

Assessment on Application of Total Quality Management Philosophy in Parastatals in Zambia: A Case of ZESCO Limited and Lusaka Water and Sewerage Company.

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Abstract

Total quality management (TQM) is a firm-wide management philosophy of continuously improving the quality of the products/services/processes by focusing on the customers' needs and expectations to enhance customer satisfaction and firm performance. Total quality management (TQM) has been proposed to improve business performance and received considerable attention in recent researches. Despite the recent research efforts on effects on total quality management, little work has been done on effects of total quality management implementation in performance of public sector institutions in Zambia, particularly the parastatal utility companies. This study sought to investigate the application of total quality management principles parastatals corporations in Zambia. The scope of the study targeted parastatals utility companies in Zambia with particular focus on ZESCO and LWSC. The specific objectives were to investigate to what extent the principles of Total quality management (TQM) are implemented at ZESCO and LWSC; To examine the impact of Total quality management (TQM) implementation on organizational performance; establish the extent of focus on customers and involvement of staff in decision making; and to find out the extent to which quality culture is embedded in the organization.

This study adopted descriptive, qualitative and quantitative data design. The main instruments in data collection used were semi-structured questionnaires targeting subordinate staff and an interview template for senior level management and. The data was finally coded, analysed, and presented by means of frequencies tables and graphs, and Pearson's correlation coefficient with assistance of statistical packages for social science (SPSS). The study shown that as much most of the employees in parastatals companies (ZESCO and LWSC) are aware of total quality management.

The findings from the study revealed that the two companies do not provide quality services that satisfy their clients. It was found that majority of the respondent represented by 40% rated the service delivery at ZESCO to be poor, followed by 28% fair, whereas 23% rated the service delivery by ZESCO to be good, and 10% indicated it was excellent. This entails that 68% of the customers were unsatisfied and not happy with the quality of services provided by ZESCO. On the contrary results from LWSC showed that most of the respondents that 78% of the respondents positively rated LWSC while only 23% rated it poor. The reasons customers advanced behind poor services from ZESCO according to the order of ranking included too much load shedding, lack timely responses, poor customer service, and delay in connecting power. On the other hand, whereas it was found that customers also experienced poor customer service, poor water supply especially both during the day and night, delayed responses, and others attributed to abnormal water bills provided by LWSC all contributed to poor service delivery. Furthermore, the study showed that TQM was implemented to a lesser extent at ZESCO and LWSC. The companies did not fully engage the employees in decision making. In addition, the study indicated that customers were not engaged in the service provision items of decision making. There is need for ZESCO and LWSC to invest in other sources of energy like solar and water energy supply. The study further ascertained that there was need to invest for ZESCO and LWSC in TQM just like other countries has done for example South African and Pakistan. The study indicated that ZESCO and LWSC had been providing poor services and delay in responses to its customer hence they need a competitor.

Keywords- Total Quality Management, Total Quality Control, Parastatal, Zambia Electricity Supply, Lusaka Water and Sewerage Company, Implementation.

CHAPTER ONE: INTRODUCTION

1.0 Overview

Many organizations are undergoing major transformation, aiming at enhancing their ability to react proactively and efficiently to customer requirements in quality, service, innovation, speed, and price (Das, Kumar and Kumar, 2011). In order to withstand new global challenges many organization have adopted TQM practices especially in fast-growing industries and businesses Quality Management (QM) approaches and techniques such as TQM, ISO 9000 and other series of standards have been developed and adopted internationally, which has facilitated the international supply chains of today's business to become more effective in the way they conduct business (Thawesaengskulthai, 2010). In every organization performs its task with the help of resource as men, machine, materials and money. It has become more important, because Manpower utilizes other resources and gives output in enhancing performance, securing and developing talents of employees, and enhancing cooperation between them to support organizational development (Belay, et.al. , 2011). However, out of all the factors of production manpower has the highest priority and is the most significant factor of production and plays a pivotal role in areas of productivity and quality (Elarabi and Johari, 2014).

Electricity is a commodity that is at the centre of modern society. Anderson (2012) stated that without electricity, life would be seen to be difficult and slow. It is argued that electricity has been widely used in the past years for example; before man discovered electrical energy, many houses used kerosene lamps for lighting and wood heated stoves to warm up rooms. Since that time electricity has been considered to be of a great importance in our everyday lives (Arora, 2008). ZESCO limited is a public utility company that generates, transmits, distributes and supplies electricity in Lusaka and

Zambia as whole. The company operates 9 hydropower stations with a combined capacity of 2,217.5 MW and eight small thermal power plants with a combined capacity of 11.3 MW resulting in a total installed capacity of 2,228.8 MW. The company also owns and operates power distribution and transmission lines of 9,975 km (ZESCO Limited, 2015). The electricity is produced mainly by water commonly known as hydro-electricity and by use of fuels such as diesel (ZESCO, 2013).

Cairn cross et al., (2003) state that water supply includes the supply of water for domestic purposes, excluding provision for irrigation or livestock. Sanitation here means the narrow sense of excreta disposal, excluding other environmental health interventions such as solid waste management and surface water drainage. Safe drinking water, sanitation and good hygiene are fundamental to health, survival growth and development. In Zambia, Lusaka Water and Sewerage Company (LWSC) is a Commercial Water Utility providing water and sanitation services to Lusaka Province. The core values of LWSC are as follows; good corporate governance practices, customer satisfaction, innovation, team work, employee motivation, Courtesy, and Gender responsiveness (LWSC, 2017). The main function of LWSC is to supply water and sanitation services to Lusaka town and other districts in Lusaka province. This study will provide a background, statement of the problem, purpose of the study, research objectives, and research questions, significance of the study, scope, delimitations, and limitations. Literature review, data analysis, and detailed discussion of findings, conclusion, and recommendations.

1.1 Background

Total Quality Management is a method by which management and employees can become involved in the continuous improvement of the production of goods and services. It is a combination of quality and management tools aimed at increasing business

and reducing losses due to wasteful practices. Total Quality Management views an organization as a collection of processes which incorporates the knowledge and experiences of workers. The simple objective of Total Quality Management is “Do the right things, right the first time, every time.” (Aswathappa, 2007). In other words, Total Quality Management is a philosophy for managing an organization in a way, which enables it to meet stakeholders’ needs and expectations efficiently and effectively without compromising ethical values (ISO 8402, 1994). According to Baldrige National Quality Program (NIST, 2006), the total quality management core values and tools for excellent measuring of an organization performance are as follows; 1) visionary leadership, 2) customer driven excellent, 3) agility, 4) organizational and personal learning, 5) management by fact, 6) valuing employees and partnerships, 7) focus on the future, 8) managing for innovation, 9) social responsibility, 10) focus on results and creating value, and 10) system perspective. Total Quality Management provides a framework for implementing effective quality and productivity initiatives that can increase the profitability and competitiveness of organizations (Naj, 1993). The term quality is quite widely used by practitioners and academics, although there is no generally agreed definition of it, since there are different definitions of quality are appropriate under different circumstances (Sebastian Elli and Tamimi, 2002; Ojasalo, 2006). Leffler’s (1982) asserts that quality is only gained at higher cost, because quality reflects the quantity of desirable attributes that a product includes, and because attributes are believed to be costly to produce, quality goods are considered to be more expensive (Garvin, 1984).

However, Ishikawa and Lu (1985) argues that quality can be obtained at an acceptable price value-based approach therefore, the product-based approach of defining quality is not a complete

definition of quality, in other words not valid as the definition does not match the concept according to Routio’s (2009) criteria. The concept of Total Quality Management (TQM) emerged around 1980, primarily amongst manufacturing firms in USA, in response to global competition, mainly from Japanese organizations who were devoted in improving the Japanese productivity and enhance the post war quality of life. Its use has since filtered through to all sectors, including the public sector. It is believed that Feigen Baum and Ishikawa are the greatest contributors to the development of TQM other than (Crosby, 1979, Deming, 1986 and Juran, 1999) who just helped to shape the dimensions, practices, mechanism and support the concept although they never used Total Quality Management (Ishikawa, 1990). Total Quality Management is an evolutionary approach was managed to build on the ideas of organizational designs that have failed earlier such as quality control (QCs) but changes them to fit in the new approach or philosophy. It is assumed that Total Quality Control (TQC) was originated by Feigen Baum in 1960. Total Quality Control the Japanese style shaped and introduced another concept known as Companywide Quality control (CWQC). This term “companywide quality control” which was introduced in Japan in 1968 after ten years of Feigen Baum introduced the term “Total Quality Control”. This quality control consists of developing, designing, producing, marketing, and servicing products and services with optimum cost-effectiveness and usefulness, which customers will purchase with satisfaction Kaoru Isikawa (1990). In Japan, Total Quality Management produced managerial innovations such as quality circles, equity circles, supplier partnerships, cellular manufacturing, just-in-time production, and hoshin planning (Akao, 1991), However, as quality control programs became more widely implemented and sophisticated some aspects of the Total Quality Management philosophy could also be applied to non-manufacturing functions such as product

development, purchasing, and billing, with potential applications in service organizations and non-profits. In 1980 some U, S Policy observer and American firms began to take notice of Total Quality Management. It is argued that Japanese manufacturing quality had equaled or exceeded US standards, and warned that Japanese productivity would soon surpass that of American firms (Hayes and Abernathy, 1980). The Productivity trends to support these assertions, leading to some opinion leaders to predict that barring a radical change in American management practices Japan and other Asian countries would soon dominate world trade and manufacturing, demoting the US to second-tier economic status (Garson and O'Dell, 1988). In particular, these analysts criticized the traditional American managerial practices such as elitist leadership, autocratic authority structures, short-term thinking, financial orientation, lack of innovation, declining product quality, adversarial supplier relationships including employees, inadequate training, and, in general, living off past successes (Grayson and O'Dell, 1988; Jacobs, 1991). In the past Total Quality Management was originally applied to manufacturing operations, and now it is becoming recognized as a universal management tool applied in service and public sector organizations including developed economies (Aswathappa, 2007). Although, control of quality has been practiced in many industries for several years, the adoption of Total Quality Management as a major concern of businesses worldwide is very recent, (Lakhe and Mohanty, 1993).

In Zambia, Zambia Electricity Supply Corporation (ZESCO) can be drawn back its origins in 1906 with a small thermal station which was established in Livingstone to serve a small section of the town. The name Zambia Electricity Supply Corporation was changed to ZESCO Limited in order to providing high quality of customer service. The company is a vertically integrated electricity utility,

which generates, transmits, distributes and supplies electricity in Lusaka and in Zambia as whole. It is a public utility which has been in existence since 1906. The Company operates 9 hydropower stations of capacity 2,217.5 MW and eight small thermal power plants with a combined capacity of 11.3 MW resulting in total capacity of 2,228.8 MW. This entails that the company is committed in providing safe and reliable electricity in order to improve the quality of life for all. However, the distribution, supply and customer services directorate are responsible for the distribution and supply of electricity, and customer services businesses in ZESCO. Currently, there are some Installation of new protection and control relays at the major substations and on transmission lines in Lusaka district (ZESCO Limited, 2015). These installations are made in order to improve quality service delivery and customer satisfaction in the district.

On the other side, Lusaka Water and Sewerage Company (LWSC) is a Commercial Water Utility providing water and sanitation services in Lusaka Province. The Company has been in existence 1988 when it took over from the Lusaka Municipal Council under the Engineering department. The core values of LWSC are good corporate governance practices, Customer satisfaction, Innovation, Team work, Employee Motivation, Courtesy, and Gender responsiveness (LWSC, 2017). Since Independence, the company has embarked on an adventurous water infrastructure expansion crusade not only for Lusaka town but for all the towns in the country through the management of the local authorities provided the policy and legal framework within the councils to manage water supply and sanitation services to the citizens. However, over the years, many councils including Lusaka City Council started experiencing challenges with managing water supply and sanitation services to the people. This is due to some of the infrastructure inherited which has become

dilapidated. Besides that, the population also has increased thereby putting so much stress on the dilapidated and inadequate water and sanitation infrastructure. It is for this reason that the Government began the water sector reforms and sector policy which led to legal framework formulation to guide the water utilities in the country. Despite all these water reforms taking place, LWSC has not been spared from these challenges. However, since its operations in terms of providing quality services since it took over from city council. The company has faced with some challenges such as old and inadequately maintained water and sewer infrastructure, inadequate service coverage less 60 per cent for water and 12 per cent for sanitation. Low metering ratio Low collection efficiency High non-revenue water (more than 65 per cent) Low hours of supply (LWSC, 2017). In order to enhance customer service and confidence the company has embarked on metering project. This means that the company has moved from the conventional brass meters to the pre-paid meters since 2012 although some areas are still on fixed charge but on a lower level, for example, Kafue, Chongwe and Luangwa are at 100% pre-paid metered. According to the Water Supply and Sanitation Sector Report 2012/13 by National Water Supply and Sanitation Council, LWSC has improved remarkably in the area of Water quality Metering ratio Collection efficiency. It has also increased the base to 80,000 water connection and there is room for improvement. Moreover, customer service has improved greatly as can be attested to by establishment of 15 customer service centres for example. LWSC is committed in providing water and sanitation services to people of Lusaka province and will continue exploring other electronic, technological and business innovations in order to serve its esteemed customers (Times of Zambia, 2014).

1.2 Statement of the Problem

To date, and despite the fact that many organizations began to adopt Total Quality

Management principles in the last two decades, most of the organization performance is still lagging behind especially the ones in utility service providers. Kasongo and Moon, 2010 in Zambia, Zambia bureau of standards (ZAB) provides guide lines concerning quality on goods and services but this has not been the case to many companies. It has been observed that most of the institutions and organizations are still lagging behind in terms of providing quality service delivery which includes parastatal organizations such as Zambia Electricity Supply Corporation limited (ZESCO) and Lusaka water and sewerage company (LWSC) who happen to face with the problem of Total Quality Management implementation in providing quality service. The adoption of Total Quality Management by most organization has been hampered due to their non-compliance with the procedure and principles of Total Quality Management implementation. Other problem could be as an organization they run Total Quality Management like a program which they expect to function and perform the magic by itself (Gboro and Obeng, 2000). There are also problems of lack of efficiency and effectiveness in service delivery at these parastatal organization (ZESCO and LWSC) hence poor qualities of service due to financial constraint or political challenges. Also, the cost of technology acquisition and skill development programmes maybe inaccessible to staff. There is also inadequate human resource in area of service delivery in parastatal organizations such as field operators. Other problems include inadequate of human resource with field skills (electrical technician and water engineers) to meet the requirements of the institutions thus limiting operation of the institutions. There is also a general lack of management's capacity to provide service delivery training and equipment. It is for these reasons that the researcher undertakes a comparative study on these two institutions since they are both utility companies (PMRC, 2015).

1.3 General Objective

The general objective of this study was to assess the application of total quality management principle's philosophy at ZESCO and LWSC.

1.3.1 Specific Objectives

- To assess the extent the principles of Total Quality Management are implemented at ZESCO and LWSC.
- To examine the impact of Total Quality Management implementation on organizational performance.
- To establish the extent of focus on customers and involvement of staff in decision making.
- To find out the extent to which quality culture is embedded in the organization.

1.4 Research Questions

- What extent the principles of Total Quality Management are implemented at ZESCO and LWSC?
- What is the impact of Total Quality Management implementation on organizational performance?
- What extent of focus on customers and involvement of staff in decision making?
- What extent to which quality culture is embedded in the organization

1.5 Significance of the Study

The importance of this study shoots from the significance of the parastatal sector, as it stands as one of the main pillars of country's economy. The study is expected to add up to the inadequate research probing of application of Total Quality Management principles in utility service provider organizations such as ZESCO limited and LWSC. This study provides the management of ZESCO and LWSC with better understanding of its processes and identifies tools for implementing continual improvement programs that can lead to improved profitability thereby increasing shareholder value. The study will assist the management of ZESCO and LWSC to encourage innovation, make the

organization adaptable to change, motivate people for better quality, and integrate the business as a result of common purpose. The study will be used to improve the energy and water in ensuring that they implement Total Quality Management principles so that the benefits can be passed on the customers for more efficient services. The results will assist to forecast the future capacity needs of utility service provider organizations. This study will add to existing literature on Total Quality Management implementation in academic institutions. While students and lecturers may make references to this document, future researchers

1.6 Limitation of the Study

Since this study was mainly going to use primary data, which will be amplified with secondary data, its success depends on having access to the study population and documents. However, due to the sensitivity of information sought, the researcher strategically collected data from selected population pertaining to the study thus access was limited. This may negatively affect the validity and reliability of the data collected and unnecessarily makes the research impossible. However, the researcher mitigated actively by involving the population selected in the study and informed them the importance of the findings of the study to the organization and that no person was victimized.

1.7 Delimitation of the Study

The delimitation of the study was based on the statistics, which indicate that ZESCO Limited and LWSC is at its lowest position in terms of service delivery provision. The study covered ZESCO Limited headquarters and LWSC company headquarters with specific emphasis on Total Quality Management principles application implemented within these organizations, thus the targeted respondents could only be found within Lusaka city.

1.8 Scope of the Study

This study was conducted ZESCO limited Headquarters and Lusaka water and sewerage company headquarters. The justification for picking this scope is that ZESCO limited and LWSC headquarters are being in the capital city has a lot of advantages. Moreover, Lusaka City has the large population and since most policy makers, ministries, key players in utility companies are all based in Lusaka city. It is also important to note that these utility companies play a significant role to the development in Zambia. Therefore, it's expected that employees in parastatal organizations must understand in terms of Total Quality Management in utility companies.

CHAPTER TWO: LITERATURE REVIEW

2.1 Review of Theory

This chapter discussed the relevant literature that has been reviewed in the area of Total Quality Management. It also highlighted various researchers and authors that have emphasized more on the topic. The chapter also presented theories underpinning the study, Global perspective, regional perspective, National /local perspective, and the conceptual framework. There are various explanations on Total Quality Management however are quite number theoretical perspectives that are discussed here: The Leadership Based Theory, The Institutional Theory, The general systems theory, and The Will Theory.

2.1.1 The Leadership Based Theory

The theory suggests that leadership plays an important contributor to successful implementation of Total Quality Management. Mary Parker Follett (1940) an early writer on leadership suggested "the law of the situation" and the need for managers to focus attention on improving methods. Barnard (1938) developed the "moral factor about leaders and specified a leader's responsibilities to employees by subordinating individual interest to

the good of the cooperative whole". Cohen and Higgins (2007) suggest the key responsibilities of a leader are to understand the cube, provide a vision, and encourage innovation and creativity. Cohen and Higgins (2007) define leadership as influencing people to strive willingly to achieve group goals. They propose a model for leader effectiveness based on the leader's emphasis on task and relation (people) behaviour. As people become more mature the most effective leadership approach evolves in the Hersey model from telling and selling (coaching) to participating and then to delegating. Total Quality Management evolves in a similar way by first encouraging individuals to more willingly participate in the design process. Later, as they become more confident, they are provided with responsibility and accountability over the processes they operate and empowered to take independent action. Quality leadership by top management has been emphasized and supported by many researchers as the basis for proper implementation of TQM in order to achieve customer satisfaction, quality product, continuous improvement and job satisfaction (Anderson, et al. 1995). In order to achieve total quality in an organization, it is important for the top managers to state clearly define the quality objectives and also to treat quality as an important feature It is expected to set priorities while allocating adequate resources to continuous quality improvement and also evaluating employees based on their performances. (Minjoon, et al. 2006). Many organizations have tried to implement the TQM because of the reluctance of top management in delegating some authorities and empower employees (Minjoon, et al. 2006). Other scholars of TQM such as Deming (1982) claim that most quality problems are caused by management and the system they create and operate (Minjoon et al. 2006). Pearson et al. (1995) also supported that managerial leaderships require management at all level should shift their role from authoritarian decision maker to coaching facilitator. According to Pheng and Jasmine (2004), the degree

of support that management takes in the implementation a total quality environment is very critical to the success of TQM implementation and TQM cannot be fully implemented if there is lack of commitment from top management. Adair, 2004 and Emerald, 2005 further stresses that time management is one of the fundamental principles of TQM, and the following are the ten principles of time management 1) Time audit 2) Identifying long-term goals 3) Making medium-term plans 4.) Planning the day 5) Making the best use of your best time 6) Organizing office work 7) Managing meetings 8) Delegating effectively 9) Making use of committed time, and 10) Managing the health. The basic understanding of pre-knowledge of time management gives a mindful total quality management approach to day-to-day activities of an organization. Additionally, the success of an organization is when top management are fully engaged in work process, with follow-ups and free flow of information or communication. Anderson (2007) and Stoner et al. (1995), highlighted that management concept as planning or organizing processes may lead to control of all types of resources in an organization, in order to reach a common vision. This will eventually transcend to continuous evolution of modern quality management as organization favourable respond to changes in business demands.

2.2 Institutional Theory

Institutional theory argues that all organizations take the shape they do because they draw from the culture around them value-based notions of how things should be organized (Tolpert and Zucker, 2006). Institutional theory is an increasingly important lens for studying all types of organizational phenomena (Frumkin and Galaskiewich, 2004). The theory recognizes the embedment of institutional actors in an environment of formal and informal rules. Institutional theorists suggest that organizational

actions and processes are driven by their actors in order to justify and plausibly explain their actions. According to this perspective, strategy implementation is rationally accounted for by organizational actors and rooted in the normative and social context that motivates actors to seek legitimacy Dacin, et al., (2007). Through various cognitive, normative and regulative forces organizations adopt a standardized set of practices (Scott 2001). In other words, an organization is composed of three pillars: the cultural-cognitive, normative, and regulative elements that together with associated activities and resources provide stability to social life. Institutional theory also argues that all organizations take the shape they do because they “draw from the culture around them value-based notions of how things should be organized” (Tolbert and Zucker, 1996). While institutional theory is becoming an increasingly important lens for studying all types of organizational phenomena, it is particularly appropriate for the study of public sector organizations, as these are perceived to be more susceptible to institutional forces than their profit-oriented counterparts (Frumkin and Galaskiewich, 2003). To this respect, institutional theory relates and was fundamental to this study as demonstrated how such institutional factors have also influenced public institutions to mimic one another with respect to both their adoption of Total Quality Management. Consequently, in addition to the potential inhibitors / facilitators highlighted, there is also the yet un-tested possibility that there are a number of institutional drivers that might be either encouraging or discouraging state-owned enterprises when it comes to the adoption of certain practices in Total Quality Management in parastatals companies.

2.3 The general systems theory

The most widely employed theory in the policy sciences is the systems model which may be seen as an application of general system theory to public

policy (Easton, 2000; Dye, 2008; Bertalanffy, 2014). For many social science applications, this theory is referred to as an “open systems” model, which reflects the idea that all elements of the model are open to influences from the external environment. Thus, outputs and feedback are functions not only of the conversion element, but of other environmental factors as well. In this study, the Total Quality Management is considered to be influenced by factors which include: staff training and motivation, service market and government policy. Thai (2000) claims that the systems model capture the whole scope of public administration. Thai places the policy-making function with management executives at the top level of a quality service delivery system. This has the effect of discounting the importance of policy roles that may be played in other elements of his model, for example, his “regulations” element or his “operations” element. The general systems theory relates to this study in that it highlighted some challenges involved in effective Total Quality Management practice in state Corporations in Zambia, And the General system theory looks at policy issues was the most appropriate for explaining and understanding the factors that affect and influence effective Total Quality Management in the public sector. The theory also considers understanding of systems through which the policy framework must operate for effectiveness. The general system theory therefore was appropriate in explaining the policy issues on Total Quality Management in public management with in State-owned Enterprises and hence very necessary for this study.

2.4 The Will Theory

Traditionally defending the view that rights necessarily involve discretion, or control, over another’s duties, the Will theory, otherwise known as the Choice theory, has been elaborated throughout the second half of the twentieth century by scholars such as H.L.A Hart and Carl Wellman.

Will theorists argue that the purpose of rights is to grant the right-holder the freedom to control the duties that others owe to that particular entity? Essentially, the purpose of rights is to protect and foster individual autonomy. Will theory emphasize the idea that all rights consist in the enjoyment of opportunities for individual choices, and furthermore, that having a right is having an opportunity to make a choice. The distribution of freedom, which the Will theory allows, is an appealing aspect in suggesting that it is a plausible theory to adopt when discussing the function and nature of rights. Emery Waldron, in the light to Private Property’ claims, “The Will theory is essentially connected to a certain distribution of freedom”. Also, the Will theory captures the distinctive link between rights and normative control. Will theorists argue to have a right is having the ability to determine what other’s may or may not do? Finally, the Will theory emphasizes the power that peoples’ or institution’s ability to make rational choices has. Rights function as a power that the right holder exercises over others. This appealing aspect of the theory makes it a plausible theory to adopt; however, it is argued that holding such power could be considered a destructive element. The basis of Total Quality Management is the meeting of the minds of the parties (that is the will of the parties). Hutchison et al., (2009) claims that if one party a Total Quality Management is in fault as regard to one of the important elements of the agreement there is no real agreement. This theory maintains that commitments in project Total Quality Management are enforceable because the promisor has "willed" or chosen to be bound by his or her commitment(s). Will theory be connected to this study on grounds that in Total Quality Management process parties have the right and freedom to control the duties that others owe to that particular entity with regards to that Total Quality Management agreement. Will theory thus, protects and fosters the rights of individual autonomy in the between the parties involved in Total Quality

Management. Will theory will ensure that all rights consist in the enjoyment of opportunities for individual choices in state-owned Enterprises, and furthermore, providing understanding that having a right is having an opportunity to make a choice.

2.5 Systems Approach Theory

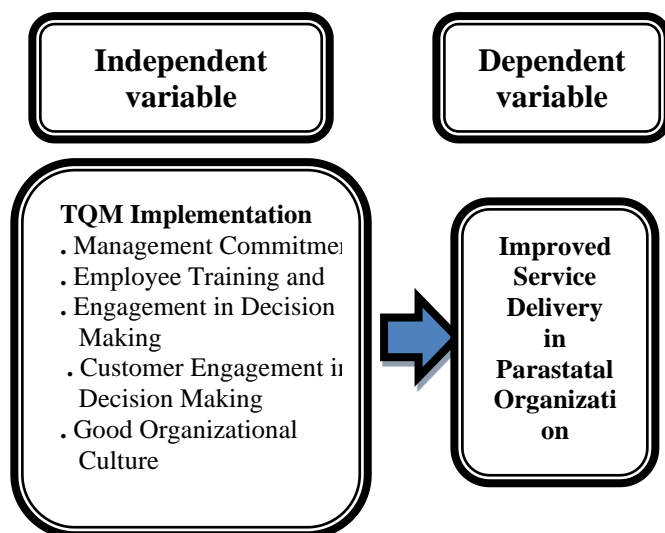
Barnard cited in Schermerhorn (2005) defines the System Approach Theory as a collection of interrelated parts working together towards a purpose. He views organizations as systems that achieve great things by integrating the contributions of individuals to achieve the common purpose. Robbins (2000) agrees with the former view by adding that the Systems Approach views organizations as made up of interdependent factors including individuals, groups, attitudes, motives, formal structure, interactions goals status and authority. Another definition of the Systems Approach is that it is a way of thinking about the job of managing that provides a framework for visualizing internal and external environmental factors as an integrated whole (Rue and Byars 2000). The manager views the human, physical and informational facets of his/her job as linked in an integrated whole (Rue and Byars, 2000). The manager's job is to ensure that all parts of the organization are coordinated internally so that the organization can achieve its goals (Robbins 2000). The Systems Approach recognizes the importance of environment for the organization's sustainability (Robbins 2000). It depends on the manager to choose the management approach that suits him/her in order to have an effective and efficient organization that performs according to acceptable standards. No single management approach offers a complete solution and practitioners need to use approaches together (Boddy and Paton 1998). Management approaches may be effective or unproductive, depending upon their application and appropriateness to given situations (Pettinger, 2002).

2.6 Conceptual Framework

A conceptual framework can be defined as asset of broad ideas and principals taken from relevant fields of enquiry and used to structure a subsequent presentation (Arshida and Agil, 2012). Other scholars claim that conceptual framework is the total, logical orientation and associations of anything and everything that forms the underlying thinking, structures, plans and practices and implementation of the entire research project. It comprises the thoughts on identification of the research topic, the problem to be investigated, the questions to be asked, the literature to be reviewed, the theories to be applied, the methodology that will be used, the methods, procedures and instruments, the data analysis and interpretation of findings, recommendations and conclusions that will be made (Ravitch and Riggan, 2017). The importance of conceptual framework is that it will assist the researcher in identifying and constructing the worldview on phenomena to be investigated (Grant and Asanloo, 2014). It will also simplest way through which the researcher presents their asserted remedies to the problem as they are defined (Akintoye, 2015). Besides that, the conceptual framework will highlight the reasons why a research topic is worthy studying the assumption of the researcher, the scholars, what they agree or disagree with and how they conceptually ground the approach (Evans, 2007). Akintoye (2015) posit that the conceptual framework is mostly used by researchers when existing theories are not applicable or adequate in creating a stable structure for the study. The researcher point of view claim that the conceptual framework will assist the researcher in organizing, conceptualizing, and conducting the research, whether qualitative, quantitative, or mixed-methods. It will also help the researcher to identify the imbalance showing how and how it might be worked on in clarifying some of the theoretical positions and as a checklist for the study to assess what may be needed to be done in

order to successfully implement the TQM. The framework will enable for better evaluation of the actual impact of an intervention on outcomes. Furthermore, the framework presented here will provide a conceptual tool for determining appropriate instructional design applications. It will also provide the much-needed conceptual clarity and facilitates bridging the various approaches to study of TQM. However, effective leadership start with top management vision and the values held, the decision taken and plans made by everyone in the organization. In order to focus them in value adding action, effective leadership and Total Quality Management may result in organization culture in which everyone is trying to do the right thing at the right time (Okuntade, 2015)

Figure 1: Conceptual Framework



2.7 Review of Empirical Evidence

2.7.1 The Concept of Total Quality Management (TQM)

The quality management concept was recognized since ancient times in Japan in the late 1930s specifically after the World War II. After that, several firms in the manufacturing sector were focused on enhancing quality and utilizing tools that directly aim to control quality at these firms (Demirbag et al., 2006; Talib et al., 2010).

Furthermore, both USA and UK accepted the idea of quality management (QM) especially in manufacturing sector in those countries. Subsequently, QM has been recognized widely in several international standards such as in the ISO 9000 and the idea of QM was largely accepted these standards (Sachdeva et al., 2007). Various techniques were also proposed for QM practices, in which it is considered as a method to enhance quality and efficiency of different industries services and products. One of the main internationally accepted approaches is total quality management (TQM) in which this approach essentially attempts to create a comprehensive cooperation between all organization functions in order to fulfil customers' demands in an efficient way and to achieve all organizational goals.

2.8 Implementation of TQM in utility organizations

The study conducted by Lagrosen (2002) on Quality Management in Europe reviewed that Organizations globally of varied types have been in existence for a long time they have been created to serve the needs of the society in which they exist. Globalization, intense worldwide competition and ever-changing customer demands have dramatically changed the business environment during the past few decades. In response to the above-mentioned changes, organizations from Jordan have adopted different quality management standards such as ISO9000, Total Quality Management (TQM), On the other hand, the emphasis on TQM as a new way of managing companies to improve competitiveness has increased considerably over the past few years. Different Studies showed the positive impact of total quality implementation on organizational performance Powell, (2005) further said with the increasing competitive, business survival pressure and the dynamic, changing customer-oriented environment, total quality management (TQM) has

been recognized as one of the important issues and generated a substantial amount of interest among managers and researchers, TQM has been regarded as one of effective ways for firms to improve their competitive advantage (Soltani and Gharneh, 2005). From a service quality approach Sit et al., (2011) found that leadership as TQM construct has a strong positive association with service quality in the commercial banks in Malaysia. Though TQM is successfully used by many organizations, many conceptual and practical questions remain unanswered while global markets and industries are a fact of economic reality. Global quality management (GQM) is a new emerging area of quality management practice but, despite its frequent use, it is not yet defined, analysed and studied. It requires the movement beyond TQM to develop a quality concept that reflects the nature of global corporations and their markets. Global Quality Management (GQM) has several definitions but one seems to be appropriate to the changing global business environment: 'the strategic planning and integration of products and processes to achieve high customer acceptance and low organizational dysfunctionality across country markets. The definition incorporates the basic philosophy of TQM, but recognizes the challenges for quality management when the organization's business is worldwide. GQM is a significant extension of the TQM concept. Although it has in common with TQM a highly customer-oriented philosophy, the expanded geographical and cultural boundaries of quality-related activities require a more dynamic and integrative approach. TQM marked a major conceptual and managerial advance in its linkage of production with marketing, as well as other quality-related functions but still a single country organization, the organizational implications of TQM are relatively straightforward. Even when multiple countries are involved, such as a company importing raw materials from abroad, the organizational requirements can be coordinated from a home headquarters. In a complex network of

quality chain activities, coordination from a single headquarters becomes untenable. GQM entails organizational adjustment. Driven on by regional economic integration in Europe and North America, and the high economic growth of Asian countries, large international companies are building globalized production networks with regionalized systems in several locations. A key characteristic of GQM is the networking of activities within and outside the firm, along with other elements of the overall supply chain. There is a high premium on GQM, which enables great flexibility because of the great number of configuration possibilities for networking, corporate control of GQM cannot be centralized at a home headquarters. Instead, a combination of regional headquarters coupled with global coordination appears to be a hybrid mechanism that allows adaptation to regional differences while enabling cross-fertilization among the corporation's subsidiaries. In the age of multiple headquarters, GQM is the appropriate quality management concept (Povilas and Zirgutiene, 2005). Adopting and implementing quality management practices may have helped some manufacturing firms to remain viable in the face of a very difficult operational environment. This is because the ability of a company to demonstrate that it has quality management systems in place to assure its clients and regulatory bodies can determine whether it gets the business or loses it to a competitor. It is for this reason that at the regional level, the Common Market for Eastern and Southern Africa (COMESA) initiated the Regional Integration Support Mechanism (RISM) project to enable businesses in the region to establish and implement Quality Management Systems based on (ISO 9001:2008). The study by Kasongo and Moono (2010) reviewed that in Zambia, this project is implemented through the partnership of Zambia Bureau of Standards (ZABS) and Zambia Association of Manufacturers (ZAM) in conjunction with the Ministry of Commerce, Trade and Industry. Companies whose quality management

system conforms to ISO 9001:2008 make an application to the Zambia Bureau of Standards for certification. If the company is compliant, ZABS grants the certification which is a Quality Management System mark of conformity denoting that an organization's Quality Management System complies with ISO 9001:2008 Quality Management System standard. ISO certification in Zambia, however, comes with the cost of training borne by the company. For this reason, a number of companies adopting and implementing quality management practices are yet to neither attain the ZABS quality management system mark nor fully invest in quality management systems training (Kasongo and Moono, 2010). However, they remain alive to the need to ensure that quality becomes a company's basis for improvement in overall performance, employee motivation and greater credibility with customers. A previous study by Ahmad et al., (2008) investigated top management commitment role in maintenance of ISO 9001:2008 and in outcomes of QM system in Algeria, practices and implementation in two large service organizations. The investigation concerned with top management commitment and leadership from different approaches such as involvement in quality improvement, providing necessary resources and showing steady commitment to quality perfection.

According to Orland (2000) state that Amati Water Services Company Limited became one of the ISO 9000 certified under Lake Victoria North Water Services Board. The scheme covers five areas namely, Vihiga, Maseno, Kaimosi, Mbale and Sosiani water supplies. The company reported in 2012/2013 financial year that it has lost approximately 40% of clean, treated and potable water as Non-revenue water, received 1241 external customer complaints about lack of clean quality water services, leaking pipes, faulty and old water meters, wrong billing, dirty and aesthetically not acceptable water. In Kenya therefore it is of great

importance to embrace TQM in all areas due to the fact that there is an increasing awareness by senior executives, of the fact that quality is an important strategic issue, which should be implemented at all levels of the organization In South Africa, a study done by N. Lusanda, 2014, reveals that 70% of firms dealing with process engineering have formally adopted TQM while 30% have not. Eighty five percent of the organizations that have adopted TQM are ISO9001 certified. Firms that have not formally adopted TQM are implementing TQM principles, even though they have not been able to implement the principles as well as those that have formally adopted TQM (Oakland, 2000). In the present world, TQM has turned out to be a globally strategic force, which may result in numerous benefits including: improved customer satisfaction, superior employee focus and enthusiasm, decreased waste and enhanced overall performance. Manufacturing companies in Zambia have, since 1975, never had it easy. More fundamentally, the manufacturing sector was conditioned to rely on foreign exchange receipts generated by copper exports to import machinery, spares and other inputs. This dependency on copper earnings effectively tied the performance of some manufacturing subsectors (chemicals, rubber and plastic; metal products/fabrication; non-metal mineral products; and paper and paper products) to the boom-and-bust cycle of the international prices of copper (World Bank, 1996). According to the World Bank (2004:51) "there was a strong forward linkage from the manufacturing to the mining sector but very little forward linkage from the mining to the manufacturing sector" a situation that undermined the role of manufacturing in the national economy. The above factors, especially before the sector was privatized in the early 1990s, contributed to declining levels of productivity and profitability in the manufacturing sector on account of shortages of foreign exchange to import spares, raw materials and intermediate goods to keep the sector viable. After having to contend with the

economic crises of the 1970s to the 1990s, they are now faced with severe electricity shortages arising from climate change and corporate governance challenges in Zambia's national electricity utility company (ZESCO); escalating costs of raw materials and other supplies as a direct consequent of a volatile exchange rate of the local currency (kwacha) against major currencies; high interest rates; competition from high-quality and relatively cheaper imported goods; and a demanding clientele that expect high quality manufactured products (Kasongo and Moono, 2010). Given these competitive pressures and deteriorating business environment, many manufacturing companies have closed shop and those that remain operational have been forced to continuously seek ways to innovate and improve quality for them to remain viable. To enhance service delivery and customer confidence, ZESCO limited has successfully implemented TQM (Kasongo and Moono, 2010). This has turned to be a strategic force at the Company, which has resulted in numerous benefits including: accountability, improved customer satisfaction, superior employee focus and enthusiasm, decreased waste and enhanced overall performance and service delivery. ZESCO company customers all over Zambia can electronically pay their bills in the more than 200 postal offices located in all major towns in the country, in commercial banks, supermarkets, and through Mobile money bill payment services country wide. ZESCO customers can check electricity bill balances through SMS and receives emails and SMS to alert before their electricity is disconnected or if their supplies are to be interrupted due to scheduled outage (Edward, 2013).

2.9 Effects of TQM on organizational performance in utility organizations.

The study conducted by (Talib, 2013) explained that total quality management also engages all organization staff members in the process of covering customers' expectation through utilizing

problem-solving methods to enhance the quality of all organizational products and services. The main focus of total quality management philosophy is to achieve a comprehensive integration among organizational staff and their functions in order to gain better enhancement, progress and preservation of quality products and services to achieve customer satisfaction. This managerial philosophy directly focusses on improving business quality and satisfaction of managers through enhancing the employee's involvement in decision making processes by utilizing teams of quality improvements and quality circle strategies (Yusuf et al., 2007). (Talib et al., 2012). Many literatures provide various concept on TQM; however, all of them share similar basic elements. One example is that all TQM considered customer as the key focus in this managerial strategy. Furthermore, one of the most important elements that ensure the success of TQM practices is the management commitment. Other essential organizational situations to achieve TQM success are organizational culture and alterations. Talib and Rahman (2010a) proposed a TQM model which recognized, "Components of TQM" model practices include commitment of top-management, focus on customers, training and education, continuous improvement, supplier management, involvement and encouragement of employees, benchmarking, and quality information and performance. The outputs are the enhanced productivity and quality, the achievement of high-level customer satisfaction, the improved customer loyalty and on-time delivery. Generally, all TQM models indicated that each managerial action is consist of planning, implementing and evaluating processes. One of the main elements to achieve an effective organizational management processes is the performance measurement. The performance of one organization can be directly related to its ability to achieve their strategic and financial objectives (Li et al., 2006). Stock et al. (2000) was also discussing the organizational performance through measuring both financial and market harmonic

performance which includes the return-on-investment measures (ROI), sales profit and growth and market share progress. One fact must be also mentioned here is that the organizational performance could be measured either depending on operational performance which is referring to the whole performance of one organization that includes financial performance, customer satisfaction and effectiveness of product quality (Brah et al., 2000). Whereas the operational performance of one organization is directly handled with the enhanced. Delivery TQM is not only limited to product quality improvement. It also covers a wider aspect of quality. Previous empirical studies regarding the linkage between TQM and competitive advantage as well as quality have shown significant and positive results. The main focus of TQM as suggested by Douglas and Judge (2001). Alter, (2013) state that a successful TQM implementation will give benefits in improving quality and reducing wastage as well as reduction in costs of poor quality such as scrap, late deliveries, warranty, replacement, (Bahri et al., 2012). Furthermore, Brahri et al. (2012) supported the proposition that TQM implementation correlates with quality conformance. Douglas and Judge (2001) found that according to the perceptions of bank employees, quality systems affect service quality that in turn relates to organizational performance. Effective TQM processes can generate marked improvements in both product and service quality which then results in increased customer satisfaction and organization's profitability (Case and Srikatiana, 1998). By establishing a motivated, customer-oriented management philosophy and practice; internal service quality levels will be more favourable. It was also found that employees' possessing organizational knowledge and skills are important in delivering service quality in which high levels of employee morale and satisfaction were found dependent on the empowerment and involvement of employees (Alter, 2013).

2.10 Strategies to enhance the use of TQM in Utility Organization.

The study by Zakuan et al., (2012) stated that Quality issue has become of great importance to every organization and no management can afford to let nature take its course when it comes to quality. The top management must play a leading role by making available the critical resources, establishing a wide quality policy that is well communicated to all stakeholders, establishing a quality management structure and managing the entire process through close monitoring and evaluation. This must be supported by an organization culture and climate of open cooperation and team work among stakeholders in quality management (Sharp et al., 2000). As cited by Zakuan et al (2012), Deming (1986) urges that managers must institute leadership to usher the quality transformation process. Parameshwar and Srikantia (2000) discussed two types of leadership: transformational leadership and transactional leadership. Transformational leadership is leadership that is based on an ideologically anchored vision while transactional leadership is based on reward control mechanisms and emphasizes on clarification of followers' roles and goals and the way the desired outcome will follow after achievement of the set goals. Champions of innovation tend to exhibit transformational leadership behaviour; they try to initiate influence through calculated tactics in their work environment. According to Omware (2012), adoption of TQM for the first time is associated with development of new organizational policy, new procedures and new tools that must be learned. TQM is an organizational change process that is often associated with instability, confusion, and employees' resistance and must be carefully initiated through consistent management involvement. This was consistent with Sallis (2002) further argues that if TQM is to work it must have the long-term devotion of the senior staff of the institution. They must back it and drive it. Many

quality initiatives falter because senior managers quickly return to traditional ways of managing. Fear by senior managers of adopting new methods is a major barrier. If senior management do not give TQM their backing there is little that anyone else in the organization can do (Douglas and Judge, 2001). Furthermore, Zakuan et al. (2012) considered training as an important factor that boosts employees' efforts towards improvement. To him, quality training includes educating and training of employees at all levels in the organization with an intention of broadening their knowledge on quality issues and programs and providing them with information about the organization's quality mission, vision and general desired direction. According to Jamali et al. (2010), employee training is one of the most important requirements in a successful TQM implementation. Management personnel, supervisors and other employees require skills and knowledge on quality dimensions and management. Owing to the fact that market quality needs are very dynamic, organization must ensure continuous employee development and training on quality management (Cohen and Higgins, 2007). In addition, Powell (2005) stated that organizational culture plays a vital role in enhancing TQM which he defined as the set of organizational practices that has characteristic values, norms and principles that guide daily operations of an organization. Nezhadet al, (2012) discussed four dimensions of organizational culture: *group culture* that emphasizes on flexibility and cohesion among employees of an organization and advocates that top management should promote employees participation and empower them, *developmental culture* that advocates for flexibility and change based on the external environment, *rational culture* that which is oriented towards the external environment but focuses on control and stability and *hierarchical culture* that focuses on internal control through internal efficiency and adherence to law. Wali and Boujelbene (2011) on the other hand discussed organizational culture under orientations.

They discussed four orientations: innovation orientation, stability orientation, results/outcome orientation, people orientation and communication orientation. An organization must come up with quality culture that must be integrated with other dimensions of culture if it has to succeed in TQM management. Sally (2002), state that TQM requires a change of culture which is notoriously difficult to bring about and takes time to implement. It requires a change of attitudes and working methods. Staffs needs to understand and live the message if TQM is to make an impact. However, culture change is not only about changing behaviours. It also requires a change in institutional management. Strong culture is said to exist where staff respond to stimulus because of their alignment to organizational values. Conversely, there is weak culture where there is little alignment with organizational values and control must be exercised through extensive procedures and bureaucracy. Where culture is strong, people do things because they believe it is the right thing to do, there is a risk of doing it another way. The study by Kasongo and Moono (2010), also identified communication as a strategy to TQM enhancement. They defined communication as the exchange of ideas, messages, or information between people through speech, signals, or writing. According to him, success of an organization depends on communication such that when the process is altered, the entire organization suffers. Every organization must therefore put into place proper communication systems that facilitate horizontal, vertical, upward and downward exchange of information. According to Murphy (2009), both internal and external communication is critical in implementation of quality programs. It enables stakeholders both within and outside the organization to have an in depth understanding of quality and its management. Top management must translate quality information in understandable form that all stakeholders can understand put in place feedback channel to allow a two-way communication process.

2.11 Challenges faced in the Implementation of TQM

There are various challenges faced by most organizations during implementation of quality management practices. These challenges create a hindrance towards successful implementation of quality management practices making it difficult for an organization to provide quality services to the customers and other stakeholders, Ngure (2012). Understanding the factors likely to impede the implementation of the TQM allows managers to develop more effective strategies for improving the chances of successfully deploy TQM and thereby to achieve excellence in the business (Jacobsen, 2008). Oakland (2003), have identified five barriers in the implementation of TQM: Poor planning, practice management and development of human resources insufficient and inadequate, lack of quality planning, the lack of leadership in the development of a quality culture, inadequate resources for TQM and Lack of customer orientation. Johnson (2013) argues that the main barriers were found to be the lack of benchmarking and employee resistance to change. Organizations must understand that benchmarking is a tool used to identify strengths and weaknesses in comparison with the best companies in their industry. Employee resistance can be overcome by appropriate training and involving them in the planning and implementation phases of TQM. It was also found that insufficient resources were an obstacle to the implementation of TQM. Smith, (2004) explained that quality management programs have failed because they were, programs of the month". According to him, implementing quality throughout an organization is not the result of a formalized programme but requires a cultural change in the way activities is conducted. Ugboro and Obeng, (2000) in their research they found out that the half-hearted implementation of TQM as a major reason for its failure in most organizations. According to them, organizations are only willing to implement just those aspects of TQM which is supported by

existing organizational culture. Their findings revealed that employees did not feel as part of the decision-making process and their ability to make contributions to quality improvement were restricted due to the limited authority granted them to carry out their activities. However, Gosen., et al (2005) stated that governments in developing countries can more effectively help in enhancing local capability without diminishing quality by being more efficient themselves, providing financial and technology support, and making industrial development an important priority. It is worth mentioning that a number of gaps have been identified in the literature concerning the role of government effect on TQM implementation in developing countries. Furthermore, there are a number of other barriers to TQM implementation success, such as lack of continuous improvement (Adebanjo and Kehoe, 1998, Tamimi and Sebastian Elli, 1998). The lack of top management commitment is also identified as one of the main obstacles to successful TQM implementations. Also, the inefficient knowledge and understanding of the concept of TQM is recorded as one of the top difficulties that face TQM (Huang and Lin, 2000).

However, the developing countries suffer from poor quality products. Low product quality is term that has become synonymous with the customer goods manufactured in the developing countries (Lakhe and Mohanty 1994). Sandholm (1999) refers to certain inhibiting factors to TQM in developing countries as low purchasing power, a shortage of goods, foreign exchange constraints, an unfinished infrastructure, insufficient leadership and insufficient knowledge. It has also been argued that for companies to realize the value of a TQM implementation, it must have an internal organizational structure that is capable of fully supporting the implementation (Turney and Anderson, 2003).

CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter presented the research methodology and covers the research design, population and sample size, data collection methods, and data analysis.

3.1 Research Design

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically (Kothari, 2004:7-8). The descriptive research design was adopted to investigate the total quality management issues affecting organization performance in utility companies. The major purpose of descriptive research is description of the state of affairs as it exists at present. It describes the attitudes and behaviours for example, bullying. It is from there that Total Quality Management should be implemented and be part of the organization. Generally, this design will deal with effect of applying Total Quality Management philosophies in utility companies and relationships of variables. A descriptive study was conducted covering ZESCO limited and LWSC in Zambia. In this study a mixed research approach of quantitative and qualitative was used in order to have a holistic view of the study. Creswell (2014:277) states that mixed methods research is an approach to inquiry that combines both qualitative and quantitative forms of research. Moreover, a convergent parallel mixed methods strategy in which a researcher collected both quantitative and qualitative data, analyze them separately, and then compare the results to see if the findings confirm or will disconfirm each other (Creswell, 2014: 275).

3.2 Target Population

A population is the entire group of individuals, events or things that are of interest to the researcher and which he or she wishes to investigate (Creswell, 2005). In the words of Bryman and Bell (2011), a population is a universe of units from which a

sample is to be selected. The target population of this study comprises of two parastatal organization that will facilitate data collection. The ZESCO limited has the population of 1,200 employees and LWSC has 1,000 employees respectively. The target population include both female and male employees such as middle managers, training managers, human resource, Technicians, engineers and few selected individuals from different organizations. The study was focused on these employees aged between 18 to 30 years and above because they are key players in these utility companies hence achieve Total Quality Management and impact on organization performance.

3.3 Sample Size and Sampling Procedure

3.3.1 Sample Size

The study covered Zambia Electricity Supply Company limited (ZESCO) headquarters employees and Lusaka Water and Sewerage Company (LWSC) headquarters employees. In order to accuracy of results, seventy-five (75) representatives were selected from each organization between two organizations to make a total sample size of 150 respondents. The seventy-five (75) respondents from each organization were randomly selected from the core departments and preferably training department, maintenance and operations, and human resource. The fifty respondents were be people who have completed their secondary school education and field of specialization so as to ensure good understanding of the questionnaire. The sample size for this study was calculated using a simplified formula for Proportion that Yamane (1967) used to calculate sample sizes. A 90% confidence level and a margin of error (confidence interval) of +/- 10% Lusaka Water and Sewerage Company and Zambia Electricity Supply Corporation

$$n = \frac{N}{1 + N(e)^2}$$
$$n = \frac{1,200}{1 + 1,200(0.1)^2}$$
$$n = 92 \text{ participants}$$

3.3.2 Sampling Procedure

According to Trochim (2006), sampling is the process of selecting units such as people or organizations from a population of interest for a study. Thus, a sample is a portion of the population of interest selected for a study (Kothari, 2004). This study used non-probability and probability sampling techniques namely: Purposive and simple random techniques. Purposive sampling is a strategy to choose small groups or individuals likely to be knowledgeable and informative about the phenomenon. The groups selected in this study assumed to be knowledgeable of the problem. Additionally, purposive sampling enabled the researcher to use her judgment to select cases that best enabled the research questions and to meet the objectives of the study (McMillan and Schumacher, 2000:433). Whereas, simple random sampling is a probability sampling technique where each and every element has an equal and non-zero chance of being included in the sample. Further, an in-depth's carefully planned discussion designed to obtain perceptions on a defined area of interest in a non-threatening environment (Greef, 2002: 306).

3.4 Data Collection Methods and Procedures

3.4.1 Data Collection Instrument

A structured questionnaire was developed and distributed to employees at ZESCO limited headquarters and LWSC headquarters. The purpose for choosing the questionnaire for this study was because questionnaires it gathers information from a large audience. It is affordable and provides both qualitative and quantitative results. The questionnaire is self-administered because they do not perform face to face interview. The other reason

is because the questionnaires are practical way to gather data because they are used for particular target group and easily managed in way for example open-ended and multiple choices. Besides that, the questionnaires are quickest way to get results easier within a shortest period of time and also provides privacy. The study used interview guides and structured questionnaires. The questions were based on a (Yes or No, tick, agree, strongly agree, to (strongly disagree) responses was provided. These questions include multiple choice, open ended and closed ended. The questionnaire captured gender, age, work experience and different department of the company as well as the knowledge about TQM.

3.4.2 Data Collection Procedures

The data was collected from various secondary sources as well as from questionnaire and interview questionnaires guide responses. The questionnaire comprised of three parts. Part- A background, Part-B includes information on Total Quality Management principles applications, and Part C effect on Total Quality Management practices regarding organizational performance. The questionnaire will be designed in a simple and accurate manner in order for the respondent to give precise answers. A draft questionnaire was sent to (5) experts for thoroughly correction. The questionnaires were sent physically to the respondents in which they were guided on the instructions to follow for example, respondents should not write names on the questionnaires as it is confidential data.

3.5 Data Analysis

The answered questionnaires were checked for uniformity, accuracy as well as consistency. They will then be editing, coded, tabulation and classification of the data and ensure it is ready for analysis. The data collected was analysed using Statistical Package for the Social Sciences (SPSS).

The reason for choosing this package is because it is user friendly and it is the most frequently used software for quantitative analysis. With SPSS, the data could be entered and stored, and data and output files can be generated. The graphs and charts were also be generated with SPSS. (Jennings, 2001:303). Moreover, qualitative data will be collected in this study as supplemental and will be analysed using Narrative Analysis and Content Analysis. The content of the data from quality talks were subjected to stringent interpretation through systematic classification, coding and identification of themes and patterns (Hsieh and Shammon, 2005).

3.6 Ethical Consideration

The subjects in this study had the right to accept to be participants and or deny being participants. No one was forced to be part on this study. The researcher therefore got consent from the subjects before engaging them in the study. The information that the participants brought out was treated with utmost confidentiality and no part of it shall be leaked out to anyone. To ensure this, the researcher did not require research participants to give names or details that may consequently make them known.

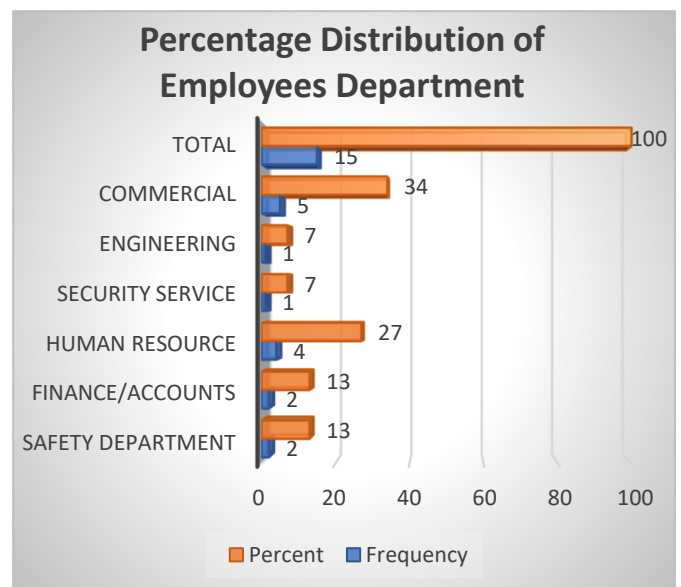
CHAPTER FOUR: DATA PRESENTATION AND FINDINGS

4.0 Introduction

This chapter presented the findings obtained from the research. It was comprised of the background information of the respondents and other findings related to the specific objectives of the study. The total number of questionnaires distributed was 30 on the employees and 40 on the public customers. However, 15 of 30 questionnaires and 40 of 40 questionnaires were collected thus these findings were based on 55 respondents. It first presented the findings from the employees, and then the customer

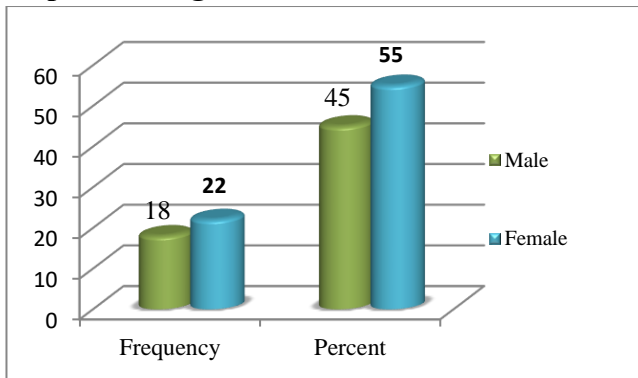
Findings from the customers of the employees of ZESCO and LWSC

Figure 4. 1: Percentage distribution by employees work department



In Figure 4.1 above, respondents were asked to indicate their department of work, to determine if the information was corrected from the right people. In the figure it was shown that 5 representing (34%) worked in the commercial department, followed by 4 (27%) human resource department, while 2 (13%) each worked in the safety and finance/accounts departments respectively, and lastly 1 (7%) each respectively worked in the Security service engineering department.

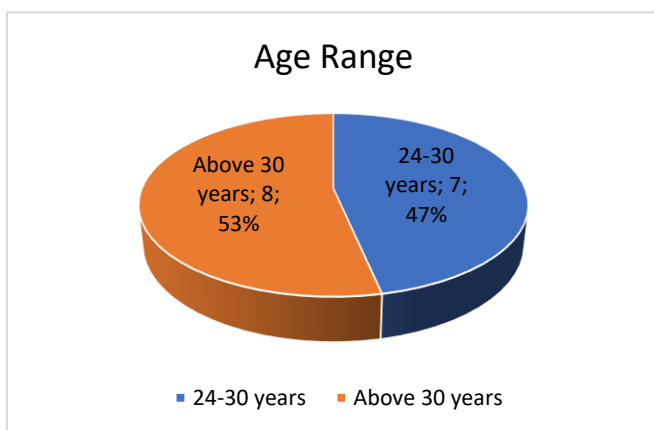
Figure 4. 2: Percentage distribution by respondents' gender



From the figure 4.1 above it was found that majority of the respondent were females represented by 22 (55%) whereas 18 (45%) were males. The result can be verified using the findings which are as shown.

Figure 4. 3: Percentage distribution by respondents' age range

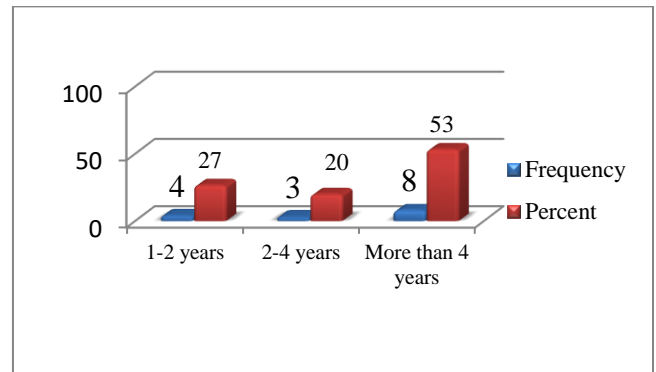
The results presented in the figure 4.2 above it can be seen that majority of the respondents were above 30 years represented by 8 (53%), while 7 (47%) were aged between 24-30 years. This shows that the results were skewed towards those who were above



30 years.

Figure 4. 4: Percentage distribution by number of years worked in the company

The years of experience an individual worked for a company or field determines their levels of knowledge on service delivery of the company.



Thus, respondents in figure 4.2 above were asked to indicate their years of work experience the have been with their respective companies. It was found that 8 (53%) majority of the respondents showed that they work for their company for more than 4 years, whereas 3 (20%) worked between 2-3 years, and lastly 4 (27%) worked between 1-2 years. The result presented from figure 4.3 above was shown that most of the respondents represented by 3 (20%) were customer service assistants, followed by human resource managers and superior officers representing 3 (13%) each respectively, while safety officer, branch manager, audit service manager, head of security services, engineer, data entry clerk, gender coordinator, and Community Development Specialist represented by 1 (7%) each respectively.

Figure 4. 5: Percentage Distribution by Respondent's Position in the Company

The results presented in the figure 4.3 below showed that 3 (20%) of the respondents were Customer Service Assistant, followed by superior Officer, and Human Resource Managers represented by 2 (13%) each respectively, and lastly 1 (7%) each were Community Development Specialist, Gender Coordinator, Data Entry Clerk, Engineer, Head of

security services, Audit service manager and Safety Officer respectively.

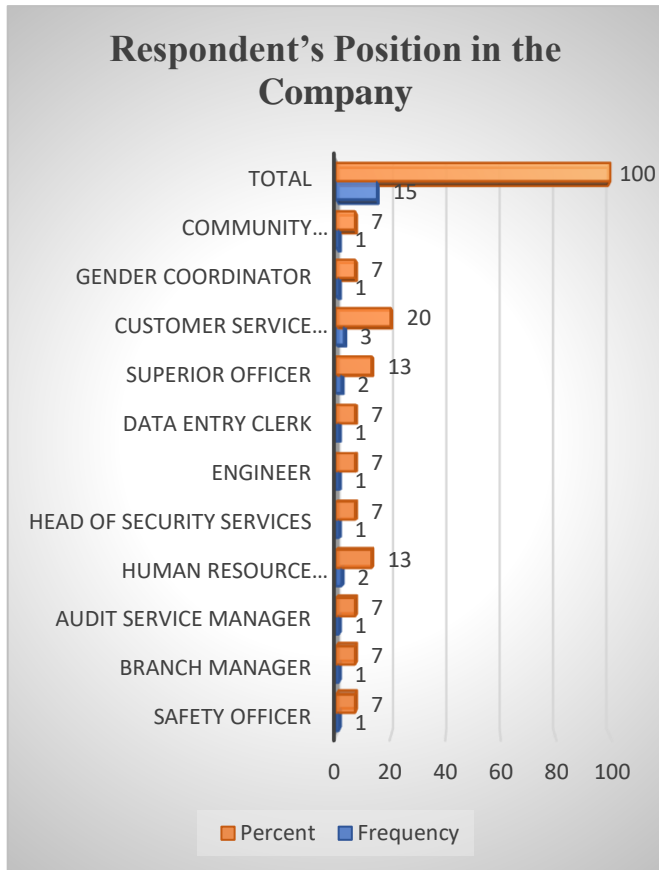
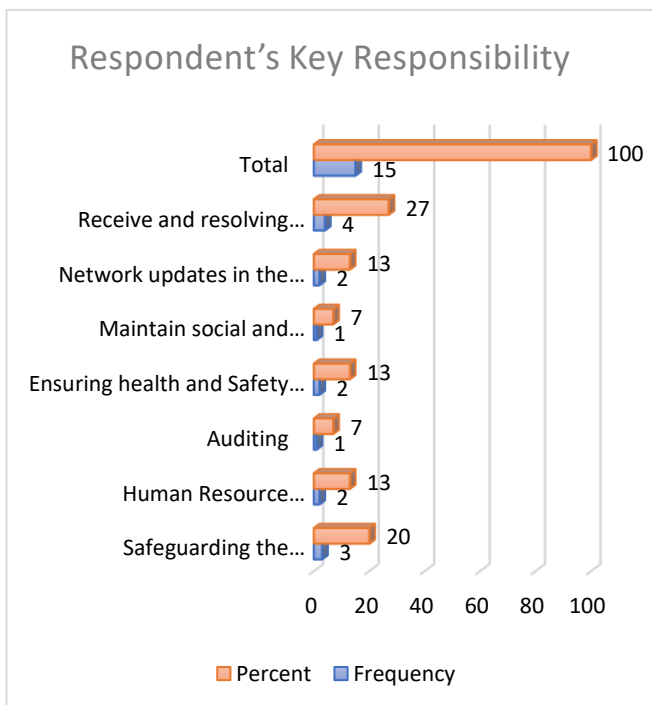
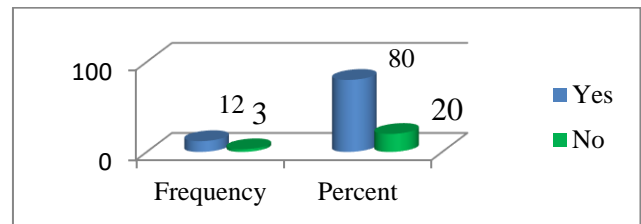


Figure 4. 6: Percentage Distribution by Respondent's Key Responsibility in their Work



From figure 4.6 above it can be deduced that 4 (27%) had a task of receiving and resolving complaints of customers, 3 (20%) safeguarding the environment, followed by managing staff, ensuring health and Safety of employees and clients, and Network updates in the data base representing 2 (13%) each respectively. 1 (7%) each indicated auditing, and maintaining social and Gender Issues in the company respectively.

Figure 4. 7: Percentage distribution on whether respondents had ever heard about Total



In figure 4.7 respondents were asked on whether respondents they heard about Total Quality Management in line with the services provided their organization. It was found that 12 (80%) indicating majority of the respondents attested that they heard about heard about Total Quality Management in line with the services provided their organization, while 3 (20%) said they never heard of total quality management at their institution.

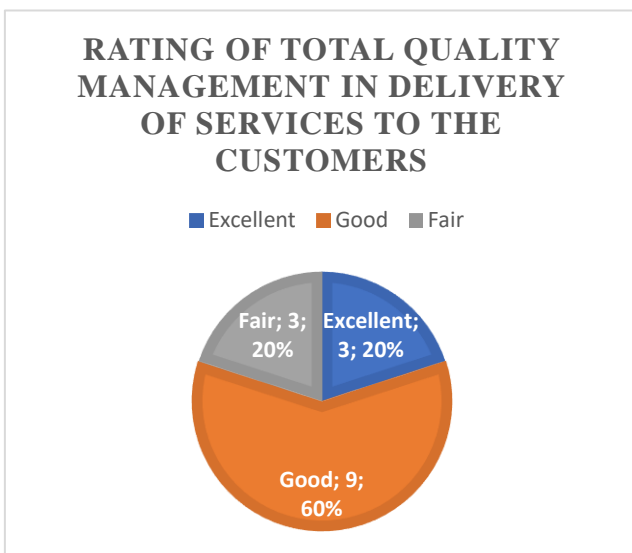
Figure 4. 8: Percentage Distribution by Respondent's Definition of Total Quality Management

Definition of total quality management	Frequency	Percent
A system used by businesses to provide quality service delivery	8	53
Provision of water and sanitation services that not only meet the needs of the clients but beyond their expectations	4	27

Continuous quality improvement in water and sanitation and achieving absolute improvement	1	7
A structured approach based on the principles to maintain high standard of work for the company	2	13
Total	15	100

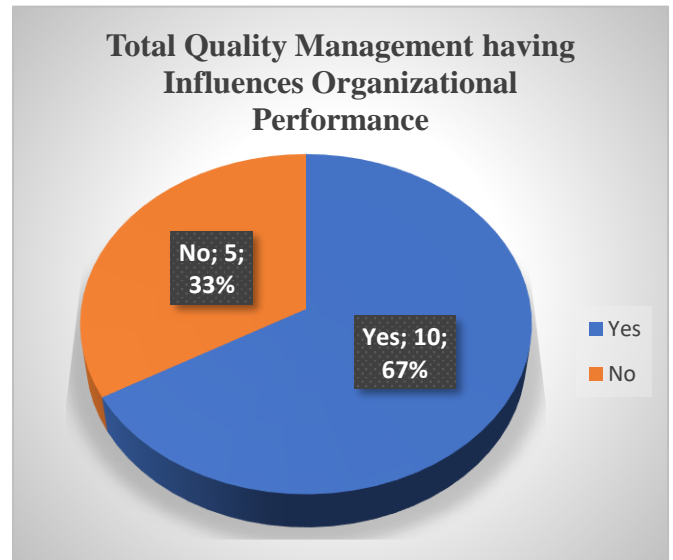
The results shown in figure 4.8 above it was shown that most of the respondents with (8) 53% understood total quality management as a system used by businesses to provide quality service delivery, 4 (27%) attributed to the provision of water and sanitation services that not only meet the needs of the clients but beyond their expectations, 2 (13%) defined total quality management as a structured approach based on the principles to maintain high standard of work for the company, while 1 (7%) referred it to entail continuous quality improvement in water and sanitation and achieving absolute improvement.

Figure 4. 9: Distribution on Rating of the Implementation of Total Quality Management in Delivery of Services to the Customers by the Organizations Percentage



In figure 4.9 above it has been seen that majority represented by 9 (60%) indicated well, whereas 3 (20%) indicated excellent, and another 3 (20%) indicated fair.

Figure 4. 10: Percentage Distribution on implementation of Total Quality Management having Influences Organizational Performance



In figure 4.10 above respondents were asked on whether implementing of total quality management influences organizational performance. It was revealed that majority of the respondents represented by 10 (67%) indicated that implementing total quality management practices influences organizational performance, whereas 5 (33%) respondents disagreed to this fact.

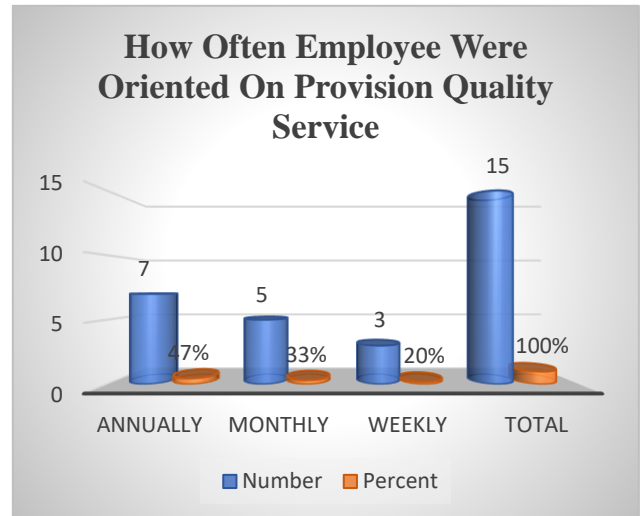
Figure 4. 2: Percentage Distribution on Whether Implementation of Total Quality Management Leads to Improved Organizational Performance

From figure 4.8 above it was found that 12 (80%) of the respondents agreed that implementation of total quality management leads improved organizational performance, whereas 3 (20%) disagreed.

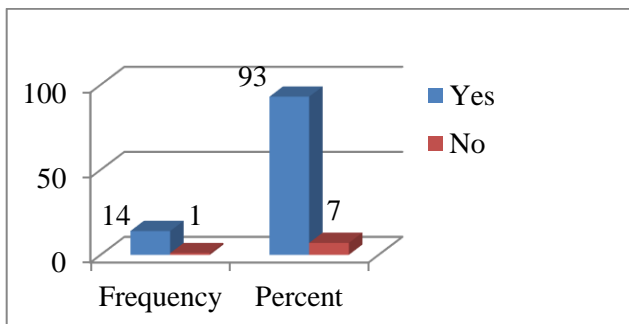


Figure 4. 1: Percentage Distribution by Whether Employees Played a Play Any Role in the Organization with Regard to Ensure Quality Provision of Services

Whether the Face Challenges in Ensuring Quality Services Provision to The Clients



In figure 4.10 above it was found that 10 (67%) majority of the respondents indicated that they face challenges in ensuring quality services provision to the clients, whereas 5 (33%) refuted to this fact.



In the figure 4.7 above it has been shown that 14 (93%) attested that played a play any role in the organization with regard to ensure quality provision of services, while 1 (7%) disagreed.

Figure 4. 3: Percentage distribution on how often employee were oriented on provision quality service

From figure 4.9 it was revealed that 7 (47%) most of the respondents in said that employees were oriented on provision quality service annually, followed by (5) 33% quarterly, and lastly 3 (20%) indicated that they were oriented on provision quality service weekly.

Figure 4. 2: Percentage distribution by whether the face challenges in ensuring quality services provision to the clients

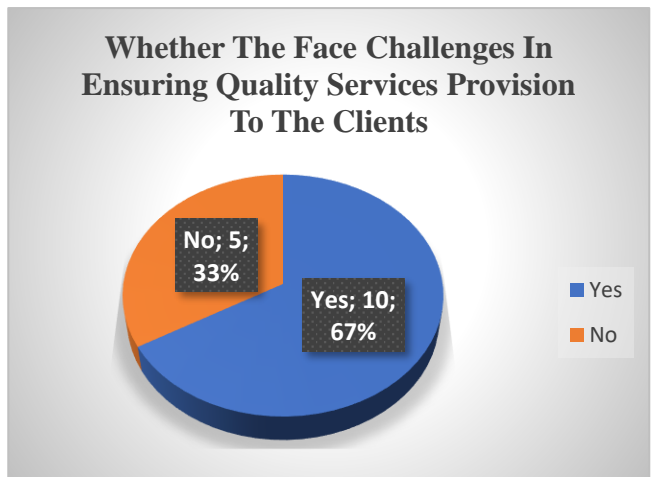


Figure 4. 11: Percentage distribution on challenges faced in the provision of quality service delivery

The results presented in Figure 4.11 above shows the percentage distribution on challenges faced by the organization in the provision of quality service delivery to the clients. It was found that, clients mostly failed to follow rules and regulations in line to requirements of the service providers 13 (13%) ,

others stated lack of timely information, and lack of continuous training and orientation programmes 11(11%), dissemination represented by 11 (11%) each respectively, followed by those who indicated lack of commitment by workers to the company, strict or too much bureaucracy leading to poor service delivery, and vandalism of equipment by members the public each representing 10 (10%) each respectively. On the hand, 9 (9%) each indicated delayed customer complaint resolution, use of outdated system in service delivery, and reduced water levels due to climate change respectively, and lastly encroachment of critical areas for the utility companies.

Challenges	Freq	%
Lack of commitment by workers to the company	10	10%
Delayed customer complaint resolution	9	9%
Lack of timely information dissemination	11	11%
Encroachment	8	8%
Vandalism of equipment by some members of the public	10	10%
Use of outdated system in service delivery	9	9%
Strict or too much bureaucracy leading to poor service delivery	10	10%
Reduced water levels due to climate change	9	9%
Clients' failure to follow rules and regulations in line to requirements of the service providers	13	13%
Lack of continuous training and orientation programmes	11	12%
Total	100	100%

Figure 4. 12: Percentage distribution by measures to put in place to improve quality service delivery

Measures	Freq	%
Weekly induction and orientation of workers on TQM	7	8.0%
Sensitization on the benefits of providing quality service to the company and the customers	11	12.6%
Emphasizing employees on following the rules and regulations in the process of TQM to meet the required standards in service delivery	10	11.5%
Invest in alternative power generation like solar	12	13.8%
strategic sourcing framework of chemicals for water purification	11	12.6%
Sensitize people on the dangers and effects of encroachment and vandalism of infrastructure	12	13.8%
ensure critical conditions of success are in place	12	13.8%
Increase number of personnel	12	13.8%
Total	87	100.0%

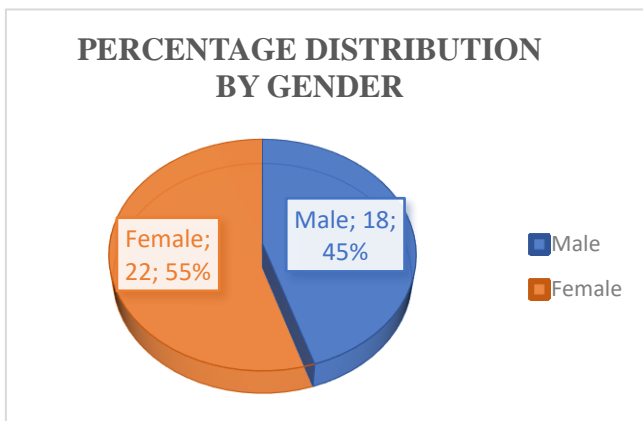
The results presented in Figure 4.7 above results from a multiple response question in which the respondents were asked to propose some measures to put in place to improve quality service delivery to their clients. It was found that out of a total number of 87 responses, majority represented by 12 (13.8%) each attributed to the need invest in alternative power generation like solar, ensuring critical conditions of success are in place, increasing on the number of personnel, sensitize the general public on the dangers and effects of encroachment and vandalism of infrastructure respectively. This was followed by 10 (11.5%) said emphasizing employees on following the rules and regulations in the process of TQM to meet the

required standards in service delivery, and lastly 7 (8.0%) frequent or weekly induction and orientation of workers on TQM.

Findings from the customers of ZESCO and LWSC

Figure 4. 3: Percentage distribution by gender

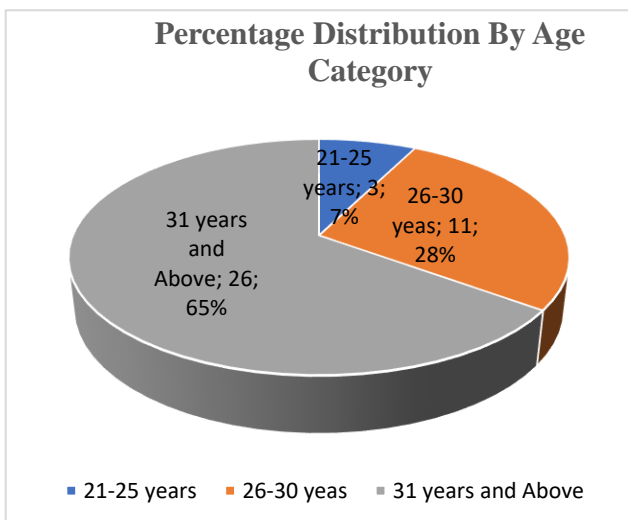
The results presented in figure 4.13 above it has been shown that majority of the respondents 22



(55%) were females while 18 (45%) were males. This entails that the results were skewed towards the female respondents.

Figure 4. 15: Percentage distribution by age category

The figure 4.15 above shows the respondents age category, and it was found that most of the



respondents were in the age 31 years and above represented by 26 (65%), followed by 11 (28%) 26-30 years.

Figure 4. 4: Percentage distribution by years of service by ZESCO

From the figure 4.14 above, it can be seen that 34 (85%) majority of the respondents were serviced by ZESCO for more 4 years, followed by 5 (13%) between 2-3 years and lastly 1 (3%) for less than 2 years. This means that 98% of the customers interviewed had been serviced by ZESCO for more 2 years.

Figure 4. 13: Percentage distribution by years of customer service by LWSC

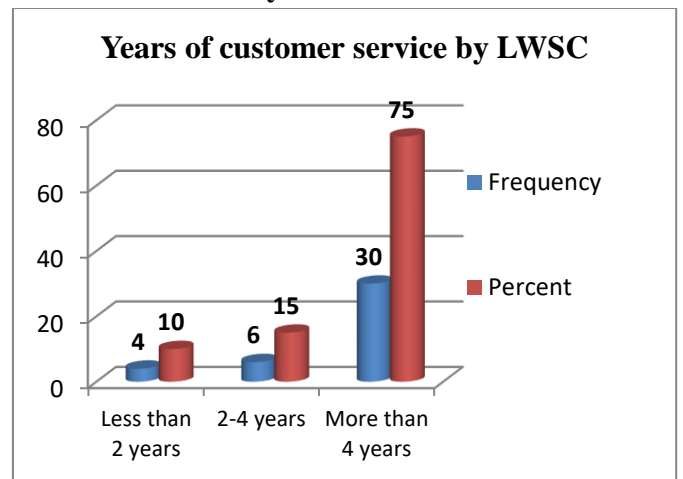
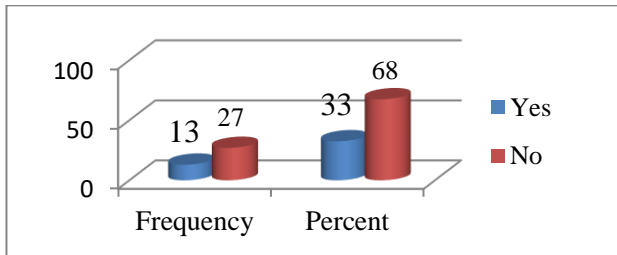


Figure 4.17 below shows the number of years that LWSC has been servicing the customers, and it was found that most of the respondents represented by 30 (75%) indicated that LWSC serviced them for more than 4 years, followed by those who indicated 2-4 years representing 6 (15%) and lastly 4 (10%) said LWSC serviced them for less than 2 years. These results entail that 90% of the respondents were serviced by LWSC for more than 2 years.

Figure 4. 4: Percentage distribution on whether clients were provided with quality services from ZESCO



From figure 4.7 above, it can be seen that majority of the respondents with 27 (68%) said that ZESCO did not provide quality service delivery, while 13 (33%) agreed that the company provided quality service delivery. It can therefore be deduced that ZESCO did not provide quality service delivery to the customers.

Figure 4. 5: Percentage distribution by whether clients were provided with quality services from LWSC

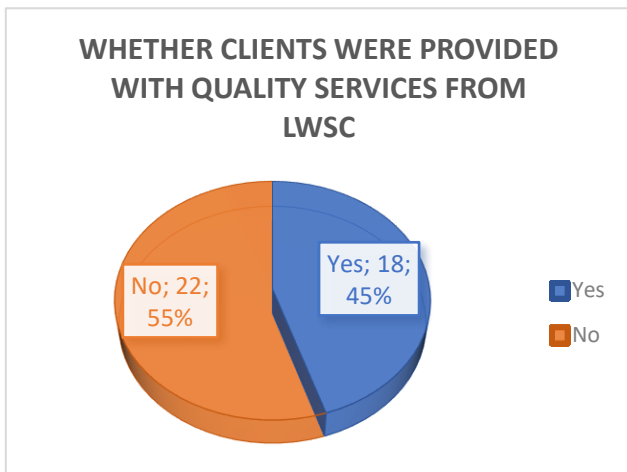


Figure 4.15 above shows that 22 (55%) majority of the respondents indicated that did not receive quality services from LWSC, whereas 18 (45%) attested that they received quality services from LWSC. This means that the results are skewed towards those who refuted that LWSC did not provide quality service delivery.

Figure 4. 6: Percentage distribution by challenges faced by customers from ZESCO



In figure 4.16 above, shows responses from a multiple response question in respondents were asked to in state some challenges faced from ZESCO in provision of its services to the customers. It was found that out of a total response of 117, 33 (28%) alluded to too much load shedding, 32 (27%) lack timely responses, 30 (26%) poor customer service, and lastly 22 (19%) delay in connecting power.

Figure 4. 7: Percentage distribution by challenges from LWSC in service delivery

From figure 4.17 below respondents were asked a multiple response question in which they required to indicate the challenges faced by LWSC in their provision of water and sanitation services. It was found that 28 (30%) indicated that they experienced poor customer service, 27 (29%) poor water supply especially during the day, 21 (22%) delayed responses, whereas 18 (19%) attributed to abnormal water bills.

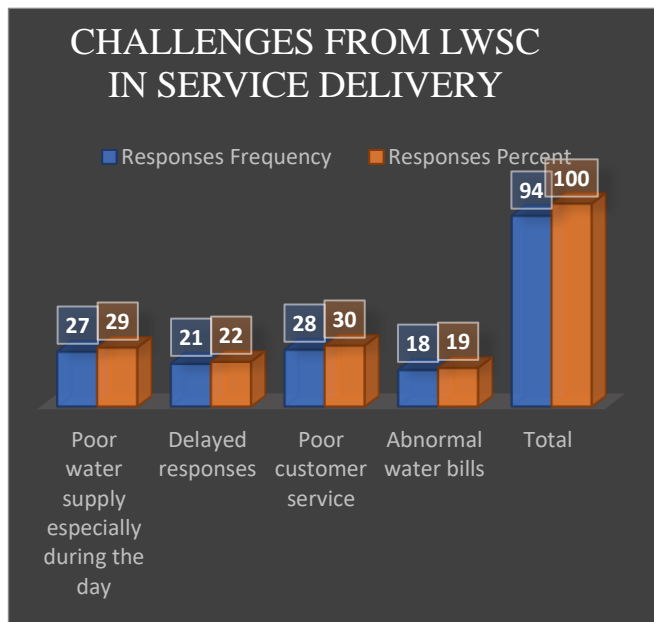
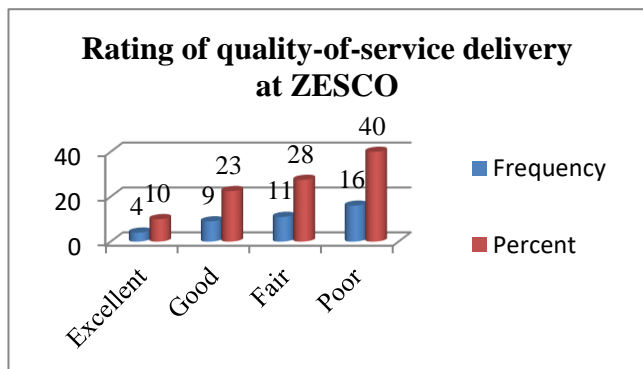


Figure 4. 5: Percentage distribution on rating of quality-of-service delivery at ZESCO



In figure 4.8 below, respondents were asked to rate the levels of service delivery by ZESCO. It was found that majority of the respondent represented by 16 (40%) rated the service delivery at ZESCO to be poor, followed by 11 (28%) fair, whereas 9 (23%) rated the service delivery by ZESCO to be good, and lastly 4 (10%) indicated it was excellent. The result can be verified using the findings as shown.

Figure 4. 8: Percentage distribution by rating of quality-of-service delivery by LWSC

Figure 4.18 below show the results from a question in which the respondents were asked rate the delivery of service by LWSC. It can be deduced that

most of the respondents with 14 (35%) rated the service delivery of LWSC as fair, followed by 12 (30%) who indicated rated it as being good, 9 (23%) poor while 5 (13%) indicated that service provided by LWSC were excellent. This means that 78% of the respondents positively rated LWSC while only 23% rated it poor.

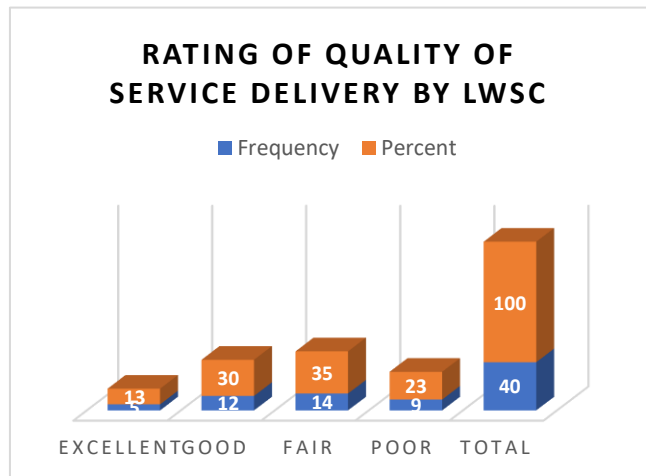


Figure 4. 9: Percentage distribution by measures to put in place to improve service delivery at ZESCO

Measures	Freq	%
Reduce on hours of load shedding	68	38.9%
Need to have proper Monitoring and evaluation system	13	7.4%
Change of management and employee qualified personnel	16	9.1%
Investing in alternative power sources and acquisition of efficient and updated equipment	30	17.1%
Introduce a competitor	26	14.9%
Constructing more dams as water reservoirs to caution power supply when water levels drop	22	12.6%
Total	175	100.0%

From figure 4.19 above it was found that 68 (38.9%) alluded to the need to reduce on hours of load shedding, 30 (17.1%) indicated investing in alternative power sources and acquisition of efficient and updated equipment, 26 (14.9%) indicated introducing a competitor, in the providing electricity, 22 (12.6%) constructing more dams as water reservoirs to caution power supply when water levels drop, 16 (9.1%) need to change of management and employee qualified personnel., and lastly 13 (7.4%) of the respondents said there is need to have proper monitoring and evaluation system.

Figure 4. 10: Percentage Distribution by Measures to Put in Place to Improve Service Delivery at LWSC

Measures by LWSC	Frequency	Percentage
Provide water both during day and night	27	17%
Employee more staff or workers	24	15%
Routine maintenance	33	20%
Provide accurate water bills	19	12%
Distribution of disconnection notes at the right time	13	8%
Installation of prepared meters to enable consumers pay for service used	22	14%
Introduce a competitor	17	11%
Change of management	7	4%
Total	162	100%

From the figure 20 above it can be seen that most of the respondents proposed 33 (20%) routine maintenance, 27 (17%), provide water both during day and night, 24 (15%) employee more staff or workers, 22 (14%) installation of prepared metres

to enable consumers pay for service used, 19 (12%) provide accurate water bills, 17 (11%) introduce a competitor, 13 (8%) pointed to the distribution of disconnection notes at the right time i.e. when month end when people are paid and not in the middle of the month, and lastly 7 (4%) change of management.

Cross tabulation between implementation of total quality management and organizational performance

Figure 4. 11: Pearson’s Correlation Coefficient on Cross Tabulation between Implementation of Total Quality Management and Organizational Performance

Whether implementation of total quality management influences performance	Whether implementation of total quality management leads improved organizational performance
Pearson Correlation	.000
Sig. (2-tailed)	1.000
Total number of cases (N)	15

Basically, there is a connection between the implementation of total quality management and organizational performance. Thus, a Pearson’s correlation test was computed between implementation of total quality management having influence on organizational performance and whether it leads to improved organizational performance. From chi-square Pearson’s correlation test it was found as indicated in figure 4.21 above that, “N” which is the total number of Pearson’s scores on which each correlation coefficient is based on, and all the variables had a total of 15 scores.

It was calculated at a significance level or P-Value of 0.000 on whether implementation of total quality management leading to improved organizational performance which is less than 0.05a. The correlation coefficient between implementation of total quality management and leading to improved organizational performance was very high indicating 1.000 indicating a perfecting positive correlation between implementing total quality management and improved organizational performance. Hence, using a P-Value of 0.05a and Pearson's correlation coefficient value of -1 to 1, 0.000 is less than 0.05, indicating a positive relation implementation of total quality management and leading to improved organizational performance and 1.000 indicating a perfect positive correlation between implementation of total quality management and improved organizational performance. Therefore, the researcher concludes that there is a perfect positive and strong relation between implementing total quality management and having improved organizational performance.

4.2 DETAILED ANALYSES AND DISCUSSION OF FINDINGS

The overall objective of this study was to investigate the application of total quality management principles at ZESCO and LWSC. It was principally based on four (4) specific objectives, and these were: 1) to investigate to what extent the principles of Total Quality Management are implemented at ZESCO and LWSC, 2) to examine the impact of Total Quality Management implementation on organizational performance, 3) to establish the extent of focus on customers and involvement of staff in decision making, and 4) to find out the extent to which quality culture is embedded in the organization.

To investigate to what extent the principles of TQM are implemented at ZESCO and LWSC

From the first objective it was found that 12 (80%) indicating majority of the respondents attested that they heard about heard about Total Quality Management in line with the services provided their organization, while 3 (20%) said they never heard of total quality management at their institution. Out of those who heard of total quality management, 53% understood total quality management to as a system used by businesses to provide quality service delivery, 27% attributed it to the provision of services that do not only meet the needs of the clients but beyond their expectations, 13% defined total quality management as a structured approach based on the principles to maintain high standard of work for the company, while 7% referred it to entail continuous quality improvement in water and sanitation and achieving absolute improvement. From this it can be seem that most of the respondents were aware of total quality management and had an understanding of it. Most of employees rated the implementation of Total Quality Management in delivery of services in the organizations to be good represented by majority represented by 60%, whereas 20% indicated excellent, and fair each respectively. However, the findings revealed that orientation programmes on provision of quality service delivery was done annually, while others indicated quarterly. This insinuates that employees were not regularly trained or oriented provision of service delivery.

Examining the impact of TQM implementation on organizational performance

The second objective was focused on examine the impact of TQM implementation on organizational performance, and it was revealed from the study findings that majority of the respondents represented by 10 (67%) indicated that implementing total quality management practices influences organizational performance, whereas 5

(33%) respondents disagreed to this fact. It was also found that it was found that 12 (80%) of the respondents agreed that implementation of total quality management led improved organizational performance, whereas 3 (20%) disagreed. To further examining the impact of Total Quality Management implementation on organizational performance, a Pearson's correlation test was computed between implementation of total quality management and organizational performance. From Chi-square Pearson's correlation test it was based on a total number 15 Pearson's scores. It found the significance level or P-Value of 0.000 on whether implementation of total quality management led to improved organizational performance which was less than 0.05a, and the Pearson's correlation coefficient of 1.000 which was very high indicating a perfecting positive correlation between implementing total quality management and improved organizational performance. Hence, using a P-Value of 0.05a and Pearson's correlation coefficient value of -1 to 1, 0.000 is less than 0.05, indicating a positive relation implementation of total quality management and leading to improved organizational performance and 1.000 indicating a perfect perfecting positive correlation between implementation of total quality management and improved organizational performance. Therefore, the researcher concluded that there is a perfect positive and strong relation between implementing total quality management and having improved organizational performance. These findings compliment those of Oakland (2000) and Wilkinson (1992) who found that TQM has turned out to be a globally strategic force, which may result in numerous benefits including: improved customer satisfaction, superior employee focus and enthusiasm, decreased waste and enhanced overall performance.

Establishing the extent of focus on customers and involvement of staff in decision making

The third objective endeavored to establish the extent of focus on customers and involvement of staff in decision making. The findings from the study revealed that most of the played a crucial role in ensuring the provision of quality services to the customer as evidenced by 93% of the workers attested that they played a role in the organization with regard to decision making and ensuring quality provision of services. Some of the tasks played by employees included receiving and resolving complaints of customers, safeguarding the environment, managing staff, ensuring health and safety of employees and clients, and network updates in the data base, auditing, and maintaining social and gender issues in the company. However, customers were not involved in decision making. These finding were in line with Zakuan et al. (2012) considered training as an important factor that boosts employees' efforts towards improvement. To him, quality training includes educating and training of employees at all levels in the organization with an intention of broadening their knowledge on quality issues and programs and providing them with information about the organization's quality mission, vision and general desired direction. According to Jamali et al. (2010), employee training is one of the most important requirements in a successful TQM implementation. Management personnel, supervisors and other employees require skills and knowledge on quality dimensions and management as well as their roles in TQM implementation. Owing to the fact that market quality needs are very dynamic, organization must ensure continuous employee development and training on quality management (Cohen and Higgins, 2007).

The extent to which quality culture is embedded in the organization

The last was aimed at finding out the extent to which quality culture is embedded in the

organization. It was found that 40 customers who were interviewed in the study 27 (68%) said that ZESCO did not provide quality service delivery, while 13 (33%) agreed that the company provided quality service delivery. Similarly, that 22 (55%) majority of the respondents indicated that did not receive quality services from LWSC, whereas 18 (45%) agreed that they received quality services from LWSC. This means that the results are skewed towards those who refuted that ZESCO and LWSC did not provide quality service delivery. It was found that majority of the respondent represented by 40% rated the service delivery at ZESCO to be poor, followed by 28% fair, whereas 23% rated the service delivery by ZESCO to be good, and 10% indicated it was excellent. This entails that 68% of the customers were unsatisfied and not happy with the quality of services provided by ZESCO. On the contrary results from LWSC showed that most of the respondents with 14 (35%) rated the service delivery of LWSC as fair, 12 (30%) rated it as being good, 9 (23%) poor, while 5 (13%) indicated that service provided by LWSC were excellent. This means that 78% of the respondents positively rated LWSC while only 23% rated it poor. The reasons customers advanced behind poor services from ZESCO according to the order of ranking included too much load shedding, lack timely responses, poor customer service, and delay in connecting power. On the other hand, whereas it was found that customers also experienced poor customer service, poor water supply especially both during the day and night, delayed responses, and others attributed to abnormal water bills provided by LWSC all contributed to poor service delivery. In addition to this the study revealed that there were several challenges that the workers from ZESCO and LWSC and a company at as a whole faced in the provision of quality service delivery to the clients, and these according to the order of ranking included clients failure to follow rules and regulations in line with requirements of the service providers, lack of timely dissemination of information, and lack of

continuous training and orientation programmes, lack of commitment by workers to the company, strict or too much bureaucracy leading to poor service delivery, and vandalism of equipment by some unscrupulous members of the public. Others pointed to the delayed customer complaint resolution, use of outdated system in service delivery, and reduced water levels due to climate change and lastly encroachment of critical areas for the utility companies. However, it was also found that orientation programmes on provision of quality service delivery was done annually, while others indicated quarterly. This insinuates that employees were not regularly trained or oriented provision of service delivery. These findings are similar to the study done by Huang and Lin (2000) which established the inefficient knowledge and understanding of the concept of Total Quality Management is recorded as one of the top difficulties that face Total Quality Management. It was also found that developing countries suffer from poor quality products. Low product quality is term that has become synonymous with the customer goods manufactured in the developing countries. More also, Sandholm (1999) refers to certain inhibiting factors to Total Quality Management in developing countries as low purchasing power, a shortage of goods, foreign exchange constraints, an unfinished infrastructure, insufficient leadership and insufficient knowledge. To this effect, there is need to put in place strategies that can improve the provision of service delivery in these utility companies (ZESCO and LWSC). Hence from the customers' point of view revealed that to improve service delivery at ZESCO, 68 (38.9%) representing most of the respondents argued that there is need to reduce on hours of load shedding, 30 (17.1%) indicated investing in alternative power sources and acquisition of efficient and updated equipment, 26 (14.9%) indicated introducing a competitor, in the providing electricity, 22 (12.6%) constructing more dams as water reservoirs to caution power supply when

water levels drop, 16 (9.1%) need to change of management and employee qualified personnel., and lastly 13 (7.4%) of the respondents said there is need to have proper monitoring and evaluation system. With regards to improve service delivery at LWSC, the study showed that most of the respondents proposed 33 (20%) routine maintenance, 27 (17%), provide water both during day and night, 24 (15%) employee more staff or workers, 22 (14%) installation of prepared metres to enable consumers pay for service used, 19 (12%) provide accurate water bills, 17 (11%) introduce a competitor, 13 (8%) pointed to the distribution of disconnection notes at the right time i.e. when month end when people are paid and not in the middle of the month, and lastly 7 (4%) change of management. These findings agreed with the findings from the employees at ZESCO and LWSC who suggested there is need to ensuring critical conditions of success are in place, increasing on the number of personnel, invest in alternative power generation like solar, and sensitize the general public on the dangers and effects of encroachment and vandalism of infrastructure respectively. This was followed by 10 (11.5%) said emphasizing employees on following the rules and regulations in the process of Total Quality Management to meet the required standards in service delivery, and lastly 7 (8.0%) frequent or weekly induction and orientation of workers on Total Quality Management. These findings agreed with the study conducted by Sally (2002) who argued that Total Quality Management requires a change of culture which is notoriously difficult to bring about and takes time to implement. It requires a change of attitudes and working methods. Staffs needs to understand and live the message if Total Quality Management is to make an impact. However, culture change is not only about changing behaviours. It also requires a change in institutional management. Strong culture is said to exist where staff respond to stimulus because of their alignment to organizational values.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.0 Conclusion

It can be concluded that much as most of the employees in parastatals (ZESCO and LWSC) are aware of total quality management, findings from the study revealed that the two companies do not provide quality services that satisfy the clients. It was found that majority of the respondent represented by 40% rated the service delivery at ZESCO to be poor, followed by 28% fair, whereas 23% rated the service delivery by ZESCO to be good, and 10% indicated it was excellent. This entails that 68% of the customers were unsatisfied and not happy with the quality of services provided by ZESCO. On the contrary results from LWSC showed that most of the respondents that 78% of the respondents positively rated LWSC while only 23% rated it poor. The reasons customers advanced behind poor services from ZESCO according to the order of ranking included too much load shedding, lack timely responses, poor customer service, and delay in connecting power. On the other hand, whereas it was found that customers also experienced poor customer service, poor water supply especially both during the day and night, delayed responses, and others attributed to abnormal water bills provided by LWSC all contributed to poor service delivery. It can also be asserted that most of the employees played a crucial role in ensuring the provision of quality services to the customer and some of the tasks played by employees included receiving and resolving complaints of customers, safeguarding the environment, managing staff, ensuring health and safety of employees and clients, and network updates in the data base, auditing, and maintaining social and gender issues in the company. However, clients were not involved in any form of decision-making process in these companies. To this effect, there is need to put in place strategies that can improve the provision of service delivery in these

utility companies (ZESCO and LWSC). Hence from the customers' point of view revealed that to improve service delivery at ZESCO, 68 (38.9%) representing most of the respondents argued that there is need to reduce on hours of load shedding, 30 (17.1%) indicated investing in alternative power sources and acquisition of efficient and updated equipment, 26 (14.9%) indicated introducing a competitor, in the providing electricity, 22 (12.6%) constructing more dams as water reservoirs to caution power supply when water levels drop, 16 (9.1%) need to change of management and employee qualified personnel., and lastly 13 (7.4%) of the respondents said there is need to have proper monitoring and evaluation system. With regards to improve service delivery at LWSC, the study showed that most of the respondents proposed 33 (20%) routine maintenance, 27 (17%), provide water both during day and night, 24 (15%) employee more staff or workers, 22 (14%) installation of prepared metres to enable consumers pay for service used, 19 (12%) provide accurate water bills, 17 (11%) introduce a competitor, 13 (8%) pointed to the distribution of disconnection notes at the right time that is when people are paid on the month end and not in the middle of the month, and lastly 7 (4%) change of management. These findings agreed with the findings from the employees at ZESCO and LWSC who suggested there is need to ensuring critical conditions of success are in place, increasing on the number of personnel, invest in alternative power generation like solar, and sensitize the general public on the dangers and effects of encroachment and vandalism of infrastructure respectively. This was followed by 10 (11.5%) said emphasizing employees on following the rules and regulations in the process of Total Quality Management to meet the required standards in service delivery, and lastly 7 (8.0%) frequent or weekly induction and orientation of workers on Total Quality Management.

5.1 Recommendations

The researcher seeks to make the following recommendations to the ZESCO and LWSC.

- It is recommended that both organizations should improve on gender equality. By doing so it will help to improve quality of work.
- The organizations need to improve on human resource age in order to perform efficiently and effective in-service provision.
- The recommendation to ZESCO is that there need to further expand services to its clients
- The recommendation for LWSC is that there is need to expand their service provision in order to cater for all the areas where service is not provided.
- According to the customers of ZESCO and LWSC, few customers accepted of quality service provision and while the majority refuted of provision of quality service delivery hence the need to provide quality delivery services.
- In order to overcome the challenges ZESCO was facing, there is need to improve on load shedding schedules, improve on connection of power services, and improve on customer query responses and customer services in order to satisfy their customers.
- The LWSC despite having challenges in service delivery provision, there is need to improve on water and sanitation, customer service, water supply, improve on customer query response and regulate and rectify abnormal water bills in order to meet customer need.

5.1.1 Recommendations for future research study

Continuous improvement and employee involvement are the major tenets of Total Quality Management practices. These factors can be included in future studies. Also, there is need to

determine the relationship between leadership in implementing Total Quality Management to improving performance. Insignificant relationship between some Total Quality Management variables and performance may imply mediational relationship among Total Quality Management practices. There may also be some mediational relationships among various performance measures. Mediational or indirect relationships among Total Quality Management practices and multiple performance measures can be investigated. The relationship between Total Quality Management practices and the various performance measures can be investigated in institutions of Government and the private sector like industries.

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