cases to multiple response questions, the rule allows contactors of poor potentials to win the tender if found least bidders (92.9%) and found incapable to produce the outputs; adversely affects quality of project deliverables (90.0%); and discourages competent and powerful contractors not to work in the area (70.0%). Low percentage of case (21.4%) on its openness to corruption could be the mere strength of the rule (table 4.32).

Table 4.32 Effects of Current Contract Administration Rule on Project Implementation

How does the existing contract administration rule affect project implementation		Responses		Percent of Cases
		N	Percent	N
1	Allows contractors of poor potentials to win if found least bidders	65	33.7%	92.9%
2	It is open for corruption	15	7.8%	21.4%
3	Discourages competent and high potential contractors	49	25.4%	70.0%
4	Adversely affect quality of project outputs	63	32.6%	90.0%
5	Others; specify	1	.5%	1.4%
Total		**193**	**100.0%**	**275.7%**

Source: Field Work (2012).

4.3.4.2. High Inflation in Price of Construction Materials

According to CSA 2010, inflation rates in Ethiopia during five consecutive years (consumer prices index for non-food items) shows 82.5% in 2005, 88.7% in 2006, 100.7% in 2007, 113.2% in 2008, and 140.1% in 2009.

Accepting the presence reality of high inflation in the price of construction materials, respondents were asked on how that affected project implementation and management. The two leading adverse effects according to percent of cases to multiple responses are by delaying completion time (92.0%) contractors waiting for lower prices; and negatively

affecting quality of project outputs (90.0%) as they reduce quality to compensate cost. It also resulted in termination of agreements on some sites (73.3%). On the other hand, the result showed that almost no contractor takes the risk of loss (19.8%) to complete sites as per agreement (table 4.33)

Table 4.33 How Does Inflated Price of Materials Affect Project Implementation?

How Inflation in price of construction materials affect project implementation? (Multiple responses)		Responses		Percent of Cases
		N	Percent	N
1	Delay in completion time	82	33.7%	95.3%
2	Reduces quality of outputs	80	32.9%	93.0%
3	Resulted in termination of agreement	63	25.9%	73.3%
4	Loss on contractor	17	7.0%	19.8%
5	Others; specify	1	.4%	1.2%
	Total	**243**	**100.0%**	**282.6%**

Source: Field Work (2012).

4.3.4.3. Contractors' Capacity and Commitment

Capacities of most contractors operating in the area were evaluated by respondents in terms of technical and logistics capabilities. Large proportion of the respondents (54.7%), judged the contractors as incapable both technically and in terms of logistics required from the levels they hold; and 37.2% evaluated them as technically capable but lack logistics as per their levels (table 4.34).

Table 4.34 Capacity of Most Contractors Operating in the Zone

How do you evaluate/judge the capacity of most contractors operating in the zone?		Frequency	Percent	Valid Percent	Cumulative Percent
1	Capable both technically and in terms of logistics as per their levels	7	8.1	8.1	8.1
2	Capable technically but lack logistics	32	37.2	37.2	45.3
3	Not capable both technically and in terms of logistics against their levels	47	54.7	54.7	100.0
	Total	**86**	**100.0**	**100.0**	

Source: Field Work (2012).

When it comes to level of commitment of most contractors, 48.8% are highly or partially committed while 51.2% are categorized as less committed.

4.3.5. The Two Most Influential Factors (Accessibility and Monitoring)

From the many so far listed factors affecting project implementation and management in the zone, the researcher tried to identify the most influential factors challenging project implementation and management. For this purpose binary logistic regression (BLR) was used. In doing so, project completion status was taken as dependent variable while many other problems are taken as independent variables. The main objective of using this analysis is to check the association between the dependent variable (Project completion status) and the independent variables/covariates (factors that affect project completion status).

Based on the frequencies of responses from the 86 respondents, project completion status is classified into three as projects completed with all requirements in problem (Cost, time and quality); projects completed with minimum problems and projects completed with partial problems. Accordingly, 50 (58.1%) responses indicated that projects are completed with all requirements in problem; 13(15.1%) showed projects are completed with minimum problems; and 23 (26.0%) indicated completion of projects with partial problems (table 4.35).

Table 4.35 Completion Status of Projects (Three Groups)

Completion status of projects		Frequency	Percent
Note: 23 responses with partial problems of project completion were excluded from running binary logistic regression	With all requirement in problem	50	58.1
	With minimum problems	13	15.1
	With Partial Problems	23	26.7
	Total	**86**	**100.0**

Source: Field Work (2012).

To run binary logistic regression, 23 (26.0%) of responses showing project completion with partial problems were excluded. Finally binary logistic regression was run for the two dichotomous groups (projects completed with all requirements in problem and projects completed with minimum problems) (table 4.36).

After running binary logistic regression for all independent variables/covariates, only two (Accessibility and Monitoring) were found to have significant association with project completion status.

Accessibility- as defined in the data collection questionnaire section 4 question 4, refers to how project sites are accessed by road in the following order:

1. Accessible only during dry seasons via routes made by the community.
2. Accessible only during dry seasons via dry weather roads.
3. Accessible during all seasons via all weather roads.

The Wald for accessibility (table 4.37) is 10.485 and the significance P=(0.001) (Wald=10.485; P<0.05) which implies significant Wald. The expected beta, β (odd ratio) is 11.665. This implies that a unit increase in accessibility of sites increases the probability of project completion with minimum problems by 11.665 times. For instance, improved accessibility of roads from 'accessible only during dry seasons via routes made by the community' to 'accessible only during dry seasons via dry weather roads' increases the probability of completing projects with minimum problems by 11.665 times than those projects which remain in the areas of 'accessible only during dry seasons via routes made by the community'.

Monitoring- Project monitoring as defined in the questionnaire section 5 question 12, refers to how often project monitoring is made to project sites in the following order:

1. There is no regular monitoring.
2. Project monitoring made within 6-8 weeks.
3. Project monitoring made with 4-6 weeks.
4. Project monitoring made within 2-4 weeks.
5. Project monitoring made every two weeks and less than two weeks.

From the binary logistic analysis of monitoring (table 4.37), Wald value is 6.638 and the significance P=0.010 (Wald=6.638; P<0.05) which implies significant Wald. The expected beta β (odd ratio) is 12.754. This implies that a unit increase in project monitoring frequency increases the probability of project completion with minimum problems by 12.754 times. For example, an increase in project monitoring from 'absence of monitoring' to 'Project monitoring made with 4-6 weeks' increases the probability of project completion with minimum problem by 25.508 times than projects which remain without monitoring.

Table 4.36 Completion Status of Projects (Two Categories)

Completion status of Projects		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	With all requirement in problem	50	79.4	79.4	79.4
	With minimum problem	13	20.6	20.6	100.0
	Total	**63**	**100.0**	**100.0**	

Source: Field Work (2012).

Table 4.37 Variables in the Equation (Binary Logistic Regression)

		B	S.E.	Wald	Df	Sig.	Exp(B)
Step 1(a)	S4_Q4_access	2.457	.759	10.485	1	.001	11.665
	S5_Q12_monitoring	2.546	.988	6.638	1	.010	12.754
	Constant	-8.115	2.256	12.937	1	.000	.000

a Variable(s) entered on step 1: S4_Q4_access, S5_Q12_monitoring.

Source: Field Work (2012).

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS

This final chapter of the thesis has two parts: conclusion (summary of research findings), and recommendations (what has to be done to mitigate the identified challenges and implement and manage projects successfully).

5.1 Conclusion

The findings of the study from the assessment of the three project parameters - cost (budget), time (schedule) and quality - indicated that most public sector projects undertaken by zone level public sectors are characterized by failures. In summary, from the 75 assessed projects, 70 (93.3%) were fully completed (actually with some problems) and are rendering services to beneficiaries while 5 (6.7%) were totally failed (canceled). According to percentages of responses from research respondents of primary data, all projects (100%) delayed for long than planned schedule, 72.1% were completed with quality problems, and 69.8% required additional budget for completion. Similarly, from the 70 completed projects assessed from secondary data, all of them (100%) delayed for long, 41(58.6%) required additional budget, and 40(57.1%) were completed with less quality than designed and agreed.

More specifically, from the 70 completed projects, 29(41.4%) were managed within initially planned budget while completion of 41(58.6%) projects required additional cost. The mean difference between planned and actual budget was tested for significance using paired sample t-test and the result was found statistically insignificant at 95% confidence level. Yet, there is Birr 140,224.60 average budget overrun per project. Respondents also agree with this finding; 60(69.8%) believe completion of most projects required additional budget that was made without any addition in project scope.

Result of the assessment on completion time of the 70 projects indicated that all of them (100%) were delayed than the planned schedule. Again, paired sample t-test was employed for the two parallel measurements (planned time and actual completion time in months) to test whether the mean difference between the two measurements is statistically significant or not. At 95% confidence level, the difference between the two means was found statistically significant. Moreover, every project has been completed behind schedule by

7.857 months on average while the average difference in delay of completion time ranges from a minimum of 7.269 months to a maximum of 8.419 months. Similarly, all of the respondents, 86(100%), agreed that all public projects implemented by their organizations usually delay for about triple and more than triple (agreed by 73.3%) of the agreed schedule without any change in project scope and any revision in contract agreement.

To check if there is any relation between delay in completion schedule of projects and additional budget requirement (budget revision), Pearson Product Correlation was used. The result showed weak (low) positive relation between the two variables.

The third factor in projects' parameter assessment is the quality level of project outputs. From those 70 completed projects, only 30(42.9%) were completed at the level of pre-determined quality while on 40(57.1%) projects, qualities of deliverables were complained by the client for not being done as per pre-determined designs and specifications. Likewise, 62(72.1%) respondents support this finding (project outputs delivered bellow the specified level of qualities).

Therefore, it is possible to categorize project implementation and management undertakings of the zone level public sectors as failures in the level one category of project failures. Moreover, the outstanding project implementation and management failure in the zone is delay in completion schedule followed by budget overrun and outputs' quality problem. These project implementation and management failures are attributed to many factors. In this study, these factors are assessed by categorizing them under four major factors. Moreover, among many, two most influential factors of project failures are identified.

The first category of factors is organizational/institutional related challenges. These include absence of project managers'/coordinators' and engineers'/construction supervisors' post in the organizational structure; thus people working on project implementation and management lack both relevant education and experience in project management; low commitment of employees on project work; low political commitment and low political and organizational priority to project management; shortage of logistics (vehicle and monitoring budget) for project monitoring; misuse of the available project

resources; occurrence of rent seeking behavior/corruption; and coordination and collaboration failures among public projects implementing institutions.

The second group of challenges is physical, climatic and infrastructure related. These comprise rugged topography (rugged landscape, mountains, valleys, gorges etc) by challenging transportation of construction materials and limiting monitoring work; long rainy season (for about 8 months per annum) by challenging transportation of construction materials, limiting working hours and challenging monitoring work; and poor development of infrastructures (absence of roads and bridges on the frequent perennial rivers) challenging accessibility to project sites.

Factors related with project-cycle management are the third category of issues challenging project implementation and management in the zone. This begins from project idea sources and selection criteria. Project ideas are generated merely from government development policies and plans not from immediate needs and relevance to the beneficiaries. The project selection model usually used is the sacred cow model (imposed by powerful politicians thus not subjected to development merit list and thorough analysis). The project planning approach utilized is top-down and non-participatory where stakeholders' involvement is very limited. Inappropriate documentation, poor project communication, poor project monitoring, and absence of project evaluation are also among the challenges associated with project-cycle management.

Under the fourth category of challenges, the current contract administration and procurement rule that considers only least prices, high inflation in the price of construction materials, and poor capacity and low commitment of contractors operating in the area are the major factors adversely affecting project implementation and management in the public sectors.

From the aforementioned numerous factors challenging successful implementation and management of projects, binary logistic regression was used to identify the most influential factors. Accordingly, accessibility of sites and frequencies of project monitoring are found to be the two most influential factors. Accessibility refers to how sites are accessed which is associated mainly with road and bridges development. Monitoring is about frequencies

of project monitoring made to project sites which are related with manpower, logistics, commitment, priority, documentation, communication and proper use of project resources.

Generally, according to the results obtained from logistic regression, a unit increase in accessibility of sites from one level to the next level increases the probability of completing projects with minimum problems by 11.665 times than those projects remaining in the same level of accessibility. Similarly, a unit increase in frequency of project monitoring work made to project sites increases the probability of project completion with minimum problems by 12.754 times than those projects remaining in the same level of monitoring frequency.

5.2 Recommendations

From the findings of the research, project implementation and management undertakings of zone level public sectors are not successful. Even though, projects are tools through which government development policies and plans are translated into practices, and have lion's share in improving livelihoods of the community, their implementation and management is characterized by failures in the study area. Most projects delay for long time than scheduled, require additional budget for completion, and are completed with low levels of qualities. To improve these situations and implement and manage public development projects successfully, the following major areas need special attention:

- The organizational structures need revision to incorporate project coordinators'/managers' and construction supervisors'/engineers' posts. Next, these positions shall be filled with manpower having relevant education, experience, and commitment in project implementation and management.
- Political and employees' commitment, and political and organizational priorities have great share in project success; however these are found to be low in the study area. Therefore, continuous awareness creation discussions and capacity building trainings on project goals and objective are important for employees. Politicians and organizations are expected to give top priority to project works as they are with specific objectives, time bound and with earmarked budget.

- Logistics required for project implementation and management specifically vehicle and budget for monitoring should be decided during project design phase and proportionally allocated. Moreover, project related resources have to be used wisely for the intended objectives.
- It is very important to reduce occurrence of rent seeking behavior/corruption by taking appropriate measure like through provision of ethical and anti-corruption education particularly to middle managers and immediate supervisors.
- There should be coordination and collaboration among public institutions involved in public project implementation and management. Areas of coordination and collaboration may include logistics, finance, manpower, expertise etc because cumulative effort can add value.
- Infrastructure development particularly rural roads and bridges need special attention to mitigate the problem of inaccessibility of sites which is found to be one of the core problems in this study. In the mean time, alternative methods of accessibility like transportation of construction materials by pack animals and community participation could be used. Moreover, in extreme cases, there should be a room to revise designs and specifications so that constructions are made using locally available materials to reach the community with the intended services.
- All challenges associated with poor project-cycle management require appropriate treatment. Project ideas should not always be from government policies, plans and donor interests. There has to be a situation where local leaders and the community express their immediate needs and local contexts. Tools like Participatory Rural Appraisal (PRA) would be applied for this. The planning approach needs to be inclusive and participatory by using the blended top-down and bottom-up planning approach. Stakeholders' participation should not be limited to contribution of resources. They have to be enabled to actually participate in planning, implementation, monitoring and evaluation and sustainable management of projects so that sense of ownership is created. Project documentation and communication also needs focus. The problems of lack of documentation systems and skills have to be mitigated through putting in place the system with skilled manpower. Importance of project

communication for project success demands recognition. The problem of low priority given to project works particularly communication has to be solved.

- Absence of regular and frequent project monitoring is found to be the core factor for project failures in the area. Thus, in addition to the need to focus on regular and frequent monitoring, sharing monitoring reports with all stakeholders and taking appropriate and immediate measures to keep projects 'on course' needs top priority. Besides, inputs from monitoring feedbacks have to be documented and utilized in project evaluations.
- Project evaluation culture should not be limited to donor driven projects but is a good culture to be borrowed to public sector projects. Projects have to be evaluated before start (ex-ante), during implementation (on-going) usually called mid-term evaluation, upon termination (terminal), and after termination (ex-post) to see the impact of that particular intervention after some years of completion. Moreover, lessons from evaluation have to be properly documented and utilized in designing new projects and management of active projects.
- Finally, the existing government contract administration and procurement rule needs revision. Least price should not be the merely criteria to select winners. The revision is expected to include past performance profile of tenders, experience of working in hardship conditions, current level of technical, financial, logistics etc capacities of contractors among others. Moreover, contractors are expected to calculate the probable high inflation rate of construction materials and accordingly incorporate during competition than complaining for price revision after award. Yet, in situations where causes for project delay are out of contractors' control, there should be a room among project owners to make price revision.

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Appendices

Appendix 1. Questionnaire

Addis Ababa University
School of Graduate Studies
College of Development Studies (CDS)
Center for Regional and Local Development Studies (RLDS)

Dear Respondent,

I am a Post Graduate Student at Addis Ababa University, College of Development Studies, Institute of Regional and Local Development Studies (IRLDS). Currently, I am conducting my Masters of Arts (M.A) Thesis on 'Project Failures and Factors: The Case of Four Public Sector Undertakings in Illu-Ababora Zone, Oromia Region'. The purpose of the study is merely academic. The research covers tfive years (2007-2011).

The general objective of the research is to examine whether public sector projects are successfully implemented or fail, thereby find out the major project implementation and management challenges/factors, and propose some easing strategies to surmount the identified challenges for future successful project execution.

The information you give will never be displayed anywhere by your name but only the overall conclusions will be reported. But, be conversant that the information you provide contributes to successful project implementation and management for better future development works in the zone. So, I kindly request you for genuine responses.

Thank you very much for your cooperation!

Feyisa Tefera Hika

Part One: General Information about the Respondent

1.1. Full name of the respondent (Optional) _____.

1.2. Sex: Male ☐ Female ☐

1.3. Age in completed years _____.

1.4. Education level and type _____.

1.5. Number of service years _____.

1.6. Current position _____.

1.7. Organization _____.

Part Two: Assessment of Project Parameters

2.1. What is the experience of your organization in managing project time?

A) Most projects are completed at the planned time

B) Most projects usually delay than the planned schedule

2.2. If most projects not competed at the planned time, for how long they usually delay?

A. For about 50% of the planned time.

B. For about double of the planned time.

C. For about triple of the planned time.

D. More than triple of the planned time.

2.3. What is the experience of your organization in managing project budget?

A) Most projects are completed within the planned budget

B) Most projects require additional budget for completion

2.4. If completion required additional budget than planned, haw much was that?

A. <15%

B. 15-30%

C. 31-50%

D. >50%

2.5. How do you judge/evaluate the quality level of most completed projects?

A. Excellent, as per predetermined specifications.

B. Complained, not as per predetermined specifications.

Part Three: Organizational/Institution Related Challenges

3.1. How is the content of your organizational structure with reference to project management?

A. Has a project manager/coordinator and an engineer/construction supervisor's post.

B. Has a project manager/coordinator but lacks an engineer/construction supervisor's post

C. Has an engineer/construction supervisor's but lacks project manager's/coordinator's post.

D. Has neither a project manager/coordinator nor an engineer/construction supervisor's post.

E. Others; specify _____ .

3.2. If A, B, or C above, was it filled with human power during the past years?

A. It was properly filled with related manpower

B. Filled with irrelevant manpower

C. Not filled with manpower

3.3. If not filled with relevant manpower, what do you think is the reason? (Multiple responses are possible)

A. Shortage of budget

B. Shortage of skilled manpower on the market.

C. Lack of organizational commitment/goodwill.

D. Problem in assigning people to relevant position.

E. Others; specify _____.

3.4. How do you evaluate/judge the skill and educational background of people working on project implementation and management in your organization?

A. Have both relevant education and experience in project implementation and management.

B. Have relevant education but lack direct experience in project implementation and management.

C. Have relevant experience but lack related education in project implementation and management.

D. Lack both relevant education and experience in project implementation and management.

3.5. If C or D above, what do you think is the reason?

A. Shortage of relevant man power with relevant education on the market.

B. Shortage of budget to recruit appropriate man power from the market.

C. People are assigned to such posts randomly.

D. Other reasons; specify _____.

3.6. How do you measure level of employees' commitment for successful project implementation and management?

A. Highly committed.

B. Partially/seasonally committed.

C. Not committed.

3.7. If B or C above, what do you think are the causes?

A. Lack of incentive.

B. Low awareness about project objectives and goals.

C. Lack of knowledge about project management.

D. Dissatisfaction with projects.

E. Others; specify _____.

3.8. How do you judge/evaluate level of political commitment among organizational political leaders for project implementation and management?

A. Highly committed.

B. Partially/seasonally committed.

C. Not committed.

3.9. How do you compare political priority given to project works and other issues?

A. Project works have high priority.

B. Other issues have high priority.

C. Others; specify _____

3.10. How are activities prioritized in your organization?

A. Project implementation and management are given top priority.

B. Other organizational issues are given high priority.

3.11. Does your organization have enough logistics (like vehicle and monitoring budget) for project monitoring?

A. Yes, has both vehicle and monitoring budget.

B. Has vehicle but no monitoring budget.

C. Has monitoring budget but no vehicle.

D. Lack both vehicle and monitoring budget.

E. Other conditions; specify _____.

3.12. If your organization has both or either of the two above, how is the utilization?

A. Project resources are merely used for project implementation purposes.

B. Project resources are used for other purposes.

C. Others; specify _____.

3.13. How do you feel about the presence of rent seeking behavior/corruption in project implementation and management in your organization?

A. I feel there is rent seeking behavior/corruption

B. I feel there is no any rent seeking behavior/corruption

C. Do not have any clue

3.14. If you feel there is a rent seeking behavior/corruption, when and at what level does that happen? (Multiple responses are possible).

A. During tender process at top management level.

B. During implementation at middle and immediate supervisors' level.

C. During effecting payments at all levels.

D. Others; specify _____.

3.15. If yes again, to what extent does rent seeking behavior/corruption affect project implementation and management in your organization?

A. High negative impact.

B. Moderate negative impact.

C. No, negative impact.

3.16. How is the nature of coordination and collaboration among different public enterprises undertaking public projects at zone level?

A. There is good coordination and collaboration

B. No coordination and collaboration

3.17. If 'A' above, what are the areas of coordination and collaboration?

A. Logistics, financial and man power.

B. Only logistics.

C. Only finance.

D. Only man power.

E. Others; specify_____.

3.18. If there is no coordination and collaboration, what do you think are the reasons?

A. Poor coordination and collaboration skills among sectors.

B. No will among sectors to be coordinated and to cooperate.

C. Low awareness among sectors about the benefits.

D. Other reasons; specify _____.

Part Four: Physical, Climatic and Infrastructure Related Factors

4.1. How do rugged topography, mountains, valley and gorges affect project implementation? (Multiple responses are possible).

A. By hindering/challenging accessibility in general.

B. Challenging transportation of construction materials.

C. Challenging monitoring.

D. Shortage of labor force.

E. Others; specify _____.

4.2. How long is the duration of annual rainfall in your most project sites?

A. <3 months

B. 3-6 months

C. 6-9 months

D. >9 months

4.3. How does long rainy season affect project implementation? (Multiple responses are possible).

A. By hindering accessibility of man power (labor) to sites.

B. By limiting working hours.

C. By hindering transportation of construction materials.

D. By limiting monitoring work.

E. Others; specify _____.

4.4. How do you see accessibility of most project sites by road?

A. Accessible only during dry seasons via routes made by the community.

B. Accessible only during dry seasons via dry weather roads.

C. Accessible during all seasons via all weather roads.

4.5. How is the condition of occurrence of bridges on the frequent rivers to project sites?

A. Most rivers have bridges

B. Most rivers do not have bridges

4.6. If 'B' above, how does that affect project implementation and management?

A. By hindering accessibility of man power (labor) to sites.

B. By limiting working hours.

C. By hindering transportation of construction materials.

D. By limiting monitoring work.

E. Others; specify _____.

4.7. If there are no all weather roads and no bridges on the frequent rivers to project sites, what solutions are usually taken for accessibility? (Multiple responses are possible).

A. Sites are reached only during dry seasons.

B. Materials are transported by pack animals and the community.

C. Designs are changed and constructions are made using locally available materials.

D. Other options are used; specify _____.

Part Five: Challenges Related with Project-Cycle Management

5.1. What is the source of most project ideas in your organization?

A. Project ideas developed by technical specialists/experts.

B. Project ideas developed by entrepreneurs.

C. Project ideas developed by local leaders.

D. Project ideas developed from government policies and plans.

E. Others; specify _____.

5.2. Which is the most frequently applied model in public sectors project selection?

A. Sacred cow model (suggested and imposed by senior and powerful individuals).

B. Operating necessity model (to keep a system in operation against hostile situations).

C. Competitive necessity model (to maintain a competitive edge over other organizations).

D. Product line extension model (to develop and distribute new product/services).

E. Comparative benefit model (development merit list made for different projects).

F. Others; specify _____.

5.3. What type of project planning approach is applied in your organization?

A. Bottom-up and participatory.

B. Top-down and non-participatory.

C. Mixture of both bottom-up and top-down.

D. Other types; specify _____.

5.4. In your project planning and implementation processes, are stakeholders involved?

A. Involved always.

B. Involved some times.

C. Not involved at all.

5.5. If involved always or some times, what are the types of involvement/participation? (Multiple responses are possible).

A. By actually participating in planning, implementation, monitoring and evaluation.

B. Contribution of resources.

C. Involved in sustainable management.

D. Others; specify _____.

5.6. Do the specific projects your organization has been implementing have clear objectives and goals?

A. Projects have clear objective and goals

B. Projects do not have clear objectives and goals

5.7. If projects have clear objectives and goals, what is the relation with organizational objectives and goals?

A. Are clearly linked

B. Are not clearly linked

C. Have no relation at all

D. Others; specify _____.

5.8. How is project related documents (proposals, agreements, progresses, monitoring and evaluation reports) made in your organization?

A. Properly and regularly documented

B. Rarely documented

C. There is no any kind of project documentation

D. Others; specify _____

5.9. If there is no project documentation, what are the reasons?

A. Lack of documentation systems and skills.

B. Lack of documentation materials (computers and other materials).

C. Low awareness about the importance of documentation.

D. Other reasons; specify _____.

5.10. How are project progresses, challenges and lessons communicated with all stakeholders?

A. Regularly and properly communicated

B. Rarely and occasionally communicated

C. No regular and proper communication

D. Others; specify _____

5.11. If project communications are rarely made or not made at all, what do you think are the main reasons?

A. Lack of communication skills

B. Low awareness about importance of communication

C. Low priority to project work particularly communication

D. Other reasons; specify _____.

5.12. How often is project monitoring made to project sites?

A. There is no regular monitoring.

B. Project monitoring made within 6-8 weeks.

C. Project monitoring made with 4-6 weeks.

D. Project monitoring made within 2-4 weeks.

E. Project monitoring made every two weeks and less than two weeks.

2.13 What types of project evaluations are made in your organization?

A. All types (ex-ante, ongoing, terminal and ex-post).

B. Only ongoing and terminal.

C. Only terminal.

D. No project evaluation at all.

E. Other types; specify _____.

5.14 If monitoring and evaluations of projects are properly conducted, what are the benefits?

A. Used to take lessons in new project implementation

B. Findings are used in designing new projects

C. No proper utilization of evaluation findings

D. Others; specify _____

Part Six: Contract Administration, Price and Contractor Related Factors

6.1. How do you evaluate the operational government contract administration rule on project implementation and management?

A. Good, has positive contribution.

B. Challenge, adversely affect project implementation.

6.2. If 'B' above, how does it affect? (Multiple responses are possible).

A. Allows contractors of poor potentials to win if found least bidders.

B. It is open for corruption.

C. Discourages competent and high potential contractors.

D. Adversely affect quality of project outputs.

E. Others; specify _____.

6.3. What are the impacts of inflation in the price of construction materials on project implementation? (Multiple responses are possible).

A. Delay in completion time.

B. Reduces quality of outputs.

C. Resulted in termination of agreement.

D. Loss on contractor.

E. Others; specify _____.

6.4. How do you evaluate/judge the capacity of most contractors operating in the zone?

A. Capable both technically and in terms of logistics as per their levels.

B. Capable technically but lack logistics.

C. Not capable both technically and in terms of logistics against their levels.

6.5. How do you evaluate/judge the level of commitment of most contractors operating in the zone to operate as per agreement?

A. Highly committed.

B. Partially committed.

C. Less committed.

Part Seven: General Questions

7.1. If there is any project of your organization partially or totally failed, please list some of them with their location, starting from the recent ones and condition/level on which it is stopped.

_____

_____

_____

_____.

7.2. What do you think are the major reasons for total failures of those projects?

_____

_____

_____

_____.

7.3. What conditions do you think will be fulfilled for successful project implementation and management?

_____

_____

_____

_____.

Thank you very much for your genuine responses!

Appendix 2. Key Informants' Interview Guide

1. Would you tell me your current position in your organization, level and type of your education and experience on project management?
2. What is your general experience in your organization in project implementation and management with reference to time, budget and quality of outputs?
3. Does your organizational structure have positions related with project management? If yes, was that filled with relevant manpower during the past years? Are the employees in your organization committed for project work?
4. How do you see political commitment and priority for project implementation and management?
5. How is logistics availability and utilization in your organization for project related activities?
6. Do you see any rent seeking behavior/corruption in project management? If yes, when and at what level? How does that affect project implementation?
7. How is the nature of coordination and collaboration among public sectors in project management?
8. How do topographic nature of the landscape and long rainy season affect project implementation?
9. What is the impact of poor infrastructure development (roads and bridges) on project implementation?
10. How are projects selected? What are the criteria for selecting most projects?
11. Are all stakeholders involved in project-cycle management?
12. Do projects have clear objectives and goals? Are they clearly linked with organizational objectives and goals?
13. How is project related documentation process?
14. How and in what ways are project related issues communicated?
15. Are there project monitoring and evaluation processes and tools in place? How often and by whom are these activities done? What are the outcomes?
16. What is the impact of the existing government contract administration rule on project implementation and management?
17. What are the influences of high inflation in the price of construction materials in project implementation?
18. What are the challenges of project implementation and management related with contractors?
19. Do you know any project that is totally/partially failed? If yes, what do you think are the root causes?
20. What do you think must be fulfilled for successful project implementation and management in general?

Appendix 3. Focus Group Discussion (FGD) Guide

1. How is the experience of your organization in project implementation and management? Are projects completed before or on planned time, within planned budget and as per specified quality?
2. Is your organizational structure, skill of human resources and employees commitment convenient for successful project implementation and management?
3. How do you see level of political commitment and priority for project management?
4. How are organizational priority and availability and utilization of logistics for project implementation and management?
5. Do you see any corruption/rent seeking behavior in project work? If yes, at what level and when? How does that affect implementation of projects?
6. How do topography of the zone and long rainy season affect project implementation and management?
7. How does poor infrastructure development (like road and bridge) challenge project work?
8. How are projects selected in your sector?
9. What are the project planning processes followed in your organization?
10. Are project objectives and goals and organizational goals related and linked?
11. How is project related documentation process?
12. How are project issues communicated?
13. How often and to what levels of details are project monitoring and evaluation carried out? What tools are used and what are the outcomes?
14. How does the existing government contract administration rule affect project implementation and management?
15. What is the influence of high inflation in the price of construction materials on project implementation/outputs?
16. What are the challenges related with contractors' capacity and commitment on project management?
17. Is there any project that is totally or partially failed?
18. What more challenges do you face in project implementation and management?
19. What do you think must be fulfilled for successful project implementation and management in general?

Appendix 4. Format for Secondary Data Collection

Organization: _____ (To be filled by the four organizations separately)

No.	Name and type of Project	Year of project	Budget		Time		Quality		Comment
			Planned	Revised	Planned	Actual	As per agreement	Complained by client	

Prepared by:
Name _____
Position _____
Signature _____
Date _____

Official Seal Of the organization

Approved by:
Name _____
Position _____
Signature _____
Date _____

Note: The study period covers five years (2007-2011); please cover all years staring from the recent.

Appendix 5. List of KIs and Members of FGDs

No	Key Informants	
	Name	**Institution And Position**
1	Tamane Workiheh	Zone Education Office, Project Focal Person
2	Tesfaye Rundasa	Zone Health Office, Plan and Program Performer
3	Delegegn Asefa	Zone Water, Mineral and Energy Office; Hydrologist
4	Girma Tarekegn	Zone Agricultural Office; Plan and Program Performer
	Members of Focus Group Discussions	
I	**FGD One**	**Zone Education Office**
1	Getachew Abdisa	Vice Head
2	Yidnekachew Tesfaye	Process Owner
3	Dame Hunde	Plan and Program Process Owner
4	Tamane Workihen	Project Focal Person
5	Taye Alemu	Construction supervisor for MDG Projects (MDGP)
II	**FGD Two**	**Zone Water, Mineral and Energy Office**
1	Wasse Ejerso	Head
2	Getchew Hika	Process Owner
3	Delegegn Asefa	Hydrologist
4	Adugna Alemu	Hydraulic Engineer
5	Daniel Etefa	Geologist
III	**FGD Three**	**Zone Finance and Economic Development Office**
1	Gutema Daba	Vice Head and Planning and Budget Process Owner
2	Teferi Ayana	Accounting Process Owner
3	Kasahun Geleta	Budget Expert
4	Belayneh Lencho	Data Collection, Analysis and GIS Expert
5	Dereje Negasa	Monitoring and Evaluation Expert

Declaration

I, the undersigned, declare that this Thesis is my original work, which has not been presented for a degree in this or any other university; and all sources of materials used in the thesis have been duly acknowledged.

Name: **Feyisa Tefera Hika**

Signature: 

Date of submission: **June, 2012**

Advisor:

Name: **Issac Paul (PhD)**

Signature: 

Date: **June, 2012**