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**ASSESSMENT OF EMPLOYEE TRAINING AND DEVELOPMENT
ON PROJECT PERFORMANCE: THE CASE OF ADDIS ABABA
WATER AND SEWERAGE AUTHORITY WATER AND
SANITATION DEVELOPMENT AND REHABILITATION PROJECT
OFFICE**

BY

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JUNE, 2018

ADDIS ABABA, ETHIOPIA

Addis Ababa University

College of Business and Economics

School of Commerce

MA in Project Management (Extension Programme)

**Assessment of Employee Training and Development on Project Performance:
The Case of Addis Ababa Water and Sewerage Authority Water and
Sanitation Development and Rehabilitation Project Office**

BY

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Advisor: Fesseha Afework (PhD)

**A Thesis Submitted to Addis Ababa University School of Commerce
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of the Degree of Master of Art in Project Management**

June, 2018

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Declaration

I, the under signed, declare that this thesis is my original work, prepared under the guidance of Fesseha Afework (Assistant Professor). All sources of material used while working on this thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any type of degree.

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Letter of Certification

To: Addis Ababa University

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**Title: Assessment of Employee Training and Development on Project Performance:
The Case of Addis Ababa Water and Sewerage Authority Water and Sanitation
Development and Rehabilitation Project Office**

This is to certify that Gezahegn Assefa Micho has worked on the title “Assessment of Employee Training and Development on Project Performance: The Case of Addis Ababa Water and Sewerage Authority Water and Sanitation Development and Rehabilitation Project Office” under my supervision. This work is original in nature and it is suitable for submission in the partial fulfillment of the requirement for the Degree of Master of Arts.

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Lists of Acronyms and Abbreviation

AAWSA: Addis Ababa Water and Sewerage Authority

AU: African Union

BPR: Business Process Reengineering

ECA: Economic Commission for Africa

GC: Gregorian Calendar

HR: Human Resource

HRD: Human Resource and Development

m³: Cubic Meter

PMBOK: Project Management Body of Knowledge

PMI: Project Management Institute

SWOT: Strength, Weakness, Opportunity and Threats

T&D: Training and Development

TNA: Training Needs Assessment

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ABSTRACT

The focus of this study was to assess employee training and development on project performance undertaken by AAWSA Water and Sanitation Development and Rehabilitation Project Office. In this study cross sectional data was collected using self-administered questionnaire containing quantitative and qualitative question. In this study 38 sample size was used. The interviewed person was also purposively selected from the HRD and engineering department who have full information about the issues under consideration. Descriptive statistics was employed to analyze the data. The study indicated that 34.3% of the respondent was agreed that the training provided by the project office had improved their project performance. The organization used off-the-job training methods as ascertained by 57.9% of the respondents. It was also found that the project office had exercised training needs assessment, as agreed by 31.6% of the participants, to identify training needs of the employees at three levels i.e. organizational analysis, task and individual analysis. The study recommended that in order for project office to be successful and build potential and strengthen employees' competencies, it should provide adequate training and development opportunities and coaching for employees who are not identified as high potentials. Although existing training needs assessment practices of the project office are good, it is recommended that training and development program should be designed based on systematically and professionally analyzed needs assessment and ensure participatory training needs assessment. The project office should apply on-the-job training methods to be more effective as most of the activities are technical.

KEY WORDS: *Employee, Training and Development, Training Needs Assessment, Project Performance*

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

In today's world where competition among different organization is very strong, employee play crucial role in order to cope up with this stiff competition. Organizations not only compete for customers, but also complete for employees (in a war for talent) as human factor has been emerged as the most important sources of competitive advantage for an organization. Trained human resources are keys to maintaining a competitive advantage (Schonewille, 2001). Training can be a source of competitive advantage. As a result, there is a high interest among organizations in talent acquisition and management and retention in order to retain its position in the competitive and continuously changing market environment. For this reason organization hunt skilled and talented employees in addition to placing high priority on continues learning in order to upgrade their employees' skills.

Skills can be improved with the help of training. Training has significant implications on the productivity of the employees of an organization and personal development. The primary goal of training is to divulge to employees a new set of knowledge, skills, abilities, behavior or attitude that will enable them to be more successful in their day to day undertakings. Armstrong (2006) described the objective of training and development is to develop the skills and competences of employees to improve their performance; to help people grow within the organization in order for the organization to meet its future HR needs. Training and employee productivity correlates positively (Ahmed & Yohanna, 2014). Ng'ang'a, Weru, Travo and Sakwa (2013) also found the positive correlation between training and employee productivity. Ng'ang'a et al., (2013) further described that, training and development has explained 14.5% of the variation in organizational performance. The ineffectiveness of training and development of employees in the organization will reduces organization's productivity, as organizations depend on having people with the right skills, attitudes and capabilities in order to meet its goals and objectives effectively.

Training and development in organizations has come to be seen as a normal cost of doing business in order for companies to maintain productivity (Percival, Cozzarin, & Formanek,

2013) and stay competitive in the marketplace. Expenses made on training and development has been started to be considered as a capital investment for an organization because it plays strategic role in the success of an organization. Organizations view expenditure on training and development as a profitable investment that yield overall returns and benefits to organizations and employees.

Training has strong influence in enhancing staff productivity and that is why most organizations are mindful and invest their resources in training and development. Falola, Osibanjo and Ojo (2014) on their paper done on banking industry have found the strong relationship between training and development, employees' performance and competitive advantage. The investment in training that a company makes also signifies how the employees are valued by their organization.

Armstrong and Taylor (2014) stated that training and development activities aim at improving the performance and productivity of the employees. Training employees' benefits employers by developing the skills required to achieve organizational goals and objectives through increased effectiveness and efficiency. Training opportunities enhance staff moral, commitment, engagement and, if based on need, result in enhanced performance. Training gives staff the understanding, practical skills and motivation to carry out particular work-related tasks. Training helps in developing core competencies and motivates employees to reach higher standards, improve operational efficiency and increase customer satisfaction. In addition, it decrease employee turnover through enhancing company's image, aids succession planning in the long run, increase morale and glimmer innovation and creativity. Imran and Tenveer (2015) in their study conducted on impact of training and development on employees' performance ascertained the positive impact training and development on employees Job knowledge, work quality & quantity, functional skills, and their motivation & loyalty and these are all linked to their performance. Hence, failing to provide adequate, timely and necessary training will results in delayed output delivery which will hopefully leads to cost and time overrun. If the output did not delivered on the right time, the benefits acquired from this undertaking will not be as what was originally planned to be.

It is worth noting that Addis Ababa, which is the political, economic and cultural center of Ethiopia, is a fast-growing African city. Until 2018 the population of Addis Ababa is increasing from year to year due to higher migration from other towns and regions of the country. In addition to being Ethiopia's political, cultural and economic capital, it is also the hub of African diplomacy, hosting the headquarters of two leading continental organizations: the African Union (AU) and the United Nations Economic Commission for Africa (ECA), which holds most of their important meetings there. As the population size increases, the demand for water supply and sewerage service will increase. In order to meet the increasing demand for water and sewerage service and to serve large size and diversified sections of the population, AAWSA should enhance its employees' project performance by increasing their skills, knowledge, capacity, moral, commitment and attitude through different training and development programs. Training and development programs also need to be effective and be able to bring positive impact on the performance of each and every employee. To my understanding, there are no studies which examine the effect of employee training and development on project performance conducted in AAWSA Water and Sanitation Development and Rehabilitation Project Office. The purpose of the study, therefore, intended to discuss one of the core functions of human resource and development which is assessment of employee training and development on project performance.

1.2. Background of Addis Ababa Water and Sewerage Authority

Ethiopia is among the countries that have demonstrated a momentous improvement in expanding access to potable water although there are disparities between urban and rural areas of the country. It was since 1900GC that piped water service was started in Addis Ababa. The first ever pipeline was installed to supply water to the palace of Emperor Menelik. During its early years, the principal sources of water were the numerous springs located at the foot of the mountain range and hand dug wells.

In the beginning, the provision of potable water was delegated to the then ministry of works. Following the defeat of fascist Italian invaders in 1934, this responsibility was transferred to the newly re-established municipal office and separate water supply service department was mandated to distribute pipe water. In order to gratify for the increasingly growing demand for

water and waste water disposal services there did arise a need for establishment of an autonomous body that would primarily focus on the provision of the service. Accordingly, Addis Ababa Water and Sewerage Service Authority was set up as per proclamation No. 68/1963 in 1971 and later (1995) restructured as Addis Ababa Water and sewerage Authority. The earliest dam was Gefersa dam located North West of the city.

According to a Brief Profile of AAWSA (2012), AAWSA is led by a general manager who is answerable to a board of directors. Under the general manager there are three deputy general managers leading the water resource and sewerage units. Besides, a project office (the office under investigation) named Addis Ababa Water and Sewerage Authority Water and Sanitation Development and Rehabilitation Project Office has been organized under the authority which focuses on developing new water and sewerage infrastructures and other works of development.

AAWSA is responsible for city's potable water supply, the conservation and control of groundwater, and prevention of its pollution, as well as ensuring the sanitary disposal of sewage. The water supply service provides 608,000 cubic meters of water per day for Addis Ababa residents from surface and ground water sources: Gefersa 30,000 m³/day Legedadi 165,000 m³/day and deep wells and other ground water sources 413,000m³/day (source: company's brusher). Waste water disposal service is rendered in two ways: vacuum trucks and sewerage network. Sewerage service is primarily delivered at three catchments; namely Kality, Akaki and Eastern catchment each plant with different waste water treatment capacity. The other waste water treatment service provided by AAWSA is through vacuum truck and public and communal latrines service in low income and public areas. The vacuum service is provided by AAWSA's own vacuum trucks and also regulates private vacuum operators but existing treatment plants do not have adequate capacity to deal with the city's volume of sludge. Existing treatment plants have inadequate capacity to address the full demand. As a result, very small population has access to the sewerage services. Generally, the problem of open defecation, unsafe containment, and lack of appropriate desludging services, transportation and treatment of waste water remains significant.

Addis Ababa Water and Sewerage Authority Water and Sanitation Development and Rehabilitation Project Office, established to undertake projects of the authority, led by the

project manager. The project office has full personnel and structured into departments and processes each with its own functional manager accountable to the project manager. The processes were categorized into support and core process based on its recently implemented business process reengineering (BPR). Support process constitutes departments like Procurement, human resource, finance and admin, planning and monitoring unit and etc while the core process constitute the engineering or technique department which is responsible for all projects undertaken by the authority. Core process performs all the processes of the project i.e. from project initiation phase to project closure and handing over to AAWSA head office.

1.3. Statement of the Problem

Since the primary goal of training and development is to contribute to the overall organizational goals, organizations are therefore expected to train and develop their staff to enhance knowledge, skill, attitude and behavior that could help them improve their performance. As a result, many organizations in Ethiopia, be it public or private, engaged in training and development of their staff and considerable financial resource is invested. It is also well known that training and development of staff has been crucial for an organization to satisfy its customer needs. Effective functioning of employee training and development system is central for the success of a project as well trained employees require less supervision, improved productivity, demonstrate greater commitment to discharge their duties and better motivated.

Preliminary investigation revealed that there were forms of training and development programs given to the project office employees. However, it is rarely conducted activities. As a result, some employees were not getting training at least once in a year and it took more than a year to get training. Due to this inadequate employee training and development program the project office encountered problems like absenteeism, turnover, lack of commitment, engagement, capabilities and motivation, inadequate skills and knowledge. In addition to the inadequacy of the T&D program, employees also complain on the process of trainers and trainee selection, proper training needs information collection and analysis of the information gathered, identification of the critical limitation areas and problems in performance of individual employees. Training and development especially the integrity of training professional, quality of training, appropriateness of the training topics and training approaches is given less attention.

There are also instances where delivered training and development activities do not match the existing gaps that the employees have. However, training and development programs should be developed with an eye on organizational goals and objectives. In addition, training and development program of the project office is unplanned and unsystematic although it has unit that facilitate training and development at head quarter level. These shortfalls arise due to the fact that the project office has fail to plan and design training program and fail to implement it as per its plan and design, ineffective training methods, and inadequate training and development program. Furthermore, its effectiveness and influence on project performance never been evaluated and no studies have been carried out.

In view of the aforementioned problems, the motive of this study was tried to analyze AAWSA's Water and Sanitation Development and Rehabilitation Project Office training and development programs had any bearing effect on project performance of the employees.

1.4. Basic Research Questions

1. Does project office's training and development program improved employees project performance?
2. What training and development methods being applied?
3. How were training and development needs of AAWSA project office employee determined?

1.5. Objectives of the Study

The general objective of the study was to assess employee training and development on project performance in Addis Ababa Water and Sewerage Authority Water and Sanitation Development and Rehabilitation Project Office.

The specific objectives were

- To investigate whether employee training and development had improved project performance or not
- To investigate the methods used to conduct training and development activities
- To investigate how training and development programs needs of employee determined

1.6. Significance of the Study

The findings of this study were expected to be significant for the following reasons.

- Firstly this particular type of study, to my understanding, had not been previously conducted on this organization. Therefore, the research would add to works that have been done in this area & used as a basis for further research by academia into the subject
- Second, the result of the study highlights areas for future researches.
- Finally, in addition to enabling the researcher to convert theoretical learning into practice, it also used for future citations and references

1.7. Scope and Limitation of the Study

The scope of the study was limited to employees of Addis Ababa Water and Sewerage Authority Water and Sanitation Development and Rehabilitation Project Office Engineering Department (core process). The target population of this study was limited to project office engineering department staffs as they were responsible to undertake project of the authority. The results of the study, therefore, hold only for AAWSA Project Office Engineering Department (core process) staff and not representative of all public projects. This was because the participants were only technical staff from AAWSA Project Office. Project performance was measured against delivery on time, on budget, on specification, & to the satisfaction of the client. External factors affecting performances of employees & project performance were not considered. Therefore, another researcher can conduct a research project by incorporating all other factors.

1.8. Organization of the Research Report

The paper is organized into five chapters. The first deals with the introductory part of the paper. The introduction covers background of the research, statement of the problem, research objectives, research question, significance of the study, and scope of the study. Chapter two is concerned with literature review. Chapter three deal with the research methodology that was used to collect and analyze the data. Chapter four will provide data presentation, analysis and discussion & findings of the result. Finally, chapter five deals with conclusion, recommendation, suggestion for future research, limitation of the study, lists of references and appendix.

CHAPTER TWO

2. REVIEW OF RELEVANT LITERATURE

2.1. Introduction

This chapter presents review of literature on the topic of assessment of employee training and development on project performance. The literature explores and discusses various issues related to the topic of the study. This includes concepts related to training and development, age, educational level, benefits of training and development, training and development processes and project performance.

2.2. Concept of Training and Development

An organization's success is determined as much by the skill and motivation of its workers as by almost any other factor. Skills and motivations are enhanced by training and development.

Training: the process whereby people acquire capabilities to perform jobs (Mathis & Jackson, 2010, p. 250). It is further explained that it provides employee with specific, identifiable knowledge and skills for use in their present jobs. Glossary of Training Terms defines training as “a planned process to modify attitude, knowledge or skill behavior through learning experience to achieve effective performance in an activity or range of activities” (Manpower Services Commission's, 1982, as cited in Wilson, 2001, p. 4). Training is a big part of developing staff and assisting them to reach their true potential.

Development – It is the growth or realization of a person's ability and potential through the provision of learning and educational experiences (Armstrong & Taylor, 2014, p. 284). It is a long term investment in human resources. Employee development refers to the capacity and capability building on an employee, and thus as of whole organization, to meet the standard performance level (Gilley, 2000). Development refers to activities leading to the gaining of new knowledge or skills for purposes of growing. Development is the process that enables people to progress from a current state of understanding and capability to future state in which higher level skills, knowledge and competencies are gained. Development is any learning activity, which is

directed towards long term needs rather than current needs, and is concerned more with career growth than immediate performance. Indeed, training and development complement each other (Aguinis & Kraiger, 2009).

Training and Development can be defined as a planned learning experience designed to bring about permanent change in an individual's knowledge, attitudes, or skills (Noe, 2011). Chandan (2007) training and development is the process of developing knowledge, skills and behaviors in people that will enable them to better perform their current and future jobs. This signifies that in both cases, employees are exposed to new skills and knowledge required to perform jobs. Both training and development are meant to boost the level of capability and employees performance. Training and development usually carried out when employees have a skill shortage or when an organization brings about a change in its system and employees are required to learn new skills (Roberson, Culik, & Pepper, 2001).

Difference between Training and Development

Training and development are two different processes but inter-linked with each other. It is based on the idea to perform all tasks in effective and efficient manner. Training is concerned with preparing employees to perform current and intended job. It is a short term process while development is gradual and aimed at long term growth and career advancement. Development is preparing employees for future work. Development focuses on building and broadening skills and knowledge of employees for future responsibilities. It is aimed at acquiring general knowledge while the scope of training is limited to specific job. Training is aimed at improving present job. Development is related to enhancing conceptual skill of the employee. Training, most often, is for non-managerial position whereas development is for managerial personnel.

Employee training and development is the process of helping employees develops their personal and organization skills, knowledge, and abilities.

Employee: is any person who is currently paid to work for an organization

Project: According to the Project Management Institute's (PMI, 2008) Body of Knowledge (PMBOK) projects are temporary endeavors undertaken to meet unique goals and objectives within a defined scope, budget and time frame. Wysocki, Beck and Crane (2000) also defined

project as a sequence of unique, complex, and connected activities having one goal or purpose that must be completed by a specific time, within budget, and according to specification.

Performance: It is the accomplishment or carrying out of something commanded or undertaken; the doing of an action or operation.

According to book of “A practical guide to needs assessment” by (Gupta, 2007, p. 18),

- **Knowledge:** is the body of facts about a subject matter and the understanding that a person acquires through study or experience. Knowledge refers to “what individuals or teams of employees know or know how to do (human and social knowledge) as well as company rules, processes, tools, and routines (structured knowledge)” (Noe, 2010, p. 56).
- **Skill:** knowledge that one can proficiently apply in appropriate situations.
- **Performance:** includes accomplishments, the process that results in accomplishments, and the capacity for future performance.

2.3. THEORETICAL REVIEW

Theoretical review part examines the corpus of theory that has accumulated in regard to an issue, concept, theory, phenomena.

2.2.1. Education Level

Education is defined as “activities which aim at developing the knowledge, skills, moral values and understanding required in all aspects of life rather than a knowledge and skill relating to only a limited field of activity” (Wilson, 2001, p. 5). Education level refers to the academic credentials or degrees an individual has obtained. Liberal education is “the acquisition of the art of utilization of knowledge and aims to develop the powers of understanding and judgment” (Bell, 1979, p. 473). Education is one of the most important aspects of social and economic development. It is an important factor influencing an individual’s attitudes and opportunities. Education improves capabilities and is strongly associated with job performance.

2.2.2. Age

What people think about older and younger workers quite different from what has been shown in research although no consistent evidence. There is a widespread belief that work performance declines with increasing age. Stereotype is a personal belief and expectations about the workplace age group. Often these stereotypes are biased, negative preconceptions about older workers. If stereotypes cause an increase in the rate of turnover within older workers, organizations fail to take advantage of skilled and productive workers.

2.2.3. Training and Development

It has been widely acknowledge that the victory of an organization in today’s world relies on the quality of its human resources. In order to ensure that employees are equipped with the right kind of skills, knowledge and abilities to carry out their assigned tasks, training and development plays decisive role towards the growth and success of the organization. Training and development is useful to both employers and employees of an organization. Scholars confirmed that investing in human resources is determining factor to achieve the desired level of productivity although it represents a significant expenditure for most employers. Wilson and

Hash (2003) stated that training is one of the most central strategies for organizations to help employees gain appropriate knowledge and skills required to meet the job challenges.

Training and development is crucial to achieve objectives of the organization. The significance of training and development is harassed by budding gap between existing competencies and skills and those competencies and skills that are essential to meet future confronts. Training and development programs are meant to narrow the gap between current and expected future performance. Ongoing training and development programs improve employee productivity, employee morale, motivate employees (Mathafane, 2007), reduce employee turnover and employee's need for supervision as they can make better decision on their own. It also enables them to be involved in effective problem solving. Paynes (2008) stated training and development programs seek to change the skills, knowledge, or attitudes of employees required by the job post. Training builds the employee's confidence because he/she has a stronger understanding of the industry and the responsibilities of his/her job. In general, the benefits that an organization receives from training and developing its employees, includes: increased performance, increased efficiency resulting in financial gains, reduced employee turnover, and decreased need for supervision.

2.2.4. Training and Development Improves Employee Performance

Factors that determine individual performance are ability, work environment, capabilities and others to do the job. Individual performance changes as a result of learning. Maintaining improved performance is a result of having the right personnel and skills. Well done training and development enhance skills, greater ability to adapt and innovate, and performance improvement (Mathis & Jackson, 2010). Different scholars have ascertained that training brings improvement in effectiveness and productivity, reduced cost and improved quality. Training and development also helps the managers in succession planning.

2.2.5. Training Provides Competencies that Enable Employee to Perform Efficiently

Training and development has a vital role in bridging the gap that exists between knowledge and skills required for the job and creates significant difference on employees own ability. According to Noe (2010), definition of training, training facilitates employees learning of job related

competencies. These competencies include knowledge, skills, or behaviors that are critical for successful job performance. It is very difficult for an employee to perform well at the job place without any pre-training. Training will not only equip them, but it can also be an excellent source of employee motivation.

2.2.6. Training and Development Enhance Employee Job Satisfaction, Motivation and Morale

Sometimes job satisfaction is called morale. Training employees show them that an organization care enough to invest in them. Seeing that organizations are willing to do that makes the employees feel important, and that just boosts their motivation. Training boosts up the morale of workforce (Zahra, Iram & Naeem, 2014). They explained that employees get motivated through training as they get clarity about their roles, boundaries and expectations from them. Training develops decision making and problem solving skills. Training and development programs enhance job satisfaction and help to motivate employee. Mathis and Jackson (2010) stated that workers capabilities and determination to get work done regardless of difficulties are factors that can inhibit motivation and work performance and hence organizations spend substantial amount of money to inspire their employees. Employee performance is higher in pleased and happy workers. Increase in job satisfaction results in improved performance (Armstrong, 1995). This is due to the fact that these employees exert maximum effort to accomplish their duties efficiently and more likely to be creative and innovative. These employees also offer diversity of skills, knowledge and talents to a company and hence represent the most vital and valuable asset of the company. Therefore, organizations are required to keep such human asset by keeping them motivated through effective training and development for betterment and success of the company. High performance is achieved by well-motivated people who are prepared to exercise unrestricted effort (Armstrong, 1995).

2.2.7. Training and Development Reduce Employee Turnover

Not all turnovers are negative for organization. Involuntary turnover, employee terminated for poor performance or work rule violation, is triggered at all levels by employers. Retention of high quality employees requires investment in the development of their skills, knowledge and

abilities. The longer retention of high performing employee is a critical part for an organization as they are in a better position to boost the performance of the organization. According to Mapelu & Jumah (2013) increase in employee development would lead to a decrease in employee turnover. Training can be linked to lower employee turnover and reduced time to hire new employees (Mathis & Jackson, 2010). According to them, if new employees are hired, supervisors and managers usually do the recruitment, selecting and training. The more committed an employee is, the less a desire they have to terminate from the organization. A committed employee is one that will remain with the organization. When there is adequate training and development in an organization, employees are more likely to feel valued, and therefore, less likely to change employers.

2.2.8. Training and Development Process

As training and development is a systematic process, it follows some defined steps. Any organizations need to have a training and development plan in order to enhance its employee knowledge and skills and to best out perform in the industry in which it is competing. Identification of Training and Development Needs by conducting assessment of organizational needs, Employee needs and Job analysis is the first process. Following needs identification, objectives should be set. In line with this objective, training will be designed. After the training has been well designed, selecting the training methods taking into account the resources allocated and the objectives of the training is the other step. Implementing the training and development program and evaluating the process is the last steps in training and development process.

2.2.9. Training and Development Needs Assessment (TNA)

Needs identification is the starting point in any training and development activity (Hamza, 2012). The need for training and development is decided by the employee's performance deficiency i.e. Training and development need = standard performance - actual performance (Kulkarni, 2013, p. 142). According to Paynes (2008) a need can be simply defined as the difference between what is currently being done and what needs to be done. A training needs assessment is the method of determining if a training need exists and if it does, what training is required to fill the gap.

Needs assessment refers to the process used to determine whether training is necessary (Noe, 2010, p. 103). It is widely believed that need assessment is the key factor in training and development design process to enhance training effectiveness. This assessment considers issues of employee and organizational performance to determine if training can help (Mathis & Jackson, 2010, p. 260).

A training needs assessment can be referred as determining the gap between what an employees must be able to do and what he or she can or is currently doing. Needs assessment can be defined as “a diagnostic process that relies on data collection, collaboration, and negotiation to identify and understand gaps in learning and performance and to determine future actions” (Gupta, 2007, p. 15). Training must be geared towards the goals and objectives of the organization. Before training design issues are considered, a careful needs analysis is required to develop a systematic understanding of where training is needed, what needs to be taught or trained, and who will be trained. Effective training need analysis lay a basis for designing and delivering highly targeted training and development program to achieve specific outcome. It also helps develop a course based on the real needs and skill gaps of the employee.

According to different literatures, a training needs assessment typically involves a three-step process that includes organizational, task and person analysis (Boydell, 1979; Mathis & Jackson, 2010, p. 261).

- Organizational analysis, which might comes from various operational measures of organizational performance, identifies the training needs of different departments or subunits. We can also determine the skills, knowledge, and abilities a company needs to meet its strategic objectives. Organizational analysis involves determining the appropriateness of training, given the company’s business strategy, its resources available for training, and support by managers and peers for training activities (Noe, 2010, p. 103).
- Task analysis identifies and describes all the tasks performed by employees in a particular job and the knowledge, skills, attitudes and other behaviors needed for successful job performance. The aim of task analysis is to produce a list of tasks required to perform a particular job, and then for each task, to identify the skills and competencies needed to perform the task (Anderson, 2000).

- The third means of diagnosing training needs focuses on individuals and how they perform their jobs. This level is about determining who needs the training and what they need to be trained on. According to Noe (2010) Person analysis involves (1) determining whether performance deficiencies result from a lack of knowledge, skill, or ability (a training issue) or from a motivational or work-design problem, (2) identifying who needs training, and (3) determining employees' readiness for training. At person analysis level, the organization is seeking to identify any shortfall in the individual's knowledge, skills and attitudes required to perform his or her job. It also identifies which individuals within an organization should receive training and what kind of instruction they need. This analysis identifies who has mastered - and who needs to learn - the skills and competencies required to undertake the task.

A systematic training and development need analysis enables to determine whether training is needed and what training is relevant to employees' jobs, reason out why the training activities should be done, to clearly set out the goals and objectives of the training and the desired outcomes, to determine the contents of the training and its paramount solution for the performance problem or development need and gain management support (Boydell, 1979). Before creating training and development programs, organizations should perform a needs assessment to determine which employees need training or development and what type of skills or knowledge they need to acquire (Jones & George, 2003). Hence, training need assessment is a means to identify a gap between what is and what ought to be. Training has to first identify the target groups and assess their training needs. Conducting need assessment before training is planned and delivered enables to set appropriate goals.

2.2.10. Design of Training and Development Programs

Once training need analysis has been identified and training and development program has been decided, training objectives and priorities can be established by taking into account the gap analysis. Training and development needs can be prioritized depending on the organizational objectives (Mathis & Jackson, 2010). Training and development objectives set out what trainees should be able to achieve after undergoing training. Since training and development is aimed at bettering the performance of individual and organization as well, it requires vigilant training

design to address the intended objectives. The training design process refers to a systematic approach for developing training programs. Training is about value addition to ensure that employees can efficiently perform their jobs, gain self-confidence and seek self-growth. It helps them enhance their technical competencies. To attain this objective, proper training design is a pre-requisite to achieve this objective. Designing a training course is like mapping out a road trip or creating a journey (Hamza, 2012, p. 23). After needs assessment has been properly identified, an effective training and development program should be designed to get the full benefit.

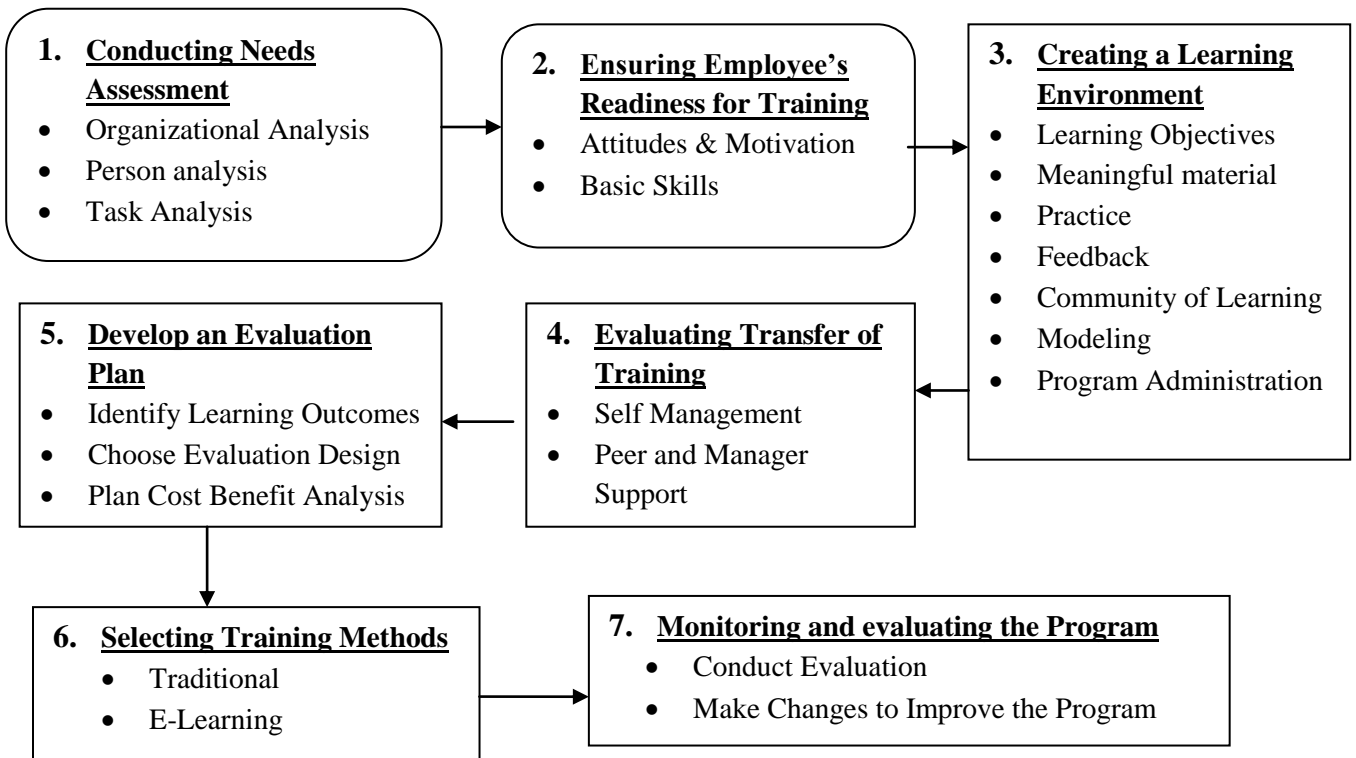
The following four central questions must be answered before we begin designing a training course according to (Hamza, 2012, p. 15). These are:

- Who is the target audience for a proposed training?
- What do members of this target audience presently do in their roles?
- What gaps exist between what these providers know how to do, and what they need to know to carry out their roles successfully?
- And finally Outcome: will the training help fill this gap?

According to Hamza, there are five primary components of a training design:

- Learning outcomes: what will participants be able to do as a result of completing the training
- Training materials: what materials need to be developed and what will the materials include
- Trainers and content experts: who will facilitate the training and act as content expert to review materials
- Training methods: what methods will be used so that participants meet the learning objectives and learn the content most effectively
- Logistics: where and when will the training take place? Who will be invited and how will they be notified? Will a per diem be paid to participants? Etc.

Noe (2010) the training design process refers to a systematic approach for developing training programs. He described the process of training design in the following figure



Source: Noe (2010) page 7

2.2.11. Methods of Training and Development Delivery

Training is the use of methodical and planned tutoring activities to support learning. Training opportunities enhance staff commitment and, if based on an objective assessment of need, result in a more efficient and effective organization. When the training has been designed, the actual delivery will begin. Training methods are tools which attempt to create learning climate for the participants.

Training and development can be delivered in a number ways. Mathis and Jackson (2010) categorized training delivery options into internal and external. The internal delivery option includes traditional classes, on the job training, self guided training, mentoring/coaching, job shadowing and etc while external delivery option includes third party delivered training, web conferences, training at outside location, podcasts, educational leave, blended training and finally

teleconferencing. Noe (2010) described that the first step in choosing a training method is to identify the type of learning outcome that you want training to influence. Whatever the approach used, nature of training, subject matter, number of trainees, training resources, time allotted and other considerations must be balanced when selecting training delivery methods.

There are two most popular methods that organizations choose from for training and developing skills, knowledge and attitudes of their employees. These are on-the-job training given to organizational employees while performing their regular work and off-the-job training which involves taking employees away from their original work environments for a specific period. The basic principle of on-the-job training is learning by performing by apply practical approach that enable trainees to get direct involvement of using machineries and equipment whereas off-the-job is learning by acquiring theoretical knowledge. On-the-job training includes coaching, mentoring, job rotations and transfers, apprenticeship, internships, orientations, and job instruction or job shadowing. Off-the-job training includes lectures, discussions or conferences, vestibule training, films or audiovisuals, case studies, seminars, role playing, and simulation. On the job training can be useful for training newly hired employees, upgrading experienced employees' skills when new technology is introduced, cross-training employees within a department or work unit, and orienting transferred or promoted employees to their new jobs (Noe, 2010, p. 264). On-the-Job training requires less investment in time or money for materials, the trainer's salary, or instructional design. Off-the-job training is expensive as compared to on-the-job and requires choice of training place and experts and arrangement of training facilities. In any case the training objectives and the outcome the training seeks to achieve, organization's strategy, goals and resources available, the needs assessment and the target groups to be trained determine the choice of the method.

The importance of training method as described by (Hamza, 2012), needs to be carefully chosen to match the purpose. The application of appropriate training methods and techniques can help maximize the benefits of training and selection of the training and development methods is crucial. Applying wrong method will lead to undesired outcome. Their motivation to learn is also one of the most critical factors affecting training effectiveness and people will learn more if they are motivated to learn (Armstrong & Taylor, 2014). Training should be designed based on skill deficiency of the trainees and organizational objectives. If it is made so they get good results.

2.2.12. Implementation and Evaluation of Training and Development Programs

Training is an organization's planned efforts to help employees acquire job-related knowledge, skills, abilities, and behaviors, with the goal of applying these on the job to substantially contribute to organizational performance and productivity. Completing training design does not mean that the work is done because implementation phase requires continual adjusting, redesigning, and refining. Implementation of the training programs requires money, time and energy. Hence, implementation must be carried out in a way that will enable the organization to maximize the results of finance, time and energy invested on it. Management also needs to make sure that necessary resources are available and how the training and development programs are going on.

Companies invest in training because learning creates knowledge; often, it is this knowledge that distinguishes successful companies and employees from those who are not. Evaluating the training provides a way to understand the investments that training produces and provides information needed to improve training. The main reasons to evaluate training program is, for improving the future training program, secondly to identify the reason to continue or drop the training program and lastly to justify the training budget. An output of evaluation helps to design and conduct effective future training and development programs. The objective of evaluation is to determine the effectiveness of training and development in line with the intended individual and organizational goals and objectives and to offer opportunities for improvement. The methods of evaluation will depend on factors that are taken into account, the relevancy and type of data collected.

2.2.13. Project Performance

Training provides competencies that enable staff to perform efficiently. Training and development are aimed at improving employees' skills and abilities. The performance of any organization is dependent on the quality of its workforce. Employee performance is the ability of an employee to perform a given task to the satisfaction of its employer. Success can mean different things to different people. Cleland (as cited by Prabhakar & Lane, 2008, p.4) suggested that "project success is meaningful only if considered from two vantage points: the degree to which the project's technical performance objective was attained on time and within budget; the contribution that the project made to the strategic mission of the enterprise." De Wit (1988)

described the complexness of measuring project success and concluded that a project that can be successful for one party is disaster for another. This author recommended that performing an intermediate or post-completion audit is a valuable exercise; not so much to determine in absolute terms the success or failure but to identify what went right and what went wrong and why, in order to apply the lessons learnt on subsequent projects if appropriate.

Project success described as “a matter of perception and that a project will be most likely to be perceived to be an “overall success” if the project meets the technical performance specifications and/or mission to be performed, and if there is a high level of satisfaction concerning the project outcome among key people on the project team, and key users or clientele of the project” (Baker, Murphy, and Fisher, 1988, as cited in Prabhakar and Lane, 2008, p. 7).

According to project success consists of four components namely budget (costs), schedule (time), performance (quality and utility), and customer satisfaction and they are most highly rated as measures of success (Gido & Clements, as cited in R.G. Koelmans, 2004, p. 231). In project management, different project managers have different definitions of success based on their experience, knowledge and context they work in. In all case the definitions for project management continue to include a limited set of success criteria; namely the Iron Triangle, cost, time and quality and seems continued to be he preferred success criteria.

2.3. EMPIRICAL REVIEW

Education improves capabilities and is strongly associated with job performance. Berhan (2008) described the significant positive relationship between level of education, preparedness and job performance. In the same paper he pointed out that there was no significant relationship between gender, age and marital status with job performance. Gede and Lawanson (2011) showed the significant relationship between educational qualification and job performance of employees. Those who have only the higher secondary education perform better than those who have completed only the secondary education (Kotur & Anbazhagan, 2014).

There are stereotypes commonly held about older workers; age is a key determinant of performance, older workers are less able to learn, less adaptable and flexible or resistant to change, and less motivated. McGregor and Gray (2002) in their questions to explore stereotypes

found that older workers held negative stereotypes about “adaptability” factors such as computer technology and resistance to change and positive stereotypes about “dependability” factors such as reliability, loyalty and commitment. Kotur and Anbazhagan (2014) found that age and gender have direct effect on the performance of the workers to varying degrees. Their study has indicated that the performance of the employees gradually increases with their experience and after an experience of 20 years (after 45) the performance is again getting lower. They described that “it is just like the newly married couple showing more interest toward their spouse and later on the levels of interest will gradually decrease”. According to their suggestion this might have been accounted by the increasing age factor because the stepping up of the age makes them weak both psychologically and physically. Gobel and Zwlick on their discussion paper have found that productivity increases with the share of employees until the age of 50-55 and only decreases slightly afterwards. Tenure rather than age was the main determinant of job performance (Roy, 2013). Age largely unrelated to core task performance (Thomas & Daniel, 2008). They also described that age was not significantly related to employee creativity as rated by their supervisors. Conversely, age affects the job performance of the employees (Gede & Lawanson, 2011, p. 546). According to their discussion this happens due to the fact, that satisfying work which is a pre-requisite for high performance is affected by the chronological age of the workers.

Training and development improves employee performance (Kulkarni, 2013). According to Woretaw (2015) training has positive impact on improving employee job performance and is a key factor for improving the performance of the companies. Trained employees perform well when compared to untrained one. According to Khan, Khan and Khan (2011), training and development has significant effect on organizational performance. They also ascertained that training and development has reward not only for worker but the crucial benefit is for organization itself. Asfaw, Argaw, and Bayissa (2015) on their paper “The Impact of Training and Development on Employee Performance and Effectiveness: A Case Study of District Five Administration Office, Bole Sub-City, Addis Ababa, Ethiopia,” confirmed that the training and development activities in which employees had participated brings new potentials of employees in performing task and resulted in employee effectiveness. They also ascertained the positive correlation between training and development, employee performance and employee effectiveness and the relationship was statistically significant. Ugbohmeh, Nosakhare and Egwu (2016) also find out the significant relationship between appropriate training development of

banking staff and efficient performance of their functions. Habib, Zahra and Mushtaq (2015) conducted a research on impact of training and development on employee performance and productivity in Pakistan. Their study results showed a strong relation among training and development of employees on their performance and productivity.

According to Kum, Cowden and Karodia (2014), besides improving employee performance, their behavior in the organization, confidence while performing task, motivation and morale, training reduces the cost of recruitment and the training of new staff members, reduce staff turnover and improve the quality of products produced by the employee due to fact that training reduces mistakes as well as defects.

Training activities are of huge benefit at both the individual and team level (e.g., motivation, attitudes and empowerment) (Aguinis & Kraiger, 2009). They concluded that existing research provides strong evidence that well-designed training programs provide benefits to individuals, teams, organizations, and society. Sharma and Shirsath (2014) have illustrated the positive impact of training on performance of employees. New and existing employees need training to continually upgrade their skills. It also enhances employee job satisfaction and morale. According to Ugbomhe et al., (2016) training/development is tailored towards job needs and motivation of staff to higher performance. Satisfied employees are more productive than unsatisfied one and display higher level of motivated behavior and performance. Satisfaction on current job can be achieved through learning more skills to perform very well and having good opportunities to get more training and also achieving human resource goals (Osibanjo, Kehinde, & Abiodun, 2012, p. 26).

A Training and development program helps to reduce employee turnover. Nkosi (2015) in multiple regression analysis confirmed a positive and statistically significant effect training has on the intention of employees to be retained, commitment and performance enhancement. The more committed an employee is, the less a desire they have to terminate from the organization.

Training design has significant effect on organizational performance and effectiveness of training and development (Khan et al., 2011). They also ascertained that on the job training has significant effect on the organizational performance. On the job training helps employee to get the knowledge of their job in a better way (Deming, 1982). It is also recommended that

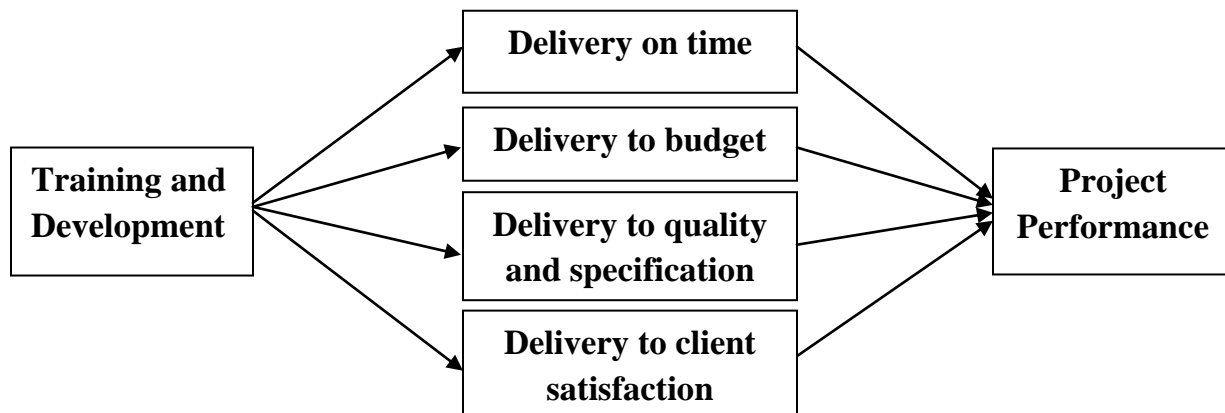
providing on-the- job training for employee is good for organization so that their employee learnt in a practical way (Tom & Frances, 2007). The application of appropriate training design and delivery methods can help maximize the benefits of training (Aguinis & Kraiger, 2009). Falola et al., (2014) found that training improves employees’ skills and competencies and mentoring plays a significant role for better performance. It was also discovered that coaching is a strategic methods of getting the best out of the employees. They concluded that behavioral training techniques have significant effect on employee performance and organizational effectiveness.

Summary of Training and Development Process

Training and development start from training needs assessment. Then design of the training program which involves identifying training goals and objectives and based on the training goals selecting ways to achieve goals. Following training design, development comes. In this phase, the training methods and all activities required in the training programs are finalized and then to implement the training process. Finally, evaluation of the training program which should takes place throughout each phase of the training process.

2.4. Conceptual Framework

As defined above training and development is a process that provides employees with skills, information and understanding of the organization and its goals. The goal of training is for employees to master the knowledge, skill, and behaviors and to apply them in their organization’s undertakings. It is a tool that is used to enhance the individual’s performance which enables him/her to contribute to success of the project.



CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

The research methodology describes the means used to collect data to address central research questions enumerated. The following part outlines the research design, the research method, the population under study, the sampling procedure, and the method that was used to collect data. This part also deals with the reliability and validity of the research instrument and ethical considerations pertaining to the research are also discussed.

3.2. Description of the Study Area

The study was undertaken at AAWSA Water and Sanitation Development and Rehabilitation Project Office. The project office is established under Addis Ababa Water Sewerage Authority (AAWSA), which is an autonomous public authority under Addis Ababa city Administration, to perform all project activities of the authority. The project office is found at Gurdshola along with Gurdshola branch. Its operational area is Addis Ababa and the neighboring towns of Oromia regional states located around Addis Ababa. The project office is mandated to undertake projects related to construction of Water Supply and Sewerage like primary and secondary distribution lines, reservoirs, pumping stations, sewers, sewerage treatment plants and others. The project office is led by the project manager. He is a full-time member of the project office and has project resources available. The majority of the project office's resources are involved in project work and the project work is generally completed for the benefit of AAWSA.

3.3. Research Design and Approach

Research design as described by (Saundres, Lewis and Thornhill, 2009, p. 136) “will be the general plan of how you will go about answering your research question(s)”. It also refers to the overall strategy that we choose to integrate the diverse components of the study in a coherent and logical way, thereby, ensuring we will effectively address the research problem. Research design constitutes the blueprint for the collection, measurement, and analysis of data.

As stated before, the primary aim of the study was to describe the effect of employee training and development on project performance. To achieve this objective, the research design for this study was descriptive research. Descriptive research helps to ascertain prevailing conditions of facts in the case under study and enables us to show truthfully the characteristics of a particular phenomenon. It also provides the opportunity to integrate the qualitative and quantitative methods of data collection.

Cross sectional study was conducted. Mixed research method/approach was employed with the intention of allowing the researcher the benefit of both quantitative and qualitative data and more complete understanding of the research problem than mono method research approach (Creswell, 2009). It also helps to neutralize/cancel the bias of any single data. Qualitative and quantitative data was collected with the help of well structured questionnaires containing both open-ended and closed-ended. The main reason of collecting qualitative and quantitative data was to acquire as much information of the entire population to be studied in relation to the effect of training and development on project performance. This enabled the researcher with in-depth understanding and perceptions of the participants under study. A descriptive statistics for analysis of data was employed to assess the effect of employee training and development on project performance.

3.4. Study Population

A population can be defined as any set of persons/subjects having a common observable characteristic. It is the broader group of people or subject to whom we intend to generalize the results of our study. In line with this, AAWSA Water and Sanitation Development and Rehabilitation Project Office has 163 employees. From this figure, majority of them were support process staff (98) and only 61 of them were core process staff (engineering department or technical staff). From 61 employees, 3 of them work experience at the project office were found below three months and hence not included into the study population. In addition, 8 employees were not found at office due to sickness, annual leave and other social cases. Therefore, study population of this research was 50 staffs engineering department constituting water supply and sewerage service division, who worked at least for three months and above.

3.5. Inclusion Criteria

Staff worked in the project office for at least 3 months and above was included in this study. Those with service year less than three months, not willing to participate, not at work because of annual leave, sick leave or social cases at the data collection period and those never attended training were excluded. The reason not including employee less 3 months of work experience in the project office was most of the time new entrant were trained with a kind of orientation and highlights about the organization. Of course if it was well planned this induction training will help new employee to reduce stress and apprehension that may be associated with starting new job, build their confidence, help them to understand their role and enable them to feel part of the organization. In most cases this induction training, perhaps provided by coworkers, human resource department and supervisors, will not support them in their specific job position as it may not directly related with the technical part. Instead it makes them familiarize with the internal environment of an organization. Its content also, in most cases, related to information about history of the organization, its culture, codes of conduct, career paths, and benefits and general conditions the organization is governed by. In Ethiopia particularly in government organization employees with less than three months were not considered as permanent employees of the organization as they are in probation period although in most cases this does not work the this project office.

3.6. Sample Design and Sample Size

Sampling is a method which involves the process of selection of a subset of individuals from the whole group of population. Sampling will be done as it costs lower; data collection will be very quick and faster. In line with this, 50 employees of the engineering department were taken as a sample size. In addition, one individual from human resource and development department and another supervisor from water supply division were purposively included for interview. This was because; it was this person who has exposure to training and development activities in the project office. Supervisor from water supply division also the one who was responsible to lead and supervise the progress of the projects built in-house.

Due to the small number of employees, the whole engineering department staff of the project office with greater than 3 months of work experience and available at office was purposively

included in the study. No sampling techniques were applied in order to select respondents as all target groups with greater than three months of experience and available at office was included. The reason why this target groups selected was due to the fact that it was these employees who were responsible to undertake all project activities. Support process staff only performs what has been ordered by the core process staff and they support the core process staff. Hence, support process staff has no direct relation with the project. Beside this, newly hired employee (less than three month experience) will not be included in the study because they were considered to be new and not fully involved in the project activities. It was also believed that they were most likely spent their time trying to adapt themselves with the organization's work environment.

3.7. Sources of Data

The collection of data, which is a process of collecting the data from various sources, was both primary as well as secondary.

Primary data: Primary data, which is a method of undergoing collection of original data, was collected directly from the respondent by using of self administered structured questionnaires that contain open ended and closed ended and interviews. The open ended had enabled to acquire the qualitative part whereas the closed one was that of the quantitative part.

Secondary data: secondary data, which refers to information gathered from sources that already exist, was obtained from documents such as status report, organizational brochures, publications and etc.

3.8. Data Collection Instrument

3.8.1. Questionnaires

Data was collected by using self administered structured questionnaire containing both open and closed ended questions. The reason of using self administered method was because to minimize costs and time associated with the data collection, to minimize the possible interviewer bias that could arise while filling, and finally this method was found to be the most conducive way as most of the respondents was found at project site. The questionnaire was distributed to all target

populations. The questionnaires were structured to contain questions that addressed; general information of the respondent and the main body that tries to answer the objectives of the study. The survey questionnaires were administered to 50 respondents. From this 45 questionnaires were returned with response rate of 90%. All filled questionnaires were checked for its completeness while collecting. From 45 respondents 7 questionnaires was not used in the analysis because they have never attended any training programs. Therefore, only 38 questionnaires were used for analysis.

3.8.2. Interview

Besides questionnaires, one-to-one interview technique was employed with two selected key informant for qualitative data collection. The key informant was one from HR department who was in charge of training and development activities, and one supervisor from water supply division who was in charge of the projects under implementation. Structured interview was held with these purposively selected individuals for further clarity and credibility.

3.9. Data Collection Procedures

Letter written from the university to the project office was submitted. In line with this, discussion was made with the HR director and responsible person was assigned to facilitate identification of the study population, questionnaire distribution and collection of the distributed questionnaires. In collaboration with the assigned person, the questionnaire was distributed after respondents were informed about the purpose of the questionnaire. Respondents also informed to submit to the assigned person upon filling the questionnaire and questionnaires was checked for its completeness while receiving. The assigned person was also encouraging respondents to fill and return the questionnaire. The two key informants were also informed about the case and after their consent was obtained appointment was made to conduct one-to-one interview. On the appointment date the researcher conducted at their own office.

3.10. Pilot Test

A pilot test was conducted to test and check the reliability of the questionnaire to make necessary correction. Based on the response of the pilot test the researcher also consulted with experienced

individuals. After getting comments correction was made and finally the questionnaires were distributed to the respondent. The stability of questions was also assessed in terms of test-retest reliability. The questionnaire was tested using Cronbach's alpha reliability, which measures consistency, precision, repeatability, and trustworthiness of a research on a sample of 10 selected individuals. Validity; "is concerned with whether the findings are really about what they appear to be about" (Saunders et al., 2009, p. 156). It is often defined as the extent to which an instrument measures what it purports to measure. The Cronbach's alpha, a measure of internal consistency or reliability, obtained was 0.81 and Cronbach's alpha greater than 0.70 is usually considered to be reliable.

Reliability Statistics

Cronbach's Alpha	N of Items
.807	25

3.11. Ethical Considerations

Ethics, in the context of research, is the "appropriateness of our behavior in relation to the rights of those who become the subject of your work, or are affected by it" (Saunders et al., 2009, p. 183). To be ethical the research topic was designed and reviewed in a way that ensure integrity and cannot disclose the secret of the organization under consideration. Besides, before going to the details of the topic the project office was consulted and their consent was obtained. Once this has been done official letter was written from the university and presented to the concerned body. Respondents were also informed fully about the purpose and intended uses of the research. The confidentiality of information supplied by research subjects and the anonymity of respondents was kept. Respondents were participated voluntarily and they were free to withdraw from the study at any time if they wish to. Data obtained from respondent was not used other than the academic purpose. The research was independent and free from conflict of interest and partiality. The analysis was made based on the responses obtained from the respondents.

3.12. Data Analysis

The study has generated both qualitative and quantitative data. The qualitative part was analyzed based on the content matter of the responses as responses with common themes or patterns were grouped together into coherent categories. Quantitative data was analyzed by using the aid of the Statistical Packages for Social Scientists (SPSS). Descriptive statistics was used to summarize quantitative data after reducing the raw data into meaningful way. Frequency distribution and percentages were used to ensure easy understanding of the analysis.

CHAPTER FOUR

4. RESULT AND DISCUSSION

In this session the findings were depicted based on different variables. In addition to this, discussion were made

4.1. Result

4.1.1. Demographic and Socio-economic Characteristics of the Respondent

4.1.1.1. Gender and Age of the Respondent

In the study 38 respondents were included of which 29 (76.3%) were male testifying to the fact that in the project office engineering department, the number of male was nearly three folds of the number of female. In the project office there was gender imbalance. From total number of male respondent, majority (58.6%) of them were belongs to age group 26 – 35.

The result of table 1 indicated that people of different age categories was serving the project office although all age groups were not well balanced. As shown from table 2, out of 38, 55.3% (21) and 2.6% (1) of the participants' age was from 26-35 and 56-65 categories respectively. From 26-35 and 56-65 age category male respondent accounted 81% and 100% respectively. The age distributions of the respondents showed 26-35 age brackets as the modal class. This implied that the majority of the respondents were aged from 26-35. These age characteristics point to the youthful nature of the employees. It is also assumed that at this age bracket people are more active in terms of business and other economic activities.

Table 1: Gender and Age of the Respondent

			Age group of the respondent					Total
			18 – 25	26 – 35	36 - 45	46 – 55	56 - 65	
Gender of the respondent	Male	Count	2	17	8	1	1	29
		% within Gender	6.9%	58.6%	27.6%	3.4%	3.4%	100.0%
		% within Age	66.7%	81.0%	66.7%	100.0%	100.0%	76.3%
	Female	Count	1	4	4	0	0	9
		% within Gender	11.1%	44.4%	44.4%	.0%	.0%	100.0%
		% within Age	33.3%	19.0%	33.3%	.0%	.0%	23.7%
Total	Count	3	21	12	1	1	38	
	% within Gender	7.9%	55.3%	31.6%	2.6%	2.6%	100.0%	
	% within Age	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: survey participants

4.1.1.2. Marital Status, Education Level and Service Year of the Respondent

From a total of 38 participants, 68.4% (26) of them were married and 2.6% (1) was widowed. None of them indicated that was divorced or separated. As indicated in table 2, out of the total participant 63.2% (24) and 26.3% (10) were degree and masters holders respectively. None of them were above or below masters and diploma respectively. This indicated that, all respondents had education status from diploma to masters.

From the study participant, majority (63.2%) was served the project office from 1 to 5 years and 2.6% served above 15 years. This also signified that majority of the participant had stayed less than 5 years.

Table 2: Respondents Marital Status, Education and Service Year

Variables	Category	Frequency (N = 38)	Percentage
Marital Status	Single	11	28.9
	Married	26	68.4
	Widowed	1	2.6
	Divorced	0	0
	Separated	0	0
Educational Qualification	Diploma	4	10.5
	Degree	24	63.2
	Masters	10	26.3
	Above Masters	0	0
Service year	1 to 5 years	24	63.2
	5 years to 10 years	8	21.1
	11 years to 15 years	5	13.2
	Above 15 years	1	2.6

Source: survey participants

4.1.2. Training and Development

The training given by the project office was relevant as 73.7% of the respondent revealed. As shown in table 4, 50% of them agreed and 23.7% strongly agreed on the relevance of the training provided by the project office. 13.2% of them were neutral which mean they were in confusion. This state of confusion expresses that they might have faced few situation where the training were irrelevant and few where it may be relevant. The rest of them where not agreed on the relevance of the training.

As can be depicted from table 3 below, 50% and 18.4% of the respondent agreed and disagreed respectively that the training made them work better. Only 2.6% of the participant strongly disagreed. Majority (57.9%) of the respondent agreed that the training helped them develop new skill. Conversely, 7.9% of the participant strongly disagree and disclosed that the training they

participated not helped them develop new skills signifying that the training had not be based on the skill gaps.

Table 3: Training and Development

Variables	Category	Frequency (N = 38)					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Training received was relevant to my work	Frequency	0	5	5	19	9	38
	Percent	0	13.2	13.2	50	23.7	100
Training made me work better	Frequency	1	7	6	19	5	38
	Percent	2.6	18.4	15.8	50	13.2	100
Training helped me to develop new skill	Frequency	3	2	5	22	6	38
	Percent	7.9	5.3	13.2	57.9	15.8	100
Mean	Frequency	1	4	6	23	4	38
	Percent	2.6	10.5	15.8	60.5	10.5	100

Source: survey participants

4.1.3. How Training and Development Needs Identified at AAWSA Project Office

Training Needs are identified through a number of ways. As shown in table 4, the respondents of the study were asked to indicate how the project office conducts training needs assessment. In relation to application of SWOT analysis of organizational performance, majority (36.8%) of the respondents was agreed that the organization used SWOT analysis of the organizational level performance to identify training needs and 31.6% of them were neutral about the usage of SWOT analysis. 39.5% and 26.3% of participants were agreed and neutral with regard to performance appraisal of individual employee to identify needs. 42.1% agreed that the organization identify training needs of its employee through individual request whereas 31.8% was disagree. Majority (36.8%) was disagreed about identification of training needs through internal survey questionnaire. Contrary to this, 34.2% agreed as the project office identified through survey questionnaire. Upcoming updating method was another training needs identification method in which the organization employed as agreed by 39.5% of the respondent.

As the table 4 showed, the project office used the stated methods to identify training needs of the employee at varying degree.

Table 4: Methods Used to Identify Employees Training Needs

How the organization identify training needs	Category	Frequency (N = 38)					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
SWOT analysis of organization	Frequency	2	7	12	14	3	38
	Percent	5.3	18.4	31.6	36.8	7.9	100
Performance appraisal of individual	Frequency	3	9	10	15	1	38
	Percent	7.9	23.7	26.3	39.5	2.6	100
Through individuals request	Frequency	4	12	5	16	1	38
	Percent	10.5	31.6	13.2	42.1	2.6	100
Through internal survey questionnaire	Frequency	3	14	7	13	1	38
	Percent	7.9	36.8	18.4	34.2	2.6	100
Through upcoming updating methods	Frequency	2	10	10	15	1	38
	Percent	5.3	26.3	26.3	39.5	2.6	100
Mean	Frequency	3	10	9	15	1	38
	Percent	3.9	26.3	23.7	39.5	2.6	100

Source: survey participants

4.1.4. Project Performance of the Respondent

Project performance of employee was measured by delivering the project on time, to the budget, to the specification and quality and client satisfaction. As shown in table 5, majority of the respondent disagree on the on-time delivery of the project. Although 31.6% of them agreed on time delivery of the project, 23.7% was neutral. In relation to delivery on budget, majority (42.1%) of the participant was neutral and 2.6% strongly agreed on budget delivery of the project. As information obtained from interview indicated, the major problem related to on time and on budget delivery was related to external factors. Looking project performance in terms of delivery to specification and quality, majority (39.5%) of the respondent agreed. 34.2% of the

respondent also agreed that the project was delivered to client satisfaction. In general, 34.3% of the respondent was agreed that the training and development provided by the project office has improved their project performance and 28.9% disagreed. Interviewed supervisor also ascertained that training delivered had helped them improved their project performance although external factors like shortage of raw material, foreign currency problem, demarcation problem, poor quality raw materials and others had challenged them.

Table 5: Project Performance Parameters

Project Performance	Category	Frequency (N = 38)					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Delivery on time	Frequency	2	15	9	12	0	38
	Percent	5.3	39.5	23.7	31.6	0	100
Delivery to budget	Frequency	2	11	16	8	1	38
	Percent	5.3	28.9	42.1	21.2	2.6	100
Delivery to specification & quality	Frequency	1	7	14	15	1	38
	Percent	2.6	18.4	36.8	39.5	2.6	100
Delivery to client satisfaction	Frequency	1	10	13	13	1	38
	Percent	2.6	26.3	34.2	34.2	2.6	100
Mean	Frequency	1	10	14	12	1	38
	Percent	2.6	26.3	36.8	31.7	2.6	100

Source: survey participants

4.1.5. Cross Tabulation of Training and Development with Project Performance

From table 6, it can be depicted that from those who have agreed on training and development majority (75%) of them agreed that the training and development program had improved their project performance. Those disagree with training and development program had not improved their project performance.

Table 6: Cross Tabulation of Training and Development with Project Performance

			Project Performance					Total
			Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Training and development	Strongly disagree	Count	0	1	0	0	0	1
		% within Training and development	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Project performance	.0%	10.0%	.0%	.0%	.0%	2.6%
	Disagree	Count	1	1	2	0	0	4
		% within Training and development	25.0%	25.0%	50.0%	.0%	.0%	100.0%
		% within Project performance	100.0%	10.0%	14.3%	.0%	.0%	10.5%
	Neutral	Count	0	2	3	1	0	6
		% within Training and development	.0%	33.3%	50.0%	16.7%	.0%	100.0%
		% within Project performance	.0%	20.0%	21.4%	8.3%	.0%	15.8%
	Agree	Count	0	6	7	9	1	23
		% within Training and development	.0%	26.1%	30.4%	39.1%	4.3%	100.0%
		% within Project performance	.0%	60.0%	50.0%	75.0%	100.0%	60.5%
	Strongly agree	Count	0	0	2	2	0	4
		% within Training and development	.0%	.0%	50.0%	50.0%	.0%	100.0%
		% within Project performance	.0%	.0%	14.3%	16.7%	.0%	10.5%
Total	Count	1	10	14	12	1	38	
	% within Training and development	2.6%	26.3%	36.8%	31.6%	2.6%	100.0%	
	% within Project performance	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: survey participants

4.1.6. Trainees Selection Process of AAWSA Project Office

Investigating trainee selection process was another interest of the researcher. Regarding the inclusion criteria, majority (42.1%) of them have got the chance due to the fact that the training was compulsory for all employees of the organization and 26.3% was recommended by their supervisor. From the total respondents who have got training, 13.2% of them have no idea how they were elected to go for the training program. In general, supervisors recommendation, compulsory for all employees, and upon employee request was the possible ways that employee elected to go for training although the percentage differs. From interview it was also affirmed that, the selection process was based on relatedness to the job position, supervisor recommendation, performance appraisal of individual was among the criteria used for selection purpose.

Table 7: Trainees Selection Process

Variables	Category	Frequency (N = 38)	Percentage
How were employees elected to go on training	On joining the company	1	2.6
	Supervisor recommendation	10	26.3
	Compulsory for all employees	16	42.1
	Upon employee request	5	13.2
	Performance appraisal	1	2.6
	Don't know	5	13.2

Source: survey participants

4.1.7. Planning and Reviewing Training Program of AAWSA Project Office

From the reviewed literatures we can understand that training is a planned and systematic activity and it results in improved level of skill and knowledge of employee. In case of AAWSA project office systematically planning, implementing, evaluating and revising training program was neglected. Failing to do this will end up with poor training design which has significant effect on organization performance (Khan et al., 2011).

Regarding planning of the training programs, 63.2% of the respondents confirmed that the training program was not well planned. As information obtained from interview revealed, the organization suddenly train its employees implying that the organization was not exercising pre-planned training practices. The absence of well established training department that conduct training needs assessment, design, plan, implement and follows the effectiveness of the training was another problem.

From the total respondents, majority (71.1%) of them witnessed that training programs were not periodically reviewed and improved.

Table 8: Planning and Periodically Reviewing and Improving Training

Variables	Category	Frequency (N = 38)	Percentage
Are Training program well planned	Yes	14	36.8
	No	24	63.2
Training program are periodically reviewed & improved	Yes	11	28.9
	No	27	71.1

Source: survey participants

4.1.8. Training Delivery Methods Employed by the Project Office

The project office applied both off-the-job and on-the-job training delivery methods. However, from the study participants, 57.9% and 10.5% replied that the training method used by the organization was off-the-job and on-the-job and respectively. The remaining 31.6% of the respondents witnessed that the project office applied both methods of training delivery. Results of the interview revealed that, the project office apply both methods based on the type and objective of the training, skill gap and financial budget. As stated by the key informants, the major off-the-job training delivery method employed was lecture type in which trainers conveys information to a group of trainees. The lecture method, which was provided by internal and external partners, was found effective to introduce new concepts to a group of trainees. On-the-job training method, which was effective, was provided by senior staffs in the form of coaching and mentoring. In this method of training delivery style, experienced senior staff with

demonstrated personality, skills and knowledge show and guide other employees how to perform the job. There was also organizational culture in which capable senior employees share their experience, skills and knowledge to other employees through different discussions.

Table 9: Training Delivery Methods

Variables	Category	Frequency (N = 38)	Percentage
Type of training given to employee	On-the-job	4	10.5
	Off-the-job	22	57.9
	Both	12	31.6
	Total	38	100

Source: survey participants

4.1.9. Training and Development Program Evaluation

The purpose of training evaluation was to facilitate decision whether to continue/discontinue, to assess if the objective of the training have been met, make improvement, and ensure appropriateness. Having this mind, participants were asked whether the project office evaluate the effectiveness of the training programs. 97.4% of participant disclosed that the organization under consideration not conducted any evaluation to determine the effectiveness of the training provided to employees. The same information was obtained from interview.

Table 10: Training and Development Program Evaluation

Variables	Category	Frequency (N = 38)	Percentage
Evaluate to determine effectiveness of training	Yes	1	2.6
	No	37	97.4

Source: survey participants

4.2. Discussion of the Results

Training conducted when employees have a skill deficit or when an organization brings change in its system (Roberson et al., 2001). Training equips personnel to react appropriately to emerging challenges. Its role is to improve the overall performance of the organization

(Armstrong, 1995). A training and development section can be essential component of an organization's human resource function because providing the workforce with the necessary tools for success will inevitably benefit the organization.

4.2.1. Employee Training and Development and Project Performance

The study confirmed that training and development in which employees had participated had improved project performance of the project office. The finding was in line with (Tahir & Sajjad, 2013) that provision of training has a significant positive relationship with job performance. Khan et al., (2011) training and development had significant effect on organizational performance. Asfaw et al., (2015) found the positive correlation between training and development and employee performance and effectiveness and found statistically significant at $P < 0.05$. Training has positive impact on employee job performance (Woretaw, 2015). Training and development improves employee performance (Kulkarni, 2013). High performance is obtained as a result of motivated employee which was in turn an outcome of employee training program (Armstrong, 1995). Training and development programs have positive impact on motivation of employees in banking sector (Gullu, 2016).

4.2.2. Training and Development Methods Employed by the Project Office

As indicated from table 9, the major training delivery method employed was off-the-job. If the training method employed is not appropriate, trainees may not be benefiting from the program. Interviewed supervisors witnessed that the project office applied both off-the-job and on-the-job training methods. However, the most effective training method that complies with their undertaking, as described by the supervisor, was on-the-job training because this method helped them equipped their employees with the practical knowledge as compared to off-the-job which was theoretical. That was why in most projects they established a team led by capable and experienced senior staff who was responsible to guide, coach, mentor team members. There was also a practice in which skilled individual share his/her experience to fellows. Off-the-job training methods had also helped improved employees basic skills. This off-the-job training was delivered through lecture method by internal and external professional and experts. Applying unfitting training methods will hinder the organization to harvest the full benefit of the investment made on training programs. Deming (1982) on-the-job training enables employees to

get the knowledge of their job in a better and in a practical way. Hamza (2012) pointed out that training methods needs to carefully selected to match training objectives. On-the-job training delivery was minimal which was very effective (Khan et al., 2011). According to these researchers on-the-job training would help save time and cost in addition to enhancing project office performance. Barber (2004) also ascertained that on-the-job training led to greater innovation and adds tacit skills.

4.2.3. Methods Employed to Identify Training and Development Needs of AAWSA Project Office

The aim of TNA is to ensure that training addresses existing or foreseeable problems (Mathis & Jackson, 2010). Analyzing training needs is vital. Tahir and Sajjad (2013) explained that an effective training needs assessment followed by the launch and evaluation of a training program enhances job performance. Regarding training needs assessment, the organization in consideration conduct training needs assessment as the participant witnessed. Participants were asked to show their level of agreement to the following variables as a means of identifying needs assessment. The variables were SWOT analysis of the organization, performance appraisal of individuals, individual request, internal survey questionnaires and upcoming updating methods.

The result indicated that, majority (47.4%) of the respondent agreed that the project office used SWOT analysis of the organization. It was revealed that the project office employed individual request and upcoming updating methods as a method of training and development identification as majority of the respondents agreed. The study also indicated that the application of internal survey method of needs assessment was found minimal. From interview, the researcher ascertained that the project office identify training needs with the help of aforementioned needs assessment methods. But the information obtained from employees was not professionally analyzed and implemented. In addition, there were times in which training was not designed in line with the skill gaps employees have. There also skill gap in professionally analyzing the information collected for the purpose of needs assessment. As a result, information collected was not used design training needs of the employees. Attention given to needs analysis was not sufficient enough and the project office was negligent in this endeavor.

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with summary of the findings, conclusions and recommendation

5.2. Summary of Major Findings

This research examined the effect of employee training and development on project performance of AAWSA Water and Sanitation Development and Rehabilitation Project Office. To achieve the research objectives 38 staff was included an addition to interview. The study revealed the following major findings.

- Majority of the participants revealed that the training and development in which they participated enabled them improve their project performance.
- As participants revealed, the major training and development delivery method so far employed was off-the-job which involves taking employees away from their usual work environments to a place where the training and development program was delivered.
- The project office tried to identify training needs. The result revealed that 31.6% of the participants agreed that the project office used SWOT analysis of the organization, performance appraisal of individuals, individual request, internal survey questionnaires and upcoming updating methods to identify training needs of the employee although 23.7% of them were disagreed. 44.7% of the participant was neutral. It exercised training needs assessment at three levels namely organizational analysis level through SWOT analysis of organization performance, task analysis level by the help of upcoming updating methods and finally at individual analysis level. However, these levels were not found equally applied.

5.3. Conclusion

Training and development program provided by the project office should be aligned with organization's goals and objective. It should be designed in way that helps to achieve its objectives. Training and development programs require resources. As a result, organizations are

incurring resources signifying that they are investing in human capital with the intention that it will provide them with a competitive advantage and organizational goal attainment. Training and development believed to enhance individual and organizational performance. Having this in mind, from the data obtained it can be concluded that:

- Employee training and development program of AAWSA Water and Sanitation Development and Rehabilitation Project Office has improved project performance as revealed by the participants of the study.
- Training and development delivery method predominantly used by the organization was off-the-job training method which takes place outside the actual work environment of an organization with less attention to on-the-job training as witnessed by the respondents. From interview, it was revealed that this method was found less effective as compared to on-the-job training.
- The study has also shown that the project office has been undertaking training and development needs assessment by using different need identification approaches to identify the gaps between the actual and expected performances. The study indicated that analyzing performance of the organization, individual and the tasks being undertaken by the organization have been considered during needs analysis of the project office. However usage of internal survey questionnaire to identify training needs was minimal as majority of the respondent revealed. From interview it was also indicated that information collected for the purpose of training needs analysis was not properly and systematically analyzed. No responsible person in the project office who primarily undertake this activity. Due to this there are times in which training was not designed and implemented based on the training needs analysis.

5.4. Recommendations

Based on the findings of the study the following recommendations are outlined

- Organizations require highly performing employees in order to meet their goals and objectives. To have highly performing employees, organizations are required to train and develop their employees which is crucial to enhance individual performance the

foundation for enhancement organizational performance. Therefore, the organization under consideration should provide adequate training and development opportunities and coaching for employees who are not identified as high potentials. Training and development program should be a continuous process. Because it was confirmed that training and development program in which employees participated had improved employees' project performance. In addition, it enables the project office to make best use of its human resources.

- In line with the training and organization's objectives, the project office should determine and apply the most effective training and development delivery methods to employees. It is also recommended that it would be better if on-the-job training is applied. Because this method will enable trainees to learn in practical way than theoretical way in off-the-job method, less expensive than off-the-job training, and help employees to easily familiarize themselves with machineries and devices. In addition, on-the-job training delivery method was proved to be the most effective method in bringing benefits for the development of employees' capacity, as information obtained from interview revealed, and therefore it must be encouraged.
- Although the existing training needs assessment practices of the project office are good and must be encouraged, it should be conducted extensively, systematic, participatory, and consistent and should be aligned with the organization's objectives. The information collected should be systematically analyzed before designing a training program. Training and development should be designed based on systematically and professionally analyzed training needs assessment otherwise the project office could not achieve the expected organizational goals and objectives. There should also be assigned staff to search out training and development needs of high potentials and coordinate training and development.

6. Suggestion for Future Research

The research only covered Addis Ababa Water and Sewerage Authority Water and Sanitation Development and Rehabilitation Project Office staff, but did not include all government owned countrywide project offices. A similar research can be conducted in other sectors so as to have an

overall picture on effects of training and development on employee project performance in the public institutions in the country.

Training has to start with the recognition of training needs through job analysis, performance assessment, and organizational analysis. Training should also not be for the sake of report to supervisory body. Hence, investigating relevance of the training to the assigned job position and the gaps the individual or organization have can also be another research area.

A comparative study can be done in the future to compare training and development and its effects on performance in the public sector and that of the private sector.

Training and development is an expensive investment. Hopefully public and private sector has been spending large volume of money on training and development programs although no figure that shows how much it is. Therefore, a study can also be done focusing on how much costs training and development programs has been incurring and the returns gained from the training (training cost benefit analysis) countrywide.

7. Limitation of the Study

Major challenges encountered include, the difficulties associated with data collection, for instance difficulty to find those who are in annual leave, work pressure and time constraints were some of the limitations. The nature of the project office work was another challenging factor in data collection process as most of them spent their time at project site. Performance measurement considered was time, cost, quality and client satisfaction. Therefore, further study can be conducted by extending these parameters and other issues.

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Appendices

Questionnaire on Training and Development

Dear Respondents,

Kindly go through this questionnaire and you are politely requested to answer by placing a tick (√) or mark (X) in the appropriate response on the right side of the questions. This information is meant for only research purpose on the thesis title effect of employee training & development on project performance which is in partial fulfillment of one of the requirements for the attainment of the award for the degree of masters. Finally, I assure you that the response recorded by you will be kept strictly confidential and will not be used other than the intended purpose.

Section I: Socio Demographic Characteristics

1. Gender: a) Male [] b) Female []
2. Age: a) 18-25 []; b) 26-35 []; c) 36-45 []; d) 46-55 []; e) 56-65 []; f) >65 []
3. Marital status: Single []; Married []; Divorced []; Widowed []; Separated []
4. What is your highest qualification (Education)? _____
5. What is your organizational tenure (Service year in this organization)? _____
(please specify your answer in years and/or months)

Section II: Training Related Variables

Descriptions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6. Training and Development					
6.1.The trainings you received was relevant to your work					
6.2.Training made me work better					
6.3. Training helped me to develop new skill					
7. How Training and Development Needs Assessment Conducted					

7.1. By SWOT analysis of organization					
7.2. By performance appraisal of individual					
7.3. Through individuals request					
7.4. Through internal survey questionnaire					
7.5. Through upcoming updating methods					
8. Project Performance Measurement					
8.1. Time					
8.1.1. The project was completed on time/on the schedule					
8.1.2. The project was completed earlier/ahead of the schedule					
8.1.3. Harmonious relationship on site					
8.2. Cost					
8.2.1. The project was completed within budget or progressing on budget					
8.2.2. The project completed below budget or progressing below budget					
8.2.3. Financial Resources were efficiently utilized					
8.2.4. No additional financial claim at completion					
8.3. Quality					
8.3.1. The project met design					

specification					
8.3.2. Defects easily maintainable					
8.3.3. No variation from the original design					
8.3.4. A clear plan was formulated					
8.3.5. The right materials were used					
8.4.Client Satisfaction					
8.4.1. At handover there was no apparent defects					
8.4.2. The customer was satisfied					
8.4.3. The project met the customer's requirements					

9. Have you had any form of training since you joined the organization? Yes []; No []

10. How were you elected to go on training courses? (**multiple response possible**)

- a. On Joining the Company []
- b. Upon employee request []
- c. Supervisors recommendation []
- d. Performance appraisal []
- e. Compulsory for all employee []
- f. Don't know []
- g. If others specify

11. Which type of training is given to employee? (if any)

On-the-job []; Off-the-job []; Both []; None []

12. Does your organization conduct any evaluation to determine the effectiveness of the training received?

YES []; NO []

13. If 'Yes', How?

.....

14. How often do you receive training from your organization?

Quarterly []; Twice in a year []; Once in a Year []; Rarely []; None []

15. Are training programs are well planned? Yes []; No []

16. Training programs are periodically reviewed and improved? Yes []; No []

Thank You for your co-operation

Interview

For HR Department

- Do you have a well planned training and development program
- How do you conduct (training and delivery methods)
- How employee training needs identified
- How do you select employees for training programs
- Do you evaluate training and development programs

For Project of Supervisor

- What kind of training and development programs do you have
- What methods do you employ to deliver training and development
- How much effective the methods you employed?
- Do you evaluate the training and the method?
- Organization plan and performance
- Do you think that, training and development provided helped you improve project performance?
 - In terms of delivering the project on time
 - In terms of delivering the project on budget
 - In terms of delivering the project on specification and quality
 - In terms of delivery on client satisfaction.