# THE RELATIONSHIP BETWEEN MANAGEMENT FUNCTIONS AND DELIVERY OF SELF WATER SUPPLY SYSTEMS IN RURAL AREAS: A CASE STUDY KATOSI WOMEN DEVELOPMENT TRUST, UGANDA

#### BY

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# **Declaration**

| This is to confi | irm that this wor  | k is authentically | mine and has no | ot been submitted t | o any |
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| university or a  | ny other instituti | on of learning for | any award.      |                     |       |

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# Approval

| This dissertation was approved and submitted by the resear | rcher for examination with our |
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# **Dedication**

This dissertation is dedicated to my dear wife Evelyn Namara, dear son Keith Ngabirano and dear Daughters Faith Amanya and Felicia Atukunda, for their moral support and understanding throughout the study times.

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#### **Abstract**

The study examined the relationship between management functions and delivery of self water supply systems in Katosi Mukono District. This research was prompted by the shortage of clean water in Katosi, Mukono District. The study was guided under these specific objectives; to examine the relationship between planning, organizing, controlling and delivery of self water supply systems. A descriptive cross sectional survey design was employed because it enhances data collection at a single point in time. The inter-item consistency reliability using alpha Cronbach test was tested. Data was collected from 92 respondents was both qualitatively and quantitatively collected and analyzed. The study findings were; a positive and statistically significant relationship between planning, organizing and controlling vis-à-vis self water supply systems. The outstanding conclusions were; planning process was participatory, construction work was taken care of and remuneration of the technocrats was contested and the community was involved in ensuring safety of the money they collect. Underlying organizing, there was a framework within which efforts were coordinated to ensure a chain of command, had qualified and experienced personnel. As regards controlling decision making was left under the management team, there was a mechanism for ensuring proper monitoring and evaluation and had in place a medium of giving feedback to the people concerned and record keeping. The study recommended from the conclusions on planning that participatory planning should be upheld and should be bottom up approach. For sustainable development local people should be sensitized to so as to contribute generously to the project and gender balance should be taken care of much as its women founded organization. On budgeting, involvement of the community should be upheld. On organizing, the chain of command should be upheld, recruitment of qualified and experienced employees be upheld, sensitize the locals to know the importance of local contributions towards their projects and remuneration should be revised to enable employees to get both allowances and salaries for work well done. Lastly on controlling, the researcher recommended that decision before their implementation all stakeholders should be consulted, the system of monitoring and evaluation should be upheld and people concerned in sensitive positions should train through short courses and on documentation the persons concerned should have an ongoing training in records management and storage and documentation.

#### CHAPTER ONE

# INTRODUCTION

#### 1.1 Introduction

Participation of the community in managing their destiny in any endeavor is very central. Improving the capacity of locals through engaging them in planning, financing, and managing the delivery of services to their constituents/ projects is very recommendable (Asiimwe 1989). This study was concerned with establishing whether there was a relationship between management functions specifically planning organizing and controlling among others and delivery of self water supply system. This chapter presented the background to the study, the statement of the problem, the general objective, specific objectives, research questions, and hypotheses, significance, justification of the study and scope of the study.

# 1.2 Background

# 1.2.1. Historical Background

Water supply systems have undergone several revolutions in the era of human civilization. Advanced irrigation systems existed in the ancient Middle East and India thousands of years before the Romans refined the art of conveying water with impressive aqueducts/channels and sewage systems (Mays, L.W., Koutsoyiannis, D., Angelakis, A.N., 2007). Later, in 19th century Europe, the hygienic movement triggered massive investment in water infrastructure. Systems were constructed to deliver clean drinking water and remove sewage from urban areas in separate systems (Hallstrom, 2003). In the following centuries up to date water transport and separate water supply and sewage systems are the most common water systems. They have enabled people to grow crops and live where freshwater is not readily available and have been a huge success as they have practically eliminated waterborne diseases in most of the developed

world. We are now entering an era of a new water revolution, again driven by population growth and increasing urbanization, which is challenging the limits of our conventional water resources. In the 21<sup>st</sup> century and the recent decades as the populations have grown, cities in the developed world have expanded abstraction rates, imported water from further away, and struggled to reduce consumption rates to cope with increasing water demand. Water suppliers are now turning to new technologies and strategies that increase self-sufficiency by enabling the use of water sourced from within cities. Localization of water cycles through neighborhood reclamation and distribution of water has several benefits including minimization of piping systems and reduced water extraction and discharge of sewage to the environment (Van Roon, 2007). However, localization of water treatment is only one example of increased water self-sufficiency; water is sourced closer to the city rather than being transported from distant resources. On the city scale, several options for increasing self-sufficiency exist; including unconventional water resources like centralized wastewater reclamation, desalination and local and central rainwater collection.

# 1.2.2 Theoretical Background

The study was guided by Luther Gullick,s ((1865–1918) Organizational Theory, which asserts that, administration takes place in all organizations. "An organization is the planned coordination the activities of a number of people for the achievement of some common, explicit purpose or goal, through division of labor and function, and through a hierarchy of authority and responsibility" Schein, 1980, 15. The important principle of organization is cooperation among members to achieve a common goal. So, an understanding of organization theory is very important for public administrators.

Organization is the form of every human association to accomplish some desired objectives or goals. It is treated as the structure of administrator. "The organization carries material resources, technologies, human skills and values. It provides

the vehicle whereby productive factors are assembled, transferred into utilities of value and distributed in the form of consumable good and services". It arises in a project management context associated with behavioral studies of implementing community projects interacting in a public or not for profit making setting of which delivery of self water supply system in Katosi Mukono district when put in context pertinently apply.

Delivery of self water supply system in Katosi, Mukono district is very crucial a function of local government, so they consequently contracted or appoint responsible people responsible for ensuring planning organizing and controlling whatever is put under their management with utmost honesty for the smooth running of the project registering good use of the funding and ensuring safety of the local contribution, rightful personnel are used as group leaders from the various groups, ensuring self project identification, implementation and operations and maintenance of water sources among many other projects.

# 1.2.3 Conceptual Background

Terry (1971) defined it as a distinct process consisting of planning, organizing and actuating controlling, performed to determine and accomplish stated objectives by the use of human beings and other resources. To Fayol, (1949) defined management as forecasting and planning, to organize to command, to coordinate and to control. In the context of management functions study, community management was described by Wade, (1987) as common pool resource management of a common resource or issue by a community through collective action of volunteers and stakeholders; this could either be material or informational for example water rights or fisheries. As per the this study the researcher viewed community management function in terms of planning, organizing and controlling as it will be expounded upon in the preceding chapters. Self water supply system or water self-sufficiency system was proposed and defined

as the self-sufficiency ratio as Qlr/Qtd, where Qlr is the amount of water sourced from within a given area, and limited to recycled wastewater, harvested rainwater or desalinated water from local shores (Han and Kim, 2007). Otd is the total water demand in the same area, e.g. a single building or a larger urban area. The definition employed shows that the self-sufficiency ratio depends on the definition of the area or system boundaries and so it is important to use consistent boundary definitions in every case. Here the system boundaries for each case are defined to be its geographic boundaries. In this research, self water supply system will mean the ability of the local populace mobilizing, facilitating and ensuring safe and clean water in place and sustainable as long as there stay in that area. According to KWDT, it is where the amount of clean water is sourced from within a given area, and limited to schemes like community rain harvesting, water source protection, assistance to various households to acquire ferro cement tanks and KWDT following up the operation and maintenance of shallow wells (Katosi Women Development Trust, 2012). Self water supply system will be studied in detail through critically looking at how the funding is raised to ensure the financial facilitation of the equipment used, the personnel who act as the mastermind in seeing this project a success, the role of the Water users household in self project identification and lastly is how the project is implemented, operated/ran and maintained.

# 1.2.4 Contextual Background

Katosi Women Development Trust (KWDT) is a Not for profit organization with an aim of improving the general living standards of poor, rural peasant communities in Ntenjeru and Nakisunga sub counties in Mukono District. KWDT has a mission of empowering rural women with productive livelihoods in healthy communities. KWDT activities are comprehensive in a way that they empower women through the integrated programs of; Economic empowerment,

leadership and political participation as well as environment conservation practices, lobbying and advocacy, capacity building and awareness raising through music and drama but most of all health in line with self water supply systems. In line with water hygiene and sanitation program WATSAN program was initiated in 2002 after a baseline survey that revealed disastrous water and hygiene situation for the fishing community. It was revealed that 90% of the fishing community depended on contaminated water of Lake Victoria which was shared between people and animal. 75% of the population lacked latrines; excreta management and hygiene practice were poor.

The aim of WATSAN program was to increase access to safe clean water, improve sanitation and hygiene through behavioral change so as to reduce prevalence of poor Water, Hygiene and Sanitation Diseases. Various partners with WATSAN program has expanded to include domestic and community rain water harvesting, water source protection, hygiene and sanitation promotion through hygiene among many others. These activities are reinforced by Water user committees and training of Hand pump mechanics. The rain water harvesting program includes support to households to acquire ferro cement Tanks. A tank revolving scheme has also been set up where the beneficiary pays back the whole amount for the tank. Repayments are made at group level in installments over a period of four to Six months. An initial deposit amounting to 10% of the total cost of the tank is made prior to construction of the tank.

KWDT has been able to increase tank coverage among members as repayments are pooled to create a fund that enables others acquire tanks since KWDT is mandated to follow up the operation and maintenance of shallow wells by engaging the water user committees into dialogue follow up meetings to check record keeping on water user fee payments among many

others. With such an arrangement in place, KWDT has a total income from of 489,196,327 from partners contributing to the same cause KWDT is mandated with, and 84,443,152 from revolving funds, membership fees and interest. (KWDT Annual report 2011).

However best service delivery on self water supply systems in Katosi Mukono District among many other programs/activities rendered by Katosi Women Development Trust; it calls for capacity building in managerial skills and record keeping, well user committees are trained too in operational and maintenance of the shallow wells for sustainability. A number of women groups; Bulondo among many others; were at the verge of collapsing due to poor leadership and group management functions. We have continuously retrained women and equipped them with the necessary Management skills to implement the project activities and check on the ignorance among rural women that has tremendously reduced. Group leaders are consistently trained to do their job and also to help with the community activities.

# 1.3 Statement of the problem

The study provides the relationship between management functions and delivery of self water supply systems in Katosi Mukono District. Katosi Women Development Trust seeks to achieve provision of safe clean water to all the community around Katosi evident through provision of ferro cement tanks to households, construction of shallow wells for the community, construction of the Bio sand water filters and also promoting rain water harvesting, for schools and for households under integrated water, hygiene and sanitation program. Despite the above strategies in place, provision of clean water to the entire Katosi community has remained an enigma in the sense that; many households still have no access to clean water within the vicinities of their area even with support from other developmental partners like DANIDA,

MIVA Netherlands, Local networks and international networks like Uganda water and sanitation NGO network (UWASNET) among others.

Further still, capacity building has been done through hygiene and sanitation drama plays, Biosand water filters (19) have been given out, 201 houses have received tanks, more than 8 schools have received water tanks, protected wells have been put in place with a total income of 489,196,327 partner's contribution to the same cause and 84,443,152 from revolving funds (KWDT Annual report 2011). But water sources in place are not representative in the two sub counties now including part of Nama Sub County and the whole of Katosi Sub County with now sixteen groups spread apart in the two Sub Counties with 365 members spread across the two Sub Counties' population though not commensurate to the delivery of water required hence posing an immense problem in Katosi Area (KWDT Annual report 2011).

If such a status quo remains, the population of Katosi community consuming dirty water may lose their lives through cholera, diarrhea, and dysentery, the partners in provision of clean water and entire leadership of KWDT will be tarnished and it public image tainted. The researcher was prompted to address community management functions and delivery of self water supply system with a keen interest on planning, organizing and controlling if they could give a link as to why Katosi area has remained wallowing in the consumption of unclean water hence impeding on the people's health.

# 1.4 General objective

The general objective of this study was to examine the relationship between management functions and Delivery of self water supply systems in Katosi, Mukono District.

# 1.5 Specific objectives

The specific objectives were the following;

- To examine the relationship between planning and delivery of self water supply systems in Katosi, Mukono district.
- 2) To assess the relationship between organizing and delivery of self water supply system in Katosi, Mukono district.
- 3) To investigate the relationship between controlling and delivery of self water supply systems in Katosi, Mukono district.

# 1.6 Research questions

The research questions to guide this study were;

- 1) What is the relationship between planning and delivery of self water supply systems in Katosi, Mukono district?
- 2) What is the relationship between organizing and delivery of self water supply systems in Katosi, Mukono district?
- 3) What is the relationship between controlling and delivery of self water supply systems in Katosi, Mukono district?

# 1.7 Hypotheses

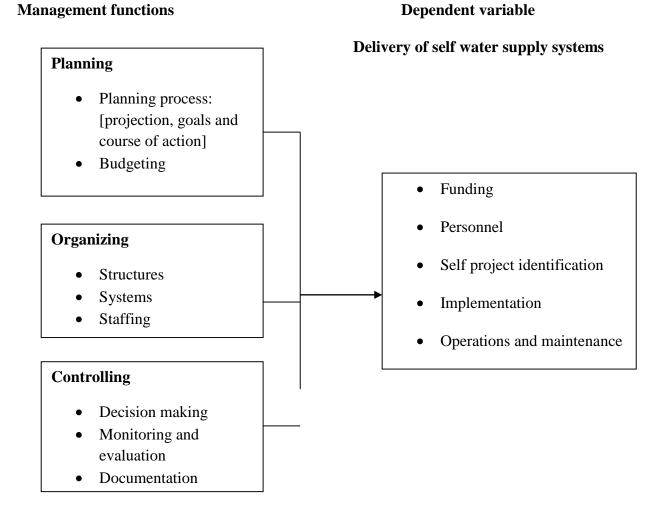
The research hypotheses that were tested were;

- There is a significant relationship between planning and delivery of self water supply systems
- There is a significant relationship between organizing and delivery of self water supply systems

3) There is a significant relationship between controlling and delivery of self water supply systems

# 1.8 A Conceptual framework

# **Independent Variable**



# 1.1 A figure showing a conceptual framework showing community management functions and delivery of self water supply system in Katosi, Mukono District

**Source**: Adopted from Gullic Luther (2005) and modified by the researcher.

The researcher conceptualized that once planning in terms of (planning process and budgeting) organizing ensuring the structures, systems and proper staffing is respected and controlling (monitoring and evaluating what was done and documenting success and proper decision making basing provided information) will be presumed to result into proper delivery of self water supply system due to the proper funding because there is transparence by the leaders who steer the entire activities of KWDT, personnel/leaders who are well facilitated to, people taking the initiative in identifying the projects, implementing the projects and taking keen interest in the operations and maintenance of facilities put in place to curb the problem of people drinking contaminated water.

# 1.9 Significance

The research findings and recommendations were useful to the policy makers to make informed decisions on how to improve on delivery of self water supply projects in the various districts with this undertaking. The findings were additionally supplement on the existing literature to the academicians, researchers, and the entire district on community management functions and delivery of self water supply projects and to the literature of Katosi Women Development Trust.

#### 1.10 Justification

The underlying-principle for this research was to identify gaps that needed to be addressed by local leaders, political leaders, and the entire Water users households and other community leaders. It was central in creating awareness to the concerned levels of the various stakeholders in ensuring community participation through self management of delivery of self water supply systems in their areas, particularly in Katosi Mukono District.

# 1.10 Scope of the study

# Geographical scope

The research was conducted in Katosi self water supply system, Mukono District. The research involved local members of KWDT, (community) the local leaders and the political leaders.

# **Content scope**

The research investigated on Planning, organizing and controlling vis-a-vis delivery of self water supply system in Katosi, Mukono District.

# Time scope

The research investigation covered the period from 2009-2012. Three years, that is between 2009-2012 are the years that KWDT has realised great achievements since its inception in 2003.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

The chapter covered the theory on which the research was underpinned, the conceptual framework and then the variables chronologically one after another.

### 2.2 Theoretical review

The Agency theory sometimes called Principal agency theory guided the study. The theory approves assumptions on distribution of property rights and information through writing contracts to guide or to give scope of operation of an organization. It focuses on the relationship between principals and agents who exercise authority on behalf of organisations. The theory propounds that principals must solve two basic tasks in choosing and controlling their agents: first, they have to select the best agents, whether employees or contractors, and create inducements for them to behave as desired. Second, they have to monitor the behaviour of their agents to ensure that they are performing as agreed. A problem arises when the parties' goals conflict or when it is difficult or expensive for the principal to verify what the agent is actually doing. It arose in a business management context associated with behavioral studies of employer-contractor or employer-employee interacting in a public or nonprofit making setting of which delivery of self water supply system in Katosi Mukono district when put in context pertinently apply.

Delivery of self water supply system in Katosi, Mukono district is very crucial a function of local government, so they consequently contracted or appoint responsible people responsible for ensuring planning organizing and controlling whatever is put under their management with utmost honesty for the smooth running of the project registering good use of the funding and

ensuring safety of the local contribution, rightful personnel are used as group leaders from the various groups, ensuring self project identification, implementation and operations and maintenance of water sources among many other projects.

Due to obligation which is mandated to some special individuals identified as leader are by law expected to take the lead in planning, implementing, monitoring and evaluating programs of KWDT. The contracted personnel (leaders) are referred to as agents that act and work to ensure the mission and vision of KWDT are fulfilled. The agents prove their capacity to carry out management functions on behalf of others though sometimes fail to reach the standards required due to dubious access of such contracts due to nepotism and tribalism or hiring incompetent personnel hence facing the challenge of difficulty of accessing cleaning water.

# 2.3 The relationship between management functions and Delivery of self water supply systems

# 2.3.1 Planning and delivery of self water supply system

Planning is a core element and time management is a value in planning as a behavior as postulated by (Claessens, van Eerde, Rutte, & Roe, 2004). It is a person's skill at setting of goals concerning what the person wants or needs to accomplish and prioritizing of tasks necessary to achieve these goals (Macan, 1994. P.391). Planning enhances a person to make more efficient use of their time by distributing their attention and energy more effectively, thereby managing work overload (Cleassens et al., 2007).

According to Todd, (2012) planning is referred to as the process of deciding what to do and how to do it. According to Koontz, (2000) "Planning is deciding in advance - what to do, when to do & how to do. It bridges the gap from where we are & where we want to be." Planning is

the function of management that involves setting objectives and determining a course of action for achieving these objectives. Planning requires that managers be aware of environmental conditions facing their organization and forecast future conditions. It also requires that managers be good decision-makers. Planning is a process consisting of several steps. The process begins with environmental scanning, which simply means that planners must be aware of the critical contingencies facing their organization in terms of economic conditions, their competitors, and their customers. Planners must then attempt to forecast future conditions. These forecasts form the basis for planning.

Effective planning takes into account diverse perspectives and impacts, allowing decision-makers to identify and implement the most effective ways to achieve goals. Harvard University Professor Daniel Gilbert (2006) said that the human species greatest and most unique ability is to imagine and anticipate objects and episodes that do not currently exist, that is, to plan for the future. Planning occurs at many levels, from day-to-day decisions made by individuals and families, to complex decisions made by businesses and governments.

The types of planning include; strategic planning that involves competitive opportunities and threats, as well as the strengths and weaknesses of the organization, and then determining how to position the organization to compete effectively in their environment. Strategic planning has a long time frame often three years and more. It covers the entire organization formulation of objectives. Strategic planning is based on organization's mission which is the fundamental reason for existence. Strategic planning is a duty of top management. Tactical planning is another type; it is intermediate-range planning that is intended to develop concrete and specific means to implement the strategic plan. This is a prerequisite of middle managers and it has a one to three years time horizon. Lastly is operational planning; it assumes existence of

objectives and specifies ways to achieve them. Operational planning is short-range planning it is deliberated to develop specific action steps that support the strategic and tactical plans. Operational planning usually has a very short time horizon, from one week to one year. This paper focuses on community management functions and self water supply systems, but most principles described apply to any planning activity. Planners are professionals who facilitate decision-making. Planners do not make decisions themselves; rather, they support decision-makers (managers, public officials, citizens) by coordinating information and activities.

However planning can fail often times due to inadequate resources, inadequate public or official support and unsolved conflicts. Planning follow certain principles like ensuring comprehensiveness, efficient in the sense that process should not waste time or money, inclusive to all stakeholders, informative in the sense that results are understood by all stakeholders, integrated to cover all levels of planning, and must be logical each step leading to the other and lastly transparent to put everybody on board in understanding how the process operates.

Edwards & Rothbard (2000) said planning behavior may be one form of effective resource allocation since on daily basis; individuals are confronted with the need to make resource allocation decisions. Planning facilitates individual's ability to effectively shift resources such as time and energy from one domain to the other. Good planning is insightful, comprehensive and strategic. Effective planning requires correctly defining problems and asking critical questions. Planners should strive to understand factors that will affect the future. Planners must manage information flows, including gathering, organizing and distribution (Litman, 2006).

Those who are less skilled in planning may squander the control they have by wasting their limited time, attention and energy on lower priority or irrelevant activities.

Planning requires preparing for a future that is often impossible to predict, and so must incorporate uncertainty. Forecasts should usually describe ranges and probabilities rather than point estimates, and plans should usually incorporate contingencies Utt, (2005). Planners manage resources, such as people, time, money, land, and infrastructure. From the study carried out underlying the specific objective on planning vis-à-vis self water supply systems, it was found out that planning process involved participation of all the stakeholders and there was a parallelism with what was done in Katosi water project because among what the planners for this project are keen on are the member groups scattered all around Katosi and part of Nama Sub County now. The planning process within this project was problem solving oriented with the ability to forecast whether set goals could be achieved and on budgeting the stakeholders together with the management team together look at the need of the self water sources and devise means of raising the funds for construction of water sources, remuneration of technocrats responsible ensuring proper construction and other contingencies too are catered for which is exactly in line with what Utt 2009 stressed.

# 2.3.2 Organizing and delivery of self water supply system

It is the process of bringing together physical, financial and human resources and developing productive relationship amongst them for achievement of organizational goals. Organizing is the function of management that involves developing an organizational structure and allocating human resources to ensure the accomplishment of objectives. The structure of the organization is the framework within which effort is coordinated. The structure is usually represented by an organization chart, which provides a graphic representation of the chain of command within an

organization. Decisions made about the structure of an organization are generally referred to as "organizational design" decisions. Organizing also involves the design of individual jobs within the organization. Decisions must be made about the duties and responsibilities of individual jobs as well as the manner in which the duties should be carried out. Decisions made about the nature of jobs within the organization are generally called "job design" decisions.

Organizing is establishing the internal organizational structure of the organization. The focus is on division, coordination, and control of tasks and the flow of information within the organization. It is in this function that managers distribute authority to job holders that can deliver services as required by the Water user households. Organizing is establishing the internal organizational structure of the business (Holt, 2003). To ensure effective delivery of self water supply systems through organizing function, specialization is a key organizing concept for several reasons (Koontz & Weihrich, 2000). Repetition of such key specialties improves skills. By performing the same task repeatedly, the employee gains expertise and thus increases productivity. Wage economics may also arise through the development of various employee levels (Lunenburg & Irby, 2006). Complex jobs can be staffed with skilled personnel and simple tasks with unskilled labor. Job specialization enhances a variety of tasks to be performed concurrently.

In the management process, organizing is the function of management that involves developing an organizational structure and allocating human resources to ensure the accomplishment of objectives. The structure of the organization is the framework within which effort is coordinated. The structure is usually represented by an organization chart, which provides a graphic representation of the chain of command within an organization. Decisions made about

the structure of an organization are generally referred to as organizational design decisions (Mintzberg, 2006). The organizational structure allows proper allocation of tasks within the organization hence improved service delivery to the beneficiary.

The decisions made always reflect the service delivery levels in the long run. Organizing also involves the design of individual jobs within the organization. Decisions must be made about the duties and responsibilities of individual jobs, as well as the manner in which the duties should be carried out. Decisions made about the nature of jobs within the organization are generally called job design decisions (Lamond, 2004). These determine what one is responsible to and what they are not and these help to measure the outcome levels as per organizational objective hence the status of service delivery.

Organizing at the level of the organization involves deciding how best to departmentalize, or cluster, jobs into departments to coordinate effort effectively, the nature in which these are done determines the level of output in the service delivery process. There are many different ways to departmentalize, including organizing by function, product, geography, or customer. Many larger organizations use multiple methods of departmentalization. Organizing at the level of a particular job involves how best to design individual jobs to most effectively use human resources. Traditionally, job design was based on principles of division of labor and specialization, which assumed that the more narrow the job content, the more proficient the individual performing the job could become. However, experience has shown that it is possible for jobs to become too narrow and specialized (Lamond, 2004). In context of the study, it was revealed in the first place that there existed a strong positive and statistically significant

correlation with delivery of self water supply systems. As per this study it was found out that there was a framework within which efforts are coordinated to ensure a chain of command and the organization had practicing managers who were responsible for recruitment of the very qualified and well experience people to execute the specialized duties that are particular and specific to employees who have the knowledge to do it. This was exactly what (Lamond 2004) was stressing. The practice as postulated by Lamond (2004) was justified by the agreement of the respondents that the personnel who render specialized services were well trained since the recruitment and selection looked at basically the qualifications and experience.

# 2.3.3 Controlling and delivery of self water supply system

According to Journal of management (Dwyer & Ganster 1991), control sometimes is termed as autonomy. It designates the extent to which an individual feel they can directly influence their environments. Employees experiencing a high degree of control at work, have the opportunity to self manage, in that they have the freedom to exercise their personal initiative and judgment by deciding what their work goals and responsibilities should be. Like which projects they should work on first, activity that takes precedence and it should be performed, the method to be used and which schedule they will use to carry out various work tasks (Dwyer & Ganster 1991).

According to (Frese, Kring, Soose &Zempel, 1996; Spector, 1986), they say that a high degree of control at work often implies that employees participate in and thus have influence over, superior's decisions that affect their work. Having control would mean having more influence on one's responsible goals. Having no control over any endeavor would depict a scenario of conflict, and for greater control would enable people to more easily avoid situations in which

the demands of one role interfere with participation in the other role (Greenhaus & Parasuraman, 1986; Hinggings, Duxbury, & Irving 1992).

Ensuring service delivery requires an effective controlling function. Controlling is step process of establishing performance standards based on the firm's objectives, measuring and reporting actual performance, comparing the two, and taking corrective or preventive action as necessary (Daft, 2009). Controlling is a four-step process of establishing performance standards based on the firm's objectives, measuring and reporting actual performance, comparing the two, and taking corrective or preventive action as necessary.

Performance standards come from the planning function. No matter how difficult, standards should be established for every important task (Koontz & Weihrich, 2000). Although the temptation may be great, lowering standards to what has been attained is not a solution to performance problems. On the other hand, a manager does need to lower standards when they are found to be unattainable due to resource limitations and factors external to the business.

Ramanujam explain that Venkatraman, (2007) explain that an effective control function helps in identifying weaknesses and errors by controlling feedback, and conforming activities with plans, policies and instructions to allow effective performance. In Fayol's management process went further than Taylor's basic hierarchical model by allowing command functions to operate efficiently and effectively through co-ordination and control methods that allow effective results.

In control process, monitoring and evaluation are implied vital management tools to track progress and facilitate decision making (Hunger & Wheelen, 2003). The greatest beneficiary of

an evaluation is the community of people with whom the organization works. The way the organization is designed leads to effective, efficient, provision of outputs as expected by the intended Water user households who are the community.

Monitoring primarily provide management and main stakeholders of an ongoing intervention with early indications of progress, or lack thereof, in the achievement of results. An ongoing intervention might be a project, program or other kind of support to an outcome. Monitoring helps organizations track achievements by a regular collection of information to assist timely decision making, ensure accountability, and provide the basis for evaluation and learning, (Peel, 2003). Evaluation is the systematic and objective assessment of an on-going or completed project, program, or policy, and its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact, and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision making process of both recipients and donors.

In the context of the study, there was a mechanism of with KWDT for ensuring proper monitoring and evaluation and upon the above endeavor; members of KWDT were meeting monthly to review self water supply system. This was in fulfillment of what Peel 2003 referred to. This was further strengthened by the organization having a proper documentation of the organizations performance, and other concerns that would help in bettering the organization. This was evident through the annual reports that could give the status quo of KWDT while highlighting the challenges, opportunity and success of the organization and the records were kept for the stakeholders who would wish to track the performance of KWDT.

# 2.4 Summary

Management function as postulated by (Gullic, 2005) intends at ensuring delivery of efficient, effective and timely accomplishment of selected mandates as established by management at a strategic level. Managers carry out the functions of planning, organizing, staffing and controlling among many others. Managing is vital an activity at organizational levels. Managerial skills need special forecast while looking at the personnel concerned, attitude of the beneficiary and other environmental factors. The goal of managers is creating a surplus and to be productive by achieving a favorable output-input ratio within a specific time period with due consideration for quality that calls for special art of management science.

#### **CHAPTER THREE**

#### **METHODOLOGY**

# 3.1 Introduction

This is the plan through which the researcher employed to answer the research problem posed. It further highlights components that were embedded in this chapter as thus; research design, study population, sample size and selection, sampling techniques and procedure, data collection methods, data collection instruments, quality control (validity and reliability), data collection procedure, data management and analysis and measurement of the variables.

# 3.2 Research design

The research design was descriptive cross sectional research survey. Descriptive cross sectional research survey was used in social research to determine aggregate change over time making it appropriate as advanced by Sekaran, (1992) hence making it pertinent for this research project. It was preferred for this study due to its inexpensiveness, relatively quicker and enhances data collection at a single point in time over a short period. It is the best for this study since the researcher collected data at a point in time since the study was not longitudinal.

# 3.3 Study population

The study population encompassed Water users household heads representatives, Water Board Members, District water officer, KWDT Staff, Programme managers for donors (development partners/NGOs) of self water supply system in Katosi, Mukono District.

## 3.4 Sample size and selection

The researcher used Krejcie and Morgan's (1970) table to determine the sample size out of the target population of N=(171) which gave the sample size of 127. These were given questionnaires. The researcher chose them according to their category.

**Table 3.1: Distribution of the Actual Sample Size** 

| Category                                    | Population | Sample size | Selection technique |
|---|------------|-------------|---------------------|
| Water users household heads representatives | 155        | 108         | Simple random       |
| Water Board members                         | 5          | 5           | Purposive           |
| District water officers                     | 2          | 2           | Purposive           |
| KWDT Staff                                  | 5          | 5           | Purposive           |
| Programme Managers for Donors/NGO           | 4          | 4           | Purposive           |
| Total                                       | 171        | 127         |                     |

**Source**: Katosi self water project staff list, Mukono District Local government 2012, Ministry Water and Environment 2012.

## 3.5 Sampling techniques and procedure

The researcher in this study used simple random sampling and purposive sampling. Simple random sampling technique was be subjected to the selected Water users household heads representatives according to the researcher considering their ability in reading and writing. Simple random sampling was applied onto the Water users household heads representatives where every 2<sup>nd</sup> element of the sampling frame was selected from a randomized list of the population. This technique was easy and cheaper to implement than simple random sampling.

Purposive sampling was used on water board members, KWDT Staff and District water officers and programme managers for donors/NGOs since they are few in number and a little more knowledgeable; Choice was left at the discretion of the researcher since in this category the respondents are hoped to be few and yet knowledgeable.

#### 3.6 Data collection methods

Data for this research project was collected using questionnaire survey and face to face interviews and focused group discussions.

## 3.6.1 Questionnaire survey

The questionnaire design carefully followed the research objectives guiding the study. Neuman (2003) defined a questionnaire as a survey in which the researcher conceptualizes and operationalizes variables and questions. Questionnaires were very pertinent or apposite for collecting information regarding surveys that deal with the perception of the variables, the respondent is able to read and answer questions without being influenced by interviewer, the respondent may respond whenever convenient without any pressures, any visual materials can be used, and confidential information may be revealed.

#### 3.6.2 Interview

This is a method of data collection where the investigator gathers data through direct verbal interaction with participants (Amin, 2005). The researcher therefore used the interview to collect data from selected employees deemed knowledgeable according to the researcher's observation. The researcher has chosen the above categories of respondents due to their centrality of positions in the entire self water project at Katosi Mukono District Local Government.

#### 3.7 Data collection instruments

The instruments used in data collection were questionnaires the structured interview guide and focused group discussion guide.

#### 3.7.1 Questionnaire

Amin (2005) describes a questionnaire as a self report instrument used for gathering information about the variables of interest in an investigation. The researcher prepared interrelated questions about the research topic under investigation based on the objectives and hypothesis of the study. It consisted of a set of questions to which the subject was responded to in writing. This intended to collect a lot of information over a short period of time since the design was cross sectional study. It was suitable because the population of the study was literate.

#### 3.7.2 Structured Interview Guide

Interview guides was designed to collect data and probe for more details from the respondents. Mugenda and Mugenda (1999) states that interviews are face-to-face encounters and leads to obtaining accurate information because the researcher can seek clarity and improves the relationship with the respondents although they are time consuming and require a lot of patience and good communication skills. This was helpful because a researcher can get non verbal cues which are difficult to put down in writing. This is very central in the sense that the researcher gains control over the line of questioning.

#### 3.8 Quality control

According to (Oso and Onen 2009), controlling quality is about ensuring acceptable levels of validity and reliability of the study through proper control of extraneous variable as the researcher expounded on the concepts below;

#### **3.8.1 Validity**

The validity of research instruments was checked using content and face validity approaches so as to ensure that the instruments included adequate and representative items that tackled the key concepts of the study. This was done by discussing the instruments with research Supervisors (expert judgment). Face validity of questionnaires was checked by the supervisors to determine whether they corresponded with the information being sought in the study. The researcher cross checked with key informants on correctness of data to ensure that its validity was not impaired. This stage was very important because lack of clarity at this stage might result in drawing wrong conclusions. The result got was computed using the content validity index (CVI).

#### 3.8.2 Reliability

Reliability of the instruments was ensured using internal consistence. The instruments was pretested on 10 people who were deemed highly knowledgeable about the status quo of the organization and later run a Cronbach alpha for reliability analysis. Black (1993) emphasizes that the quality of the data and the appropriateness of the methods employed are particularly important in the social sciences because of the different philosophical and methodological approaches to the study of human activity. He further states that the veracity of results and the soundness of the research conclusions are based on the appropriateness of the methodology and the quality of data upon which the conclusions were based. The researcher collected responses from ten respondents then analyzed them to determine the inter correlation items in order to determine reliability and the emerged results are as below;

Table 3.2 showing reliability values of the variables

| Variable | Cronbach alpha | No. of Items |  |
|----------|----------------|--------------|--|
|          |                |              |  |

| Planning                      | .834  | 11 |
|-------------------------------|-------|----|
| Organizing                    | .778  | 9  |
| Controlling                   | .788  | 8  |
| Delivery of self water supply | .865  | 13 |
| Total                         | 3.255 | 41 |

**Source: SPSS Data** 

#### 3.9 Data collection procedure

The researcher developed a proposal in five months under the guidance of his supervisors. An authorization letter was got from UMI department of higher degrees after proposal defense authorizing him to collect his data and proceed with the study. Once permission was granted, the researcher collected the data from 127 respondents from the population of 171 using questionnaires and interview guide. Respondents were interviewed to give qualitative support of the findings that were revealed in the questionnaire after analysis. This data was collected by the researcher with the help of five research assistants. The data collected was analyzed both qualitatively and quantitatively and then a report was written and defended. The participants were anonymous for confidentiality purposes.

## 3.10 Data analysis

Data analysis is the process of organizing, summarizing and making it clear and meaningful. Mugenda and Mugenda, (1999) postulated that it is the instrument used to collect qualitative and quantitative data as the researcher expounded below;

#### 3.10.1 Quantitative data analysis

The researcher collected raw data from questionnaires. Data was edited and coded to deal with errors, omissions and correct them where necessary; numbers were assigned to the questionnaires whilst entering in the Statistical Package for Social Sciences, a computer program. Out of the inputs within the program, descriptive statistics and relational statistics were formulated. Their purpose was to explore the premonition that might arise during the course of the research process. The researcher run a Pearson correlation coefficient to determine the relationship between variables and also a descriptive statistics was done to determine the agreement of respondents through the mean, the degree of divergence of opinions by the respondents through standard deviation and the percentages of respondents.

## 3.10.2 Qualitative analysis

Qualitative research is subjective, rich and in-depth description of information presented in form of words that will be derived from the respondent's interviews. The qualitative data was analyzed using content analysis. The interplay between the findings solicited by both qualitative and quantitative data enabled the researcher to draw conclusions and subsequently forward recommendations.

#### 3.11 Measurement of scales

The researcher categorized the data collected, using the 5 likert scales which is used on the questionnaires as indicated below; 1) Strongly disagree, 2) Disagree, 3) Neutral 4) Agree, 5) Strongly agree. Likert scales are very flexible and can be constructed more easily than most other types of attitude scales and they are a mixture of statements that represent positive and negative attitudes, thus reducing an examiner's tendency to respond with a certain mental set. According to Amin (2005), this guides the researcher during inference of findings. The

instrument was development under the guidance of standard tools used by other researchers though it is hoped to be put in the context of the research topic and area.

#### CHAPTER FOUR

#### PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

#### 4.1 Introduction

The study set out to examine the relationship between management functions and delivery of self water supply systems in Katosi, Mukono District. This chapter presented the rate of response, research finding, analysis and interpretation of findings based on the specific objectives stated earlier as thus;

- 1) To examine the relationship between planning and delivery of self water supply systems in Katosi, Mukono district.
- 2) To assess the relationship between organizing and delivery of self water supply system in Katosi, Mukono district.
- To investigate the relationship between controlling and delivery of self water supply systems in Katosi, Mukono district.

#### **4.2 Response rate**

The response rate is the ratio of the actual number of respondents vis-à-vis the targeted population. Out of 127 sample size that was determined using the table of Morgan and Krejcie (1970) only 92 questionnaires were returned and feed in the SPSS program. The response rate was computed as below;

#### 92/108\*100= 85%

The researcher basing on Amin (2004) recommendations that in a survey, a response rate of over 70% should yield valid findings. According to researcher's response rate is above 85% above what Amin (2004) recommended. The good response rate is attributed to the importance

attached to the problem of delivery of self water supply systems, hence respondents getting interested in participating in the study.

**Table 4.1: Response Rate summary** 

| Category                                    | Questionnaire issued | Questionnaire returned | Percentage |
|---|----------------------|------------------------|------------|
| Water users household heads representatives | 108                  | 92                     | 85%        |
| Water boards members                        | 5                    | 2                      | 40%        |
| District water officers                     | 2                    | 1                      | 50%        |
| KWDT staff                                  | 5                    | 2                      | 40%        |
| Program managers for donor/NGOs             | 4                    | 2                      | 50%        |
| Total                                       | 127                  |                        |            |

Source: Primary Data

The results in table 4.1 above show response rate. This indicated that response rate was representative compared to the target population; hence this data can be relied on to give a framework in which conclusions can be inferred.

## **4.3 Presentation of the Background information**

The questionnaires were administered to the sample size as indicated above. The researcher among the demographic information, he sought to investigate on age, gender, highest level of education, category of respondents and the type of water system used by a particular respondent and the researcher gave justified the choice of the aspects that the researcher deemed important and pertinent to the study.

## 4.3.1 Age of respondents

Age is a very central issue in a person's process of growth. Often one's reasoning capacity, attainment of responsibilities to name but a few; age comes into play as a yardstick necessitating the researcher to investigate on age. In view of the above reason therefore, respondents were requested to indicate their age and the results are shown below in the emerging figure 4.1

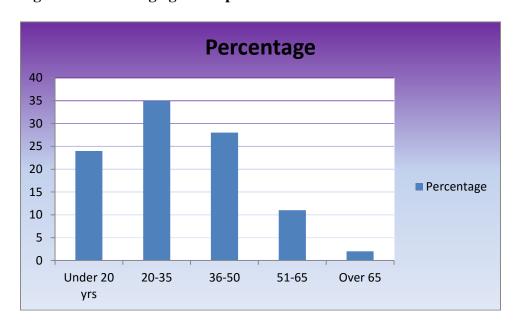


Figure 4.1: Showing age of respondents

**Source:** Primary data

The plots in figure 4.1 above clearly show that majority of the respondents (35%) were between 20-35 years, these are people in the midpoint of their life, and this was followed by 29% that were aged (36-50) years, this was followed by 24% who were under 20 years and 11% who were under (51-65) and lastly those above 65 years who were 2%. This signified that most of the respondents were youthful hence expected to be very ambitious, and zealous for a better life by respecting the hygiene and sanitation. The implication is that the researcher was working in the defined ethics of research where by all respondents were adults.

# 4.3.2 Gender of respondents

The respondents were also requested to indicate their gender and the results are shown below in figure 4.2.

Gender

37%

Male
Female

Figure 4.2: Showing gender of respondents

Source: Primary data

Results from Figure **4.2** showed that the majority of the respondents were female at 63% with their male counterparts at 37%. The biggest number of respondents was female at 63% meaning that more female respondents engaged in the study. This could literary imply that most men are not concerned about the projects that goes around in their vicinities and yet the women on the contrary are very much concerned about the projects and their participation seemed to be better than that of men.

## **4.3.3** Highest level of Education

The researcher requested the respondents to indicate their highest level of education; the reason for this request was to help the researcher understand the different roles that the respondents played as far as self water supply systems in Katosi is concerned.

**Table 4.2: Education level of Respondents** 

| Category          | Frequency | Percentage |
|-------------------|-----------|------------|
| None              | 26        | 28%        |
| Primary           | 22        | 24%        |
| Ordinary level    | 28        | 30%        |
| Advanced level    | 6         | 7%         |
| College and Above | 10        | 11%        |
| Total             | 92        | 100%       |

**Source:** Primary Data

Table 4.2: shows that a significant number of respondents at (30%) whose highest education qualification was Ordinary level, this was followed by 28% who were not educated at all; this was followed by 24% who had a primary leaving certificate and 11% had attended a college and lastly only 7% had an advanced level. This meant that not all respondents that got involved in the study were literate much as they expressed knowledge of the topic under contention.

## 4.3.4 Category of respondents

The category of respondents in line with their roles contributes to better understanding and therefore giving reliable information on the study. Below are the emerging results as indicated on table 4.3

**Table 4.3: Category of respondents** 

| Category | Frequency | Percent |
|----------|-----------|---------|
|          |           |         |

| Water user household | 88 | 96%  |
|----------------------|----|------|
| KWDT staff           | 4  | 4%   |
| Total                | 92 | 100% |

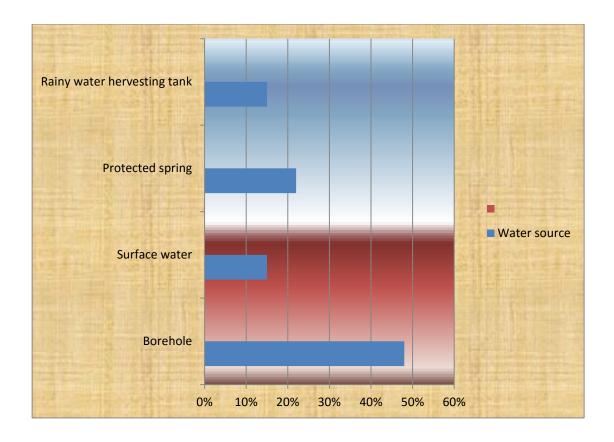
## **Source: Primary data**

The statistics show that all the respondents were attached the water project. The highest percentage of the respondents belonged to that water user household with 96% participation rate this was followed by 4% who were Katosi Women Development Trust staff. This meant that all the respondents were well acclimatized with the way KWDT projects so the information that they gave is very reliable.

## 4.3.5 Water system used

Respondents further still were requested to indicate the water source that they often use. This was purposely intended to portray the kind of water source which is commonly used by the population or members of Katosi Women Development Trust and the results are as shown the figure 4.3 below;

Figure 4.3: Showing the type of water system/Source used



## **Source: Primary Data**

According to the figure above, the highest number of respondents at 48% used boreholes, this was followed by those who used protected springs at 22% and lastly was surface water and rainy water harvesting tank that was each at 15%.

This implied that self water supply system constituted a number of water sources not only borehole. This meant that KWDT truly was involved in provision of clean water indicated by emerging results as in the above.

4.4 Finding s on the relationship between management functions and delivery of self water supply systems in katosi women development trust, Uganda

The purpose of the study was aimed at examining the relationship between management functions and Delivery of self water supply systems in Katosi, Mukono District. The analysis was done in a way that following objective by objective in a chronological order.

Descriptive statistics were done to determine respondent's opinion on a particular statement, percentages, mean, standard deviation showing degree of divergence of opinions among respondents and relational statistics; specifically Pearson correlation to determine the relationship between two variables and regression analysis to determine percentage effect of an independent variable on the dependent variable.

The qualitative results were reaped from the interviews conducted with key informants and the results were presented in form of themes following the objectives posed. They substantiated and gave more credibility to results obtained quantitatively.

# 4.4.1. The relationship between planning and delivery of self water supply systems in Katosi.

As stated in the questionnaire respondents were requested to give their opinion on statements on planning vis-à-vis self water supply systems in Katosi and the results that emerged as below;

**Table 4.4: Descriptive statics on planning** 

| able 4.4. Descriptive statics on planning |      |       |     |      |      |     |      |
|---|------|-------|-----|------|------|-----|------|
| Statements on Planning                    | Per  | centa | age | Resp | onse | Mea | Std  |
|   | (,,, |       | n   | Dev  |      |     |      |
|   | S    | A     | N   | D    | SD   |     |      |
|   | A    |       |     |      |      |     |      |
| Planning in Katosi women development      | 64   | 24    | 4   | -    | -    | 4.6 | .563 |
| trust is participatory                    |      |       |     |      |      | 5   |      |

| While planning the focus is on the      | 54 | 36 | 2  | -  | -  | 4.5 | .541 |
|---|----|----|----|----|----|-----|------|
| problem of clean water provision        |    |    |    |    |    | 7   |      |
| They look at whether the goals can be   | 44 | 36 | 4  | 4  | 4  | 4.2 | 1.02 |
| achieved in the future                  |    |    |    |    |    | 2   | 5    |
| Mobilization of resources is through    | 40 | 26 | 6  | 16 | 4  | 3.8 | 1.26 |
| community cash contribution             |    |    |    |    |    | 9   | 2    |
| Community elects the committee to       | 34 | 34 | 12 | 4  | 8  | 3.8 | 1.20 |
| handle money with objectivity           |    |    |    |    |    | 9   | 9    |
| They use a gender based criteria while  | 24 | 40 | 8  | 4  | 16 | 3.5 | 1.38 |
| selecting the committee                 |    |    |    |    |    | 7   | 5    |
| The materials needed for construction   | 34 | 30 | 18 | 6  | 4  | 3.9 | 1.10 |
| systems are identified                  |    |    |    |    |    | 1   | 6    |
| The project is approved of by the       | 46 | 26 | 4  | 8  | 8  | 4.0 | 1.30 |
| community                               |    |    |    |    |    | 2   | 1    |
| The personnel to handle construction of | 38 | 30 | 12 | 2  | 10 | 3.9 | 1.27 |
| the system are competent                |    |    |    |    |    | 1   | 2    |
| Duration for construction is respected  | 36 | 30 | 8  | 12 | 6  | 3.8 | 1.25 |
| _                                       |    |    |    |    |    | 5   | 7    |
| Remuneration of the technocrats is done | 40 | 18 | 14 | 10 | 10 | 3.7 | 1.39 |
| with maximum transparency               |    |    |    |    |    | 4   | 8    |

## **Source: Primary data**

SA=Strongly Agree A=Agree N=Neutral D=Disagree SD=Strongly Disagreed

Table 4.4 shows the statements on planning, the percentage responses, the mean and standard deviation. Agree (A) was combined with strongly agree (SA) to come up with an agreement side and strongly disagree (SD) with disagree (D) to constitute the disagreement side. This was the case for all variables including both dependent and independent variables. The mean values above 3.00 reveal most respondents being in agreement with the items posed, while the values below 3.00 reflect disagreement. The standard deviation values above 1.00 show divergence or diversity in respondents' views, while values below 1.00 indicate communalities.

An overwhelming number of respondents of 88% agreed planning in Katosi Women Development Trust was participatory, Four (4%) were neutral. This meant that planning was for all (participatory). The implication is that the people indeed acted upon their deliberation

and so directly owned the project of self water supply systems. Further still, another overwhelming majority response of 80% agreed to the statement that while planning the focus is majorly on problem of clean water provision, 4% were in disagreement and 4% were neutral. This meant that planning process centers on specific goals. This implied that during planning process the goals are focused upon making their planning systematic.

There was an overwhelming mean response of 4.22 indicating agreement on projection where by goals were looked at to ensure whether they can be achieved in the future. This was contradicted by the divergence in opinion on the above statement much as majority of the respondents overwhelmingly agreed by 80% to the statement that they look at the goal whether they can be achieved. This implied that during planning projection of whether set goals are achievable was done. This was complemented further in an interview with chairperson of KWDT, who said that,

"Different managers at strategic levels sit four times a year to plan for the activities to be done. It was noted with great concern that there are 16 women groups under Katosi Women Groups and each group has a committee that comprises of chairperson, vice chairperson, secretary and treasury that come up with activities to be done and project objectives."

This kind of planning process is good however it should not only be top bottom approach. There is need to involve even the beneficiaries so as to completely own the project. It should actually be bottom up approach while planning.

Through achievement of the projected goals, they look at the resources to ensure achievement of the set goals and as regards mobilization of resources being done through community cash

contribution, 66% agreed with the statement, 20% disagreed whereas only 6% were neutral. Those who disagreed could be the members who might be less involved in the project activities. In an interview with one of the chairpersons, it was contradicted that, "the source of funding for the different activities of the project included; DANIDA, Waterloo, and Global women Water Initiative of USA. These donor agencies fund KWDT programs in 16 women groups from initiation up to the end."

This approach might not be sustainable. There is need to encourage even the beneficiaries to contribute generously towards their projects because external funding is not sustainable since it is quite complex to ensure any sustainable development that is dependent entirely on the donors.

However to ensure that money is safe the community respondents were posed with a statement on whether the community elects the committee to handle the money with objectivity; a mean response of 3.89 indicating agreement with the statement, 12% were neutral and 12% disagreed. This meant that community elected members to handle the money. The implication is that the process of projection, goals and course of action are done systematically but all for purposes of ensuring set objectives are covered. Another statement underlying planning process was whether they use a gender based criteria while selecting the committee; 64% were in agreement with the statement where as 20% disagreed and 6% were neutral. This meant that gender based criteria is used while selecting the committee, this was supported by the mean response of 3.57 which was also in agreement. The implication is that in planning process, gender balance is also put in consideration. In an interview with KWDT staff, it was contradicted that, "internal recruitment sometimes is done where by members among women groups are appointed to execute some duties for example in the area of water tanks construction women masons are

recruited from among members." This directly implied that men in most cases are left out or neglected in these projects. There is need to strike a gender balance much as the KWDT basically was inaugurated by women.

Underlying Budgeting, respondents were posed with the statement whether the materials needed for construction systems are identified, 64% agreed with the statement, 10% disagreed and 4% were neutral. This meant that materials for construction of the systems are identified. In the same pipeline, on whether the project is approved of by the community; an overwhelming majority of 72% agreed with the statement and 16% disagreed and only 4% were neutral. This was confirmed through a 4.02 mean response that was indicated an agreement on the statement. This meant that community is involved in project establishment so the implication is that Budgeting process is also participatory. In an interview, it was revealed that, "each women group generates a budget for its activities which set standards for performance of activities." This budget process by all the women groups from the grass root should be upheld.

Further still another statement posed was that the personnel to handle construction of the system are competent; 68% agreed with the statement, 12% disagreed and 12% were neutral. This meant that even personnel to handle construction of the system are planned for; the duration for construction is also respected.

Lastly in line with budgeting, respondents were posed with a question on whether remuneration of the technocrats is done with maximum transparency, 58% agreed, 20% disagreed and 14% were neutral. This meant that remuneration of the technical people was done and the implication indicated proper budgeting both for human resources, finances and other concomitant requirements for the construction of the self water supply systems. This was justified in an

interview where it was revealed that, "Donors finance all the activities of the project including building water tanks, buying water tanks, cleaning shallow wells and paying allowances to members who participate. It was further noted that in case of budgeting deficiencies, donors meet the extra costs." This implied that the local contributions from the member groups had very little impact to the KWDT which should not be acceptable. However to ensure sustainable funding the community and the local mobilization for funds within should be intensified since donor funds are not very reliable for the entire project and secondly beneficiaries will only be on the receiving end they may have little or no obligation in ensuring the maintenance of the water sources

## 4.4.1.1Correlation between Planning and Delivery of self water supply systems

A Pearson correlation method was run and the results got were used to find whether a relationship existed between planning and delivery of self water supply systems.

Table 4.5: Showing a correlation between planning and delivery of self water supply systems

#### **Correlations**

|          |                 | Planning | Delivery |
|----------|-----------------|----------|----------|
| Planning | Pearson         | 1        | .824**   |
|          | Correlation     |          |          |
|          | Sig. (2-tailed) |          | .000     |
|          | N               | 92       | 92       |
| Delivery | Pearson         | .824**   | 1        |
|          | Correlation     |          |          |
|          | Sig. (2-tailed) | .000     |          |
|          | N               | 92       | 92       |

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## **Source: SPSS**

Table 4.5 above, shows correlations results between planning and delivery of self water supply systems. Findings reveal the Pearson correlation ( $\mathbf{r} = .824^{**}$ ), sig value p < 0.05, at 95% confidence level (.000), sample size (n=92). Planning designated a positive and statistically significant correlation with Delivery of self water supply systems. This implied that the more planning is done in KWDT positively impacts on Delivery of self water supply system.

## 4.4.3.2 Regression results for planning and Delivery of self water supply systems

A regression technique using (Model Summary) was run to examine the percentage effect planning impacts on delivery of self water supply system and the results that emerged are presented in Table 4.6 below.

Table 4.6: Model Summary results for planning and Delivery of self water supply system

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1     | .824ª | .679     | .676              | .49269                     |

a. Predictors: (Constant), Planning

**Source: SPSS** 

The model summary Table 4.6 above, reveals a correlation coefficient (R), using the predictor; planning that was at .824<sup>a</sup>, adjusted R squared of .676 and Standard error of estimate value of .49269. This implied that 67.6% (.676\*100%) effect on delivery of self water supply systems was explained by planning while the remaining percentage variations of (32.4%) were explained by other factors.

## **Hypothesis for Objective One**

The Null hypothesis was that "There is a significant relationship between planning and delivery of self water supply systems." however after testing and analysis of the two variables, the researcher found out that planning affected delivery of self water supply systems. The null hypothesis was rejected and alternate hypothesis that planning had a significant relationship with delivery of self water supply systems was upheld with the percentage effect of 67.6%

# 4.4.2 The relationship between organizing and delivery of self water supply system in Katosi, Mukono district

Respondents were posed with statement on organizing vis-à-vis delivery of self water supply system. They were to rate various parameters on organizing and the results are shown as below in table 4.7

**Table 4.7: Descriptive statements on organizing** 

| Statements on Organizing                        |    | Percentage (%) |    |    | ponse | Mean | Std<br>Dev |
|---|----|----------------|----|----|-------|------|------------|
|   | SA | A              | N  | D  | SD    |      | Dev        |
| In this project endeavor there is a             | 42 | 30             | 12 | 16 | 2     | 4.13 | 1.019      |
| framework within which efforts are              |    |                |    |    |       |      |            |
| coordinated to ensure a proper chain of command |    |                |    |    |       |      |            |
| The coordinators elected for this purpose       | 32 | 42             | 14 | 2  | 2     | 4.09 | .885       |
| are practicing managers.                        |    |                |    |    |       |      |            |
| They are well educated                          | 38 | 30             | 4  | 6  | 14    | 3.78 | 1.436      |
| They have the required experience               | 36 | 32             | 2  | 14 | 8     | 3.80 | 1.336      |
| Determination of the user fees of the water     | 36 | 28             | 4  | 4  | 20    | 3.61 | 1.562      |
| source is done communally                       |    |                |    |    |       |      |            |
| There is a well trained management              | 46 | 22             | 6  | 2  | 16    | 3.87 | 1.491      |
| committee within the community                  |    |                |    |    |       |      |            |
| The personnel to render such services are       | 48 | 18             | 8  | 8  | 10    | 3.93 | 1.397      |
| trained   |    |                |    |    |       |      |            |
| The criterion used in recruiting such           | 28 | 30             | 12 | 14 | 8     | 3.61 | 1.301      |
| personnel is through qualifications and         |    |                |    |    |       |      |            |
| experience.                                     |    |                |    |    |       |      |            |
| They are well paid by the management            | 26 | 16             | 14 | 18 | 18    | 3.15 | 1.511      |

**Source:** Primary date

About the sub dimension of organizing which specifically structures on the statement posed that in this project endeavor there is a framework within which efforts are coordinated to ensure a proper chain of command, an overwhelming mean response of 4.13 coupled with 72% who

agreed with the statement, 12% were neutral and 18% disagreed. This meant that there is a framework within which efforts are coordinated to ensure a chain of command. This implied there is a proper structures and it would seem employees know better who to report to. In the same ray, 74% agreed to another statement that coordinators elected for this purpose are practicing managers, 14% were neutral and only 4% disagreed. This meant that coordinators are practicing managers, implying that chain of command was in place. In an interview with KWDT staff, it was given in details that, "the organization structure consisted of project coordinator on top, then project staff, group leaders and group members and further still the structure above enables the project beneficiaries and project workers to participate in implementation of the project." This hierarchy should be upheld. It is vital in the sense that it checks on ambiguities in the job roles and responsibilities in the project.

Further still, another statement posed was whether the employees were well educated, 68% agreed with the statement, 20% disagreed and 4% were neutral. In the same pipeline respondents were posed with another statement that they have the required experience; 68% were in agreement, 22% were in disagreement and 2% were neutral. This meant that most of the employees were surely educated and experienced in the duties they executed. Those who disagreed could be the beneficiaries who exactly might not be well informed about the administrative duties response for recruiting technical employees. In an interview it was confirmed to by one of the administrators who said that, "staff members are very experienced and qualified in water systems and are highly experienced in executing their duties." This should also be upheld since it's a very good human resource practice of recruiting experienced and qualified employees as it is helpful in checking on unnecessary wastage of the projects resources due to ignorance and inexperience by some employees.

Another statement posed was whether determination of the user fees of the water source is done communally; 64% were in agreement, whereas 24% were in disagreement and only 4% were neutral. Those who disagreed with the statement could be the members who are nominal and not interested in knowing how things get done within the project. Furthermore a statement posed was whether there is a well trained management committee within the community and to the above effect 68% were in agreement with the statement, 18% disagreed and 6% were neutral. This meant that the management committee was well trained within KWDT. It was made clear in an interview with a coordinator who said that, "the water systems in place that included; shallow wells, protected springs and water harvesting tanks and that the objective to use shallow well water and spring water during rainy season and use harvested water during dry season since shallow wells do dry." This should be upheld however there is also need to concentrate on other systems like drilling a good number of boreholes among others.

Underlying staffing as another sub dimension of organizing a statement was posed on whether the personnel to render such services are trained; 66% were in agreement, 18% were in disagreement and only 8% were neutral. This meant that service providers were trained. Again another statement posed was the criterion used in recruiting such personnel is through qualifications and experience was agreed to by 58%, 22% disagreed and only 12% neutral. This was justified in an interview that, "staff members are indeed qualified in water systems and are highly competent in executing their duties." Such a benchmark should be upheld as a basis when recruiting if delivery of self water supply systems is to be useful within the areas of operation for KWDT. Lastly, the very contentious was whether the employees were well paid by the management. 42% agreed, 36% disagreed and 14% were neutral. This was a very contentious issue in the sense that quite a big number disagreed. However, in an interview it

was contradicted because it was said that, "employees are paid allowances for work done to ensure that money is not swindled and that funds are handled by treasury." Remuneration has to be revised instead of employees getting allowances, let them be assured of a salary and some allowances otherwise only allowances may not step out swindling or theft of any kind in the project.

## 4.4.2.1 Correlation Results for Organizing and Delivery of self water supply system

A Pearson correlation technique was run and results got were used by the researcher to assess the relation between organizing and delivery of self water supply system.

Table 4.8: Correlation on organizing and delivery of self water supply system

#### **Correlations**

|            |                     | Organizing | Delivery |  |  |  |  |
|------------|---------------------|------------|----------|--|--|--|--|
| Organizing | Pearson Correlation | 1          | .907**   |  |  |  |  |
|            |                     |            |          |  |  |  |  |
|            | Sig. (2-tailed)     |            | .000     |  |  |  |  |
|            | N                   | 92         | 92       |  |  |  |  |
| Delivery   | Pearson Correlation | .907**     | 1        |  |  |  |  |
|            |                     |            |          |  |  |  |  |
|            | Sig. (2-tailed)     | .000       |          |  |  |  |  |
|            | N                   | 92         | 92       |  |  |  |  |

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

#### **Source: SPSS**

Table 4.8 above, shows correlations results between Organizing and Delivery of self water supply system. Findings reveal the Pearson correlation ( $\mathbf{r} = .907^{**}$ ), sig value p < 0.05, at 95% confidence level (.000), sample size (n=92). Organizing indicated a positive and statistically significant correlation with delivery of self water supply systems in Katosi. This implied that

the more organization made with the project, impacts positively on Delivery of self water supply system.

## 4.4.2.2 Regression results for organizing and Delivery of self water supply systems

A regression technique (Model Summary) was run to assess the percentage effect Organizing had on Delivery of self water supply system and the results that emerged are presented in Table 4.9 below.

Table 4.9: Model Summary results for organizing and Delivery of self water supply system

| Model | R     | R Square | Adjusted R<br>Square | Std. Error of the Estimate |
|-------|-------|----------|----------------------|----------------------------|
| 1     | .907ª | .822     | .820                 | .46118                     |

a. Predictors: (Constant), Organizing

**Source: SPSS** 

The model summary Table 4.9 above, reveals a correlation coefficient (R), using the predictor; organizing that was at .907<sup>a</sup>, adjusted R squared of .820 and Standard error of estimate value of .46118. This implied that 82.2% (.820\*100%) effect on Delivery of self water supply system was explained by organizing while the remaining percentage variations of (17.8%) were explained by other factors.

## **Hypothesis for Objective Two**

The Null hypothesis was that "There is no relationship between organizing and delivery of self water supply system." but after testing and analysis of the two variables, the researchers found out that a relationship existed between organizing and delivery of self water supply system in

Katosi. The null Hypothesis was therefore rejected and Alternative Hypothesis that there is a significant relationship between Organizing and delivery of self water supply system was opted for.

# 4.3.3 The relationship between controlling and delivery of self water supply systems in Katosi, Mukono district.

The respondents were asked to rate the various parameters on controlling and delivery of self water supply systems in Katosi. The results got are shown below in table 4.10

Table 4.10: Descriptive statements on controlling

| Statements on controlling   | Per | centa | ge Re | spons | se (%) | Mean | Std   |
|---|-----|-------|-------|-------|--------|------|-------|
| _   | SA  | A     | N     | D     | SD     |      | Dev   |
| The management team of this project endeavor has autonomy on behalf of the                | 34  | 42    | 12    | 4     | -      | 4.15 | .811  |
| community   |     |       |       |       |        |      |       |
| Decisions made by the management team are adhered too                                     | 28  | 30    | 16    | 14    | 4      | 3.70 | 1.184 |
| We always have meetings monthly to review the self water supply system                    | 32  | 36    | 2     | 14    | 8      | 3.76 | 1.312 |
| We have a mechanism in place to ensure proper monitoring and evaluation                   | 48  | 30    | 2     | 10    | 2      | 4.22 | 1.067 |
| Often when self water supply system is failing we have an avenue of raising our concerns  | 34  | 36    | 4     | 12    | 6      | 3.87 | 1.233 |
| We get immediate feedback from the management   | 34  | 34    | 6     | 8     | 10     | 3.80 | 1.320 |
| Decision is made in time to bridge gaps that could rise due to an avoidable circumstances | 26  | 32    | 10    | 12    | 12     | 3.52 | 1.371 |
| We have proper records keeping in place to document our resolutions                       | 32  | 38    | 6     | 6     | 10     | 3.83 | 1.281 |

Source: Primary data.

SA=Strongly Agree A=Agree N=Neutral D=Disagree SD=Strongly Disagreed

An overwhelming 76% agreed to the statement, 12% were neutral and 4% disagreed on the statement that the management team of this project endeavor has autonomy on behalf of the community. This was supported by the mean response of 4.15 in agreed and as a result, this was a common opinion to all the respondents. This implied that decision making is entrusted in the hands of the management team. Again on decisions made by the management team being adhered too, 58% agreed with the statement, 18% disagreed with the statement and 16% were neutral. This meant that management team is entrusted with decision making. This implied that to a great extent, controlling is at its best indicated through ability to make successful decision for the project. In an interview with one of the KWDT staff who confirmed that, "coordination committees selected by members in each women group give important decisions during formulation of project objectives and implementation." With above case in point, the important decision they often come up with should be implemented after consulting all the stakeholders before implementing them.

Members of KWDT always meet monthly to review the self water supply system; it was agreed upon by the mean response of 3.76 indicating an agreement much as there was diversion of opinions by the respondents which was indicated through the 22% of the respondents who disagreed to the statement. Those who disagreed could be the members whom thought their attendance was not deemed of great importance much as inadvertently the researcher served them with the questionnaire. In the same line of thought underlying monitoring and evaluation as a sub dimension of controlling, another statement posed was whether the Katosi water project had a mechanism in place to ensure proper monitoring and evaluation; an overwhelming mean response of 4.22 indicating agreement with the statement was the emerging result coupled with

the 78% in agreement with the statement. In an interview with the coordinator it was revealed that,

"Various organs are in place to ensure proper monitoring; these included women groups, user committees and field officers and their role is to ensure that everything in its implementation is done correctly. For members who are supplied with water tanks have to make commitment fees of 10% value of water tank and payment must be completed within one year. All monthly payments made by member beneficiaries must be received by the group treasury and then banked with the project."

If this has to be upheld, group treasurer should be given at least basic skills in financial management and management skills.

On documentation respondents were posed with a statement whether self water supply system had a proper records keeping in place to document resolutions, an overwhelming majority of 70% agreed to the statement, 18% disagreed and 4% were neutral. Furthermore, on whether employees get immediate feedback from the management, 68% agreed with the statement, 18% disagreed and 6% were neutral. This meant that there is a medium through which emergencies are handled and indeed to the same effect get feedback from management whenever things seem not to be fine. This implied that there is a logical framework through which controlling is done evident through how concerns are attended to with maximum emergency and the feedback got from the management team. In an interview with one of the user committee members it was confirmed that, "records are kept by user committee who record the user fees and every activity and the sources of funding. It was further said that users also have formal agreements with

KWDT where husbands are required to guarantee their spouses such that in case of bankruptcy." Such a way of doing things user committees should be encouraged to have an ongoing training in records management so as to do this work in a professional way.

## 4.4.3.1 Correlation Results for controlling and Delivery of self water supply systems

A Pearson correlation method was run and the results got were used to find whether there was a relationship between controlling and delivery of self water supply systems.

Table 4.11: Correlation between controlling and delivery of self water supply systems

#### **Correlations**

|            |                 | Controlling | Delivery |  |  |  |  |
|------------|-----------------|-------------|----------|--|--|--|--|
| Controllin | Pearson         | 1           | .843**   |  |  |  |  |
| g          | Correlation     |             |          |  |  |  |  |
|            | Sig. (2-tailed) |             | .000     |  |  |  |  |
|            | N               | 92          | 92       |  |  |  |  |
| Delivery   | Pearson         | .843**      | 1        |  |  |  |  |
|            | Correlation     |             |          |  |  |  |  |
|            | Sig. (2-tailed) | .000        |          |  |  |  |  |
|            | N               | 92          | 92       |  |  |  |  |

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

#### **Source: SPSS**

Table 4.11 above, shows correlations results between controlling and delivery of water supply system. Findings revealed the Pearson correlation ( $\mathbf{r} = .843^{**}$ ), sig value p < 0.05, at 95% confidence level (.000), sample size (n=92). Controlling indicated a positive and statistically significant correlation with delivery of self water supply systems in Katosi. This implied that the more controlling in terms of decision making, documentation and monitoring and evaluation positively impacts on delivery of self water supply systems.

## 4.4.3.2 Regression results for planning and Delivery of self water supply systems

A regression technique (Model Summary) was run to investigate the percentage effect controlling had on delivery of self water supply systems and the results that emerged are presented in Table 4.12 below.

Table 4.12: Model Summary results for controlling and Delivery of self water supply system

| Model | R     | R Square | Adjusted R<br>Square | Std. Error of the Estimate |
|-------|-------|----------|----------------------|----------------------------|
| 1     | .843ª | .711     | .708                 | .48708                     |

a. Predictors: (Constant), Controlling

#### **Source: SPSS**

The model summary Table 4.12 above, reveals a correlation coefficient (R), using the predictor; controlling that was at .843<sup>a</sup>, adjusted R squared of .708 and Standard error of estimate value of .48708. This implied that 70.8% (.708\*100%) effect on Delivery of self water supply systems was explained by controlling while the remaining percentage variations of (29.2%) were explained by other factors.

#### **Hypothesis for Objective three**

The Null hypothesis was that "controlling does not affect delivery of water supply systems" but after testing and analysis of the two variables, the researcher found out that controlling had a significant relationship between controlling and delivery of water supply systems, the null hypothesis was therefore rejected and *Alternate Hypothesis that "controlling significantly had a relationship with delivery of self water supply systems was upheld. The percentage effect was quite high at 70.8%* 

## **4.5** Delivery of self water supply systems

The respondents were requested to give their opinion on the statements studying delivery of water supply systems and below are the emerging results.

Table 4.13: Descriptive statements on delivery of self water supply systems

| Statements on Delivery of self water supply systems |        | Percentage Response |    |    | stems<br>Mean | Std  |      |
|---|--------|---------------------|----|----|---------------|------|------|
|   |        | (%)                 |    |    |               |      | Dev  |
|   | S<br>A | A                   | N  | D  | SD            |      |      |
| The project solicits funding from local             | 54     | 24                  | 6  | 2  | 6             | 4.28 | 1.12 |
| community contribution, donor and the               |        |                     |    |    |               |      | 2    |
| central government                                  |        |                     |    |    |               |      |      |
| Local contribution is much more than                | 22     | 12                  | 14 | 6  | 38            | 2.72 | 1.66 |
| what we get from donors/NGO                         |        |                     |    |    |               |      | 0    |
| Without donor funding our project would             | 18     | 22                  | 16 | 6  | 30            | 2.91 | 1.55 |
| be in vain  |        |                     |    |    |               |      | 2    |
| The people used to repair the self water            | 22     | 30                  | 10 | 18 | 12            | 3.35 | 1.37 |
| supply systems are qualified                        |        |                     |    |    |               |      | 8    |
| The ratio of service providers and the              | 38     | 22                  | 2  | 20 | 10            | 3.63 | 1.47 |
| water source points is commendable                  |        |                     |    |    |               |      | 3    |
| The community is involved in                        | 40     | 24                  | 8  | 10 | 10            | 3.80 | 1.38 |
| identification of water points                      |        |                     |    |    |               |      | 5    |
| The will of the Water users household is            | 20     | 42                  | 10 | 12 | 8             | 3.59 | 1.21 |
| consented with                                      |        |                     |    |    |               |      | 5    |
| Community is mobilized to participate in            | 40     | 34                  | 4  | 8  | 6             | 4.02 | 1.19 |
| the construction                                    |        |                     |    |    |               |      | 5    |
| There is a follow up team in place to               | 42     | 34                  | 6  | 6  | 4             | 4.13 | 1.08 |
| monitor what was implemented                        |        |                     |    |    |               |      | 1    |
| There are technical people to oversee the           | 38     | 30                  | 4  | 8  | 12            | 3.80 | 1.40 |
| repairs done where there is need                    |        |                     |    |    |               |      | 0    |
| Spare parts are readily available when              | 16     | 36                  | 12 | 14 | 14            | 3.28 | 1.33 |
| wanted  |        |                     |    |    |               |      | 7    |
| The cost for maintenance is manageable              | 26     | 38                  | 4  | 14 | 10            | 3.61 | 1.33 |
| by the Water users household                        |        |                     |    |    |               |      | 4    |
| The maintenance is done in time by the              | 18     | 46                  | 4  | 16 | 8             | 3.54 | 1.23 |
| service providers                                   |        |                     |    |    |               |      | 5    |

**Source:** Primary data

SA=Strongly Agree A=Agree N=Neutral D=Disagree SD=Strongly Disagreed

Self water supply systems were studied using funding, personnel, self project identification, implementation and operations and maintenance. Specific questions were set to measure the opinions of the respondents on the above sub dimensions used to study self water supply systems.

On funding; a statement was posed whether the project solicits funding from the local community contribution, donor and the central government. An overwhelming majority at 78% in agreement with mean response of 4.28 also indicating agreement with the statement 8% disagreed and 6% were neutral. This meant that funds come from various stakeholders like local community's contributions, donor and central government. It was noted also that local contribution is much compared to that from what the project gets from donors/NGOs; this was clarified through the majority response rate who disagreed with 44%, 34% agreed and only 14% were neutral. This meant that the local contribution is meager and it was made clear that the project is very much reliant on donor funds. It was also agreed to by 40% that without donor funding the project would be in vain, 36% disagreed and 16% were neutral. Those who agreed could be ignorant about how funds are raised to ensure self water supply systems are in place. This confirmed the prior statement; the project is basically reliant on donor funds. This was confirmed to in an interview with a coordinator who said that, "in soliciting funds, the project manager and women group coordinators write and submit proposals to funding agencies for approval and when the field officers implement the activities in collaboration with members." Being dependent on donor funding is not sustainable enough for the smooth running of the project. As a solution to avert the current state of affairs, it calls for the coordinators to recruit more people in the groups and also to sensitize them on how to be in control of their projects especially through contributing financial wise.

On personnel running the project in KWDT and specifically on self water supply systems; on the people employed to repair the self water supply systems are qualified. A majority response of 52% was in agreement whereas 30% disagreed and 10% were neutral. Another statement posed was that the ratio of service providers and the water source points is commendable; 60% agreed to the statement, 30% disagreed and 2% were neutral. This was furthermore confirmed to by 3.63 mean response indicating agreement despite the divergence in opinion by most of the respondents. This meant that people employed to repair the self water supply systems are qualified and they have enough employees to cater for the needs of the members who use self water supply systems. In an interview with one of the coordinators it was confirmed that,

"the project recruits qualified personnel using news papers adverts where successful applicants are subjected to interviews and best candidates are chosen and another source is through internal recruitment where by members among women groups are appointed to execute some duties for example in the area of water tanks construction women masons are recruited from among members."

With above state of affairs the researcher recommends that the recruitment process should be as objective as possible and furthermore if it is between the means of the project, they should hire external consultancy firms to do this work with favor and bias.

Underlying self project identification; the respondents were posed with the statement that the community is involved in identification of water points of which it was agreed to by the mean response at 3.80 coupled with the 64% majority response rate whereas 20% disagreed and only 8% were neutral. Again respondents were posed with another statement whether the will of the

water users' household was consented with; 62% agreed with the statement, 20% disagreed and 10% were neutral and further still the community being mobilized to participate in the construction work; an overwhelming response rate of 74% agreed with the statement, 14% disagreed and 4% were neutral this was substantiated with a mean response of 4.02 indicating agreement to. This meant that community is involved in project identification and the will of the water user household was consented with and beneficiaries do participate physically in the construction work. The above salient issues implied that in the bid to delivery self water supply systems the people are involved in self identification of the projects and water points. In an interview, it was revealed that, "planning for clean water and sanitation is very vital in the following ways; funds are mobilized among members though not very critical on it, beneficiaries are involved from the start of the project activities up to the commissioning of the project." This indicated that there is a community participation in development and it should even been taken to higher levels through more sensitization.

On implementation; it was responded to by an overwhelming majority of 76% who agreed that there is a follow up team in place to monitor what was implemented, this was disagreed to by 10% and 6% were neutral. This agreement was indicated through a mean response of 4.13. This meant that implementation is serious followed by a specific team. The implication is that in a bid to ensure delivery of self water supply systems implementation is a major concern for the project. In an interview it was noted that, "KWDT implements its programs in conjunction with Mukono District Local Government since it has qualified personnel that certify the work done by any external contractors. This ensures quality for work done and non duplication of

community projects." Such an approach should be encouraged; it should every stakeholders business to know what is done for the betterment of people's lives.

On operations and maintenance; 68% agreed to the statement that there are technical people to oversee the repairs done where there is need, 20% disagreed and 4% were neutral. Again spare parts being readily available when wanted; 52% agreed whereas 28% disagreed and 12% were neutral; furthermore whether the cost for maintenance is manageable by the water user household, 64% agreed, 24% were disagreed and 4% neutral and lastly the maintenance being done in time by the service providers, 64% agreed with the statement, 24% were disagreed and 4% were neutral. This meant that the project has specific technical people to cater for repairs, they have required spare parts and the const for maintenance is affordable and services are done on time. This implied operations and maintenance are catered for by the project.

#### CHAPTER FIVE

#### SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Introduction**

The purpose of the study was to examine the relationship between management functions and Delivery of self water supply systems in Katosi, Mukono District. This chapter presents the summary, discussion of findings, conclusions from findings and recommendations. The major areas of study were aimed at examining the relationship between planning and delivery of self water supply systems and secondly to assess the relationship between organizing and delivery of self water supply systems and lastly to investigate on the relationship between controlling and delivery of self water supply systems. The dependent variable was delivery of self water supply systems which was measured in terms of funding, personnel, self identification of projects, implementation and operations and maintenance.

#### **5.2 Summary of findings**

#### 5.2.1 Planning and delivery of self water supply systems

Through the relational statistics, it was found out that planning had a significant positive relationship with delivery of self water supply systems in Katosi Mukono District with a coefficient of .824\*\* at a significance level of 0.05.

Through descriptive statistics on planning, it was found out that planning process was participatory, it was problem solving oriented with the ability to forecast whether set goals could be achieved. Underlying budgeting, the summary of findings indicated that funds were looked at when estimating goals to be achieved; the community elects treasurers to handle their money, gender is not respected since most of the members are women, the entire community is

involved in project establishment and so applies to the budgeting process making it participatory, the personnel to ensure construction of the self water supply systems were planned and construction was done in time and remuneration of the technocrats was catered for in the budgeting.

#### 5.2.2 Organizing and delivery of self water supply systems

The study revealed that organizing indicated a strong positive and statistically significant correlation with delivery of self water supply systems with a coefficient of .907\*\* at 0.05 significance level.

The descriptive statistics used on structures under organizing it was revealed that there was a framework within which efforts are coordinated to ensure a chain of command and the organization has practicing managers, most of the employees recruited were qualified and well experienced. The user fees of the water source were done communally and the management committees constituted of a well trained personnel too. About the personnel in terms of people who render services were trained since at recruitment processes they are critical on qualifications and experience. On remuneration of these employees was highly contested and had a lot to be desired.

#### 5.2.3 Controlling and delivery of self water supply systems

Inferential statistics and specifically a correlation result output revealed that controlling indicated a positive and statistically significant correlation with delivery of self water supply systems with a Pearson correlation coefficient of .843\*\*at a significance level of 0.05.

The findings underlying controlling; through decision making the management team was entrusted with decision making and the decision made were adhered to by the entire project stakeholders. Members of KWDT met monthly to review self water supply system, the water project had a mechanism to ensure proper monitoring and evaluation. On documentation the organization has an avenue of raising their concerns; employee's gets immediate feedback from management team and records kept by user committee concerning the operations of the organization and payments.

## **5.3. Discussion of findings**

#### 5.3.1 Planning and Delivery of self water supply systems

The study objective was to examine the relationship between planning and delivery of self water supply system, it was further revealed that planning indicated a positive and statistically significant relationship with delivery of self water supply systems.

Just as Toddy (2012) defined planning as the process of deciding what to do and how to do it. In this case it was planning vis-a-vis delivery of self water supply systems in Katosi Mukono District. As per the context of the study, it was found out that in KWDT planning was participatory. This is what Edwards & Rothbard (2000) postulated that planning to be effective looks at resource allocation on daily basis and that individual's ability to effectively shift resources such as time and energy from one domain to the other. However according to the findings; planning being effective entailed being participatory. It has to be bottom up, insightful, comprehensive meaning involving all stakeholders and strategic to even cover the future aspirations. Planning follow certain principles like ensuring comprehensiveness, efficient in the sense that process should not waste time or money, inclusive to all stakeholders, informative in

the sense that results are understood by all stakeholders, integrated to cover all levels of planning, and must be logical each step leading to the other and lastly transparent to put everybody on board in understanding how the process operates. This planning is basically focused at solving a problem of people drinking dirty water hence one could rightly assert that the planning as per the study was a problem solving oriented with the ability to forecast whether set goals could be achieved. Litman (2006) warned that less skilled personnel in planning many times waste a lot of time and energy on lower priority or irrelevant activities. It points to the importance of planning in an organization. Utt (2005) stressed the importance of forecasting for the future that is often impossible to predict, and so must incorporate uncertainty however, underlying budgeting, the summary of findings indicated that funds were looked at when estimating goal to be achieved. This is part of the forecasting that Utt (2005) referred to among others and in respect of this issue the KWDT came up with the community electing their treasurer to handle their money and take care of other resources as a way of ensuring efficient planning.

In the context of the study, what (Cleassens, Van Eerd, Rutte, & Roe, 2004) stressed of enhancing a person to make more efficient use of their time by distributing their attention and energy more effectively, thereby managing work overload. This was done by KWDT through ensuring personnel to ensure construction of the self water supply systems were planned for and construction was done in time and remuneration of the technocrats was catered for in the budgeting and all the above are part of planning.

#### 5.3.2 Organizing and Delivery of self water supply systems

The study was set to assess the relationship between organizing and delivery of self water supply systems in KWDT. Through the relational statistics (Correlation Pearson Coefficient of .907\*\* at 0.05 significant level) it was revealed that organizing had a statistically significant relationship with delivery of self water supply systems.

According to http://www.managementstudyguide/managementfunction.htm organizing is the process of bringing together physical, financial and human resources and developing productive relationship amongst them for achievement of organizational goals and in the context of the study the organizational goal is delivery of self water supply systems. However delivery of self water supply systems would require internal organizational structure of the organization whereby to achieve any goal would call for coordination and control of tasks and the flow of information within an organization as postulated by Holt, (2003) as it is the case with KWDT who have a framework within which efforts are coordinated to ensure their goal of provision of clean water is met. KWDT has practising managers who were qualified and well experienced. This is in support with Koontz & Weihrich (2000) who stressed the issue of specialization if a particular goal is to be taken as a priority. One has to recruit specialists to execute such duties. This is not any different from what KWDT is doing because it was found out that the employees who render services of provision of self water supply systems well qualified and experienced. Lunenburg & Irby (2006) said wage economics arises through the development of various employee levels and it is no wonder issues to do with remuneration of these employees was highly contested and had a lot to be desired.

### **5.3.3** Controlling and Delivery of self water supply systems

The specific objective was to investigate the relationship between controlling and self water supply systems and according to relational statistics run it was revealed that controlling indicated a positive and statistically significant relationship with delivery of self water supply systems.

Control according to Dwyer & Ganster (1991) is defined it as autonomy. It shows the degree to which an individual can directly influence their environments/control at work place. According to the findings it was revealed that the management team in KWDT was given the mandate to make vital decisions and such deliberations are paid hid too by the subordinates under this management team.

According to (Frese, Kring, Soose & Zempel, 1996; Spector 1986) hinted that having control over others would mean having more influence on one's responsible goals and as per the goal of KWDT is about provision of self water supply systems to give clean water. In a bid to ensure the above goal as a reality, members of KWDT met monthly to review self water supply systems endeavors and this was one way of ensuring that water project has a mechanism for proper monitoring and evaluation. The purpose of this approach of controlling is to establish performance standards based on organization's objectives, measuring and reporting actual performance and taking corrective or preventive action as necessary according to Daft, (2009).

Control function is vital in identifying weaknesses and errors by controlling feedback, and conforming activities with plans, policies and instructions to allow effective performance as postulated by Venkatraman (2007). In line with controlling KWDT employees get immediate

feedback from management team and records kept by user committee concerning the operations of the organization and payments. This is a vital step for previewing what is being done. It provides management and main stakeholders of an ongoing intervention with early indications of progress or lack thereof, in the achievement of results.

#### **5.4.** Conclusions of the study

## **5.4.1 Planning and Delivery of self water supply systems**

The findings pointed out that the nature of planning in place determines or impacts positively on the betterment of the delivery of self water supply systems in Katosi, Mukono District.

Planning to be successful, it requires participation of all stakeholders not that is if one has to win the will of the people and interest of the people just as it was the case with Katosi Women Development Trust. Participatory planning ushers in the importance of forecasting whether set goals could be achieved. Funds too are very fundamental while estimating the goals to be achieved when budgeting and the personnel to handle all the necessary duties to be executed. The community was useful when selecting treasurers to handle project money from the beneficiaries and gender based criteria was not respected. When carrying out or implementing any project, the inaugurators of the project should always seek the opinion of the people before venturing into implementing it. It is no wonder KWDT did involve the entire community to participated in the establishment of the project. The personnel to ensure construction of self water supply system were planned for ahead of time and remuneration of the technocrats was catered for in the budgeting.

#### 5.4.2 Organizing and Delivery of self water supply systems

The study revealed that organizing is very important and positively impacts on delivery of self water supply systems.

The descriptive statistics on structures under organizing; it was revealed that there was a framework within which efforts are coordinated to ensure a chain of command and the organization had practicing managers. For any project to run smoothly it requires coordinated supervision where in every department one should be answerable to another otherwise, the project objectives would hardly take effect. Most of the employees recruited were qualified and well experienced so if manager do not want to risk wastage of project resources through incompetence and unnecessarily mistakes should employee competent and experienced personnel. It is no wonder that the user fees of the water source were agreed upon communally and the management committees constituted of a well trained personnel too.

About the personnel in terms of people who render services were trained as at recruitment processes, they were critical on qualifications and experience. On remuneration of these employees/staff was highly contested and had a lot to be desired. This brings in a gap where by employees would not concentrate on the job being done due to lack of financial satisfaction.

#### 5.4.3 Controlling and Delivery of self water supply systems

Relational statistics specifically a correlation result output revealed that the more control is strengthened, the better the delivery of self water supply systems under KWDT. The findings underlying controlling; through decision making the management team was entirely entrusted with decision making and the decision made were adhered to by the entire project stakeholders. There should always be a proper hierarchy or chain of command to which everybody should respect that is; if any project is to realize the target objectives and goals.

Members of KWDT met monthly to review self water supply system. The water project had a mechanism to ensure proper monitoring and evaluation. For proper transparency and accountability, the strategic management of the team should always focus on protecting misuse of project resources. So by doing M&E would curb misappropriation of hold account of people involved vices as mentioned above.

On documentation the organization had an avenue of raising their concerns; employees get immediate feedback from management team and records kept by user committee concerning the operations of the organization and payments. Documentation is very central and for a successful organization, there should be a well qualified recording keeping manager to ensure that the operations of the organization are taken care of.

#### 5.5 Recommendations of the study

### 5.5.1 Planning of Delivery of self water supply systems

Basing on the conclusion drawn from the findings; the researcher recommended the following on planning that participatory planning should be upheld and also involve the beneficiaries. So it should be bottom up approach to planning.

Funding was central in budgeting but the source of funding should not only from the donor, so the researcher recommended that for sustainable development to take root there is need to sensitize the local community where the project is to contribute generously towards their projects as local beneficiaries. The researcher recommended that there is need to strike a gender balance in KWDT much as the initiative for this organization was a woman's invention.

On budgeting, the community involvement in budgeting and handling finances for the project should be upheld because the entire community is critical on how the money is spent. They become very vigilant in knowing the value for the money that runs the project and how best the project could be established. The researcher also recommended that the processes that the project looks at when budgeting like personnel response for the construction of the water supply systems and remuneration of the employees should be upheld.

#### 5.5.2 Organizing and Delivery of self water supply systems

The researcher recommended that the chain of command should be upheld. The most important reason is that such a chain of a framework helps in clearing the problem of role ambiguities among employees. Recruitment of qualified and experienced employees is a very good human resource practice that should be upheld because it avoids unnecessary wastage of the organization's resources.

On the user fees the researcher recommended that it should be emphasized through more sensitization to acquaint the beneficiaries with the importance of local contributions towards the project for future sustainability of the water systems.

The researcher also recommended that qualification and experience as a basis for recruitment should be upheld if delivery of self water supply systems is to be operational and the researcher further recommended that remuneration should be revised to enable employees to get both allowances and salaries for work well done.

#### 5.5.3 Controlling and Delivery of self water supply systems

The researcher recommended that decision before implemented, it is important to consult all the stakeholders to seek their will. It is good that such decisions that are implemented are respected however there is need for more sensitization for locals.

On monitoring and evaluation system should be upheld and if possible basic knowledge should be given to the people concerned with monitoring and evaluation for better tracking of how the organization's funds are used and how its accounted for. Also the treasurers of the groups should also be trained through short course on basic financial disciplines and management skills improvement.

On documentation the researcher recommended that the people concerned especially the user committees who act as the notary and archivists of the organization should also be encouraged to have an ongoing training in records management and storage so as not leak out secrets of the organization.

## **5.6** Limitations of the study

There was hesitation in disclosing sensitive information especially on management competence in running this project. In resolving this limitation, the researcher explained the purpose for carrying out this research endeavour and the researcher cleared the respondent's doubts by presenting an authorization letter got from the Institution from which the researcher was studying.

Fixing appointments and meeting the key informants like the coordinators at the head offices was not easy. It was resolved by writing official letters seeking appointments with them and also stating how useful the study would be instrumental in identifying cavernous challenges that the project might be encountering.

#### **5.7** Contributions of the study

This study was of paramount importance to the academia world, policy makers and to the public in causing awareness that;

- For delivery of self water supply systems, it requires collective participation of all stakeholders but above all the local people's consent should be sought, it also requires proper recruitment of technical employees and visionary and focused management team.
- 2. It is an additional literature to the existing sources. It is hoped to be helpful in identifying area of further research.

### 5.8 Areas of further study

The Researcher would recommend the following areas for further research: organizational factors and delivery of self water supply systems in KWDT organization. The reason for the selection of this topic is that another student of research could consider looking at other organizational factors apart from management functions

#### REFERENCES

Amin, A.E. (2005), Foundations of statistical inference for Social Science Research, Kampala: Makerere University.

Asiimwe, J. 1989. The resistance councils and committees (RCs) in Uganda: An appraisal of a Policy of democratic decentralization: Problems and prospects. M.A. thesis, Makerere Institute of Social Research (MISR), Kampala, Uganda.

Claessens, B.J., Van Eerde, W., Rutte, C.G., & Roe, R.A. 2004. *Planning behavior and Perceived Control of time at work.* Journal of Organizational Behavior, 25:937

Daniel Gilbert (2006), Stumbling on Happiness, Vintage Canada.

Dwyer, D.J., & Ganster, D.C. (1991). The effects of Job demands and control on employee Attendance and satisfaction, Journal of Organizational Behavior, 12:595-608)

Edwards, J. R., & Rothbard, N.P. (2000) Mechanisms liking work and family: Clarifying the Relationship between work and family constructs. Academy of management review, 25:178-199

Eisenhardt, M, K. (1989). Agency theory: An assessment and review. Academy of Management.

The Academy of Management Review, 14(1), 57

Fayol, Henri, (1949) *General and Industrial Administration*. London: Sir Issac Pitman & Sons, Ltd.

Frese, Kring, Soose & Zempel, (1996); Spector, (1986). *Personal initiative at work: Differences Between East and West Germany*. Academy of management Journal, 39:37-63.

Greenhaus & Parasuraman, S., (1986). A work-non work interactive perspective of stress and its Consequences. Journal of organizational Behavior Management, 8:37-60

Hallstrom, J., (2003). Constructing a Pipe-Bound City: A history of water supply, sewerage, and excreta removal in Norrkoping and Linkoping, Sweden, Doctoral thesis, The Tema Institute, Department of Water and Environmental Studies, Linköping University, Sweden.

Han, M., Kim, S., 2007. Local Water Independency Ratio (LWIR) as an index to define the

Sustainability of major cities in Asia. Management of Urban Water Supply, Jeju Korea.

Hinggings, C.A., Duxbury, L.E., & Irving, R.H. (1992). *Work-family conflict in the dual career Family*. Organizational Behavior and Human Decision processes, 51:51-75

Holt, D.H. (2003). Management. Principles and Practices, Prentice Hall, 3rd Edition.

Koontz, Harold, and Cyril O'Donnell. *Principles of Management: An Analysis of Managerial Functions*. New York: McGraw-Hill Book Co., 1955.

Koontz Harold and Weihrich Heinz (2000) Essentials of Management, Fifth Edition, McGraw-Krejce, R.V. & Morgan, D.W. (1970). Determining sample size for research activities: Educational and Psychological Measurement, State Publisher.Hill.

Kumar, K. (1987). *Conducting focus group interviews in developing countries. A.I.D. Program*Landlord property investment (2011), landlords paying tax on rental income.

Lunenburg, F. C., & Irby, B. J. (2006). *The principal-ship: Vision to action*. Belmont, CA: Wadsworth.

Mays, L.W., Koutsoyiannis, D., Angelakis, A.N., (2007). A brief history of urban water supply In antiquity. Water Science and Technology: Water Supply 7 (1), 1e12.

Mintzberg, H. (2004), *The Rise and Fall of Strategic Planning*, Prentice Hall, Hemel Hempstead.

Mugenda M & Mugenda G. (1999). *Research Methods*: Quantitative and qualitative Approaches, African centre for technology studies, Nairobi Kenya.

Neuman Lawrenc (2002), Social Research Methods quantitative and qualitative approaches, University of Wisconsin; New York

Oso, Y.W & Onen David. A general guide to writing research proposal and Report: A handbook For beginning researchers, Jomo Kenyatta foundation Kenya: Nairobi Peel, M. (2003), Introduction to Management: A Guide for Better Business Performance, Pitman Publishing, London

Ronald D. Utt (2005), Can Both Sides of the Sprawl Debate Find Common Ground on Property Rights?, The Heritage Foundation,

Sekaran U. (2003), Research Methods for Business, A Skills building approach, 4<sup>th</sup> Edition, USA

Todd Litman (2007), Evaluating Accessibility for Transportation Planning, Victoria Transport Policy Institute (www.vtpi.org); at <a href="https://www.vtpi.org/access.pdf">www.vtpi.org/access.pdf</a>.

Todd Litman (2006), *Evaluating Accessibility for Transportation Planning*, Victoria Transport Policy Institute (www.vtpi.org); at <a href="https://www.vtpi.org/access.pdf">www.vtpi.org/access.pdf</a>.

Van Roon, M., 2007. Water localization and reclamation: steps towards low impact urban design and development. Journal of Environmental Management 83 (4), 437e447.

Wade, R. (1987), the management of common property resources Cambridge Journal of Economics.

http://www.managementstudyguide.com/management\_functions.htm
http://www.enotes.com/management-functions-reference/management-functions

## **APPENDICES**

# Appendix I Provisional work plan and time table

| Activity                           | Duration days/weeks and months | From                        | То      |
|------------------------------------|--------------------------------|-----------------------------|---------|
| 1.Proposal writing                 | 5 months                       | August                      | January |
| 2.Proposal defense                 | One day                        | Awaiting confirmation       |         |
| 3.Data collection                  | One month                      | February                    | March   |
| 4.Data analysis                    | One month                      | April                       | May     |
| 5.Report writing                   | One month                      | May                         | June    |
| 6.Dissertitation/Thesis<br>defense | One day                        | It will depend on the board |         |

## **Appendix II**

## Questionnaire

Dear respondent,

I am *Deneth Ngabirano* conducting a research on the "relationship between management functions and self water supply systems. Case Study of Katosi Women Development Trust in Mukono District Uganda." This is to humbly request you to contribute to this study by providing the necessary information required by the questionnaire. The intention is purely academic and the information given will be subjected to utmost confidentiality. Thank you for acceptance in advance.

(Where alternatives are given, tick the appropriate box)

**Section A: Background information** 

| No | QUESTION   | ANSWER        |                   |                    |                   |                 |  |  |
|----|--|---------------|-------------------|--------------------|-------------------|-----------------|--|--|
|    |  | 1             | 2                 | 3                  | 4                 | 5               |  |  |
| 1  | What is your age in years?                         | Under 20      | 20-35             | 36-50              | 51-65             | Over 65         |  |  |
| 2  | What is your gender?                               | Female        | Male              |                    |                   |                 |  |  |
| 3  | What is your highest completed level of education? | None          | Primary           | Ordinary           | Advanced<br>Level | College & above |  |  |
| 4  | Which category do you belong                       | Water<br>User | District<br>water | Programme managers | Water<br>Board    | KWDT Staff      |  |  |

| No | QUESTION | ANSWER    |         |   |        |   |  |
|----|----------|-----------|---------|---|--------|---|--|
|    |          | 1         | 2       | 3 | 4      | 5 |  |
|    |          | household | officer |   | Member |   |  |

Please answer the following sections by ticking the appropriate response based on your opinion. It you strongly agree 5, agree 4, not sure, 3 disagree 2, and strongly disagree 1

## **Section B: Planning**

|    |   | 5 | 4 | 3 | 2 | 1 |
|----|---|---|---|---|---|---|
| 1  | Planning in Katosi women development trust is participatory         |   |   |   |   |   |
| 2  | While planning the focus is on the problem of clean water provision |   |   |   |   |   |
| 3  | They look at whether the goals can be achieved in the future        |   |   |   |   |   |
| 4  | Mobilization of resources is through community cash contribution    |   |   |   |   |   |
| 5  | Community elects the committee to handle money with objectivity     |   |   |   |   |   |
| 6  | They use a gender based criteria while selecting the committee      |   |   |   |   |   |
| 7  | The materials needed for construction systems are identified        |   |   |   |   |   |
| 8  | The project is approved of by the community                         |   |   |   |   |   |
| 9  | The personnel to handle construction of the system are competent    |   |   |   |   |   |
| 10 | Duration for construction is respected                              |   |   |   |   |   |
| 11 | Remuneration of the technocrats is done with maximum transparency   |   |   |   |   |   |

## **Section C: Organizing**

|    |  | 5 | 4 | 3 | 2 | 1 |
|----|--|---|---|---|---|---|
| 12 | In this project endeavor there is a framework within which efforts are |   |   |   |   |   |
|    | coordinated to ensure a proper chain of command                        |   |   |   |   |   |
| 13 | The coordinators elected for this purpose are practicing managers.     |   |   |   |   |   |
| 14 | They are well educated   |   |   |   |   |   |
| 15 | They have the required experience                                      |   |   |   |   |   |
| 16 | Determination of the user fees of the water source is done             |   |   |   |   |   |
|    | communally   |   |   |   |   |   |
| 17 | There is a well trained management committee within the community      |   |   |   |   |   |
| 18 | The personnel to render such services are trained                      |   |   |   |   |   |
| 19 | The criterion used in recruiting such personnel is through             |   |   |   |   |   |
|    | qualifications and experience.   |   |   |   |   |   |

| 21. Main water source system used is (tick your frequently used choice; not less than one)  A) Borehole b) Gravity water c) Surface water  d) Protected Spring e) Rainy water harvesting tank  Section D: Controlling  22  | 20    | They are well paid by the management                                  |       |          |      |     |   |
|--|-------|---|-------|----------|------|-----|---|
| A) Borehole b) Gravity water c) Surface water d) Protected Spring e) Rainy water harvesting tank  Section D: Controlling  5 4 3 2 1  22 The management team of this project endeavor has autonomy on behalf of the community  23 Decisions made by the management team are adhered too  24 We always have meetings monthly to review the self water supply system  25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management   |       |   | 1     | 1        |      |     |   |
| A) Borehole b) Gravity water c) Surface water d) Protected Spring e) Rainy water harvesting tank  Section D: Controlling  5 4 3 2 1  22 The management team of this project endeavor has autonomy on behalf of the community  23 Decisions made by the management team are adhered too  24 We always have meetings monthly to review the self water supply system  25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management   |       |   |       |          |      |     |   |
| Section D: Controlling    Section D: Controlling   | 21. N | Main water source system used is (tick your frequently used choice; r | ot le | ss th    | an o | ne) |   |
| Section D: Controlling    Section D: Controlling   | 4 \ D |   |       |          |      | _   |   |
| Section D: Controlling    The management team of this project endeavor has autonomy on behalf of the community   Decisions made by the management team are adhered too   Decisions made te | A) B  | forehole b) Gravity water c) Surfac                                   | e wa  | ter [    |      | _   |   |
| Section D: Controlling    The management team of this project endeavor has autonomy on behalf of the community   Decisions made by the management team are adhered too   Decisions made team are adhered too   D | d) Pr | otected Spring e) Rainy water harvesting tank                         |       |          |      |     |   |
| The management team of this project endeavor has autonomy on behalf of the community  23 Decisions made by the management team are adhered too  24 We always have meetings monthly to review the self water supply system  25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management   | ,     |   |       |          |      |     |   |
| The management team of this project endeavor has autonomy on behalf of the community  23 Decisions made by the management team are adhered too  24 We always have meetings monthly to review the self water supply system  25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management   |       |   |       |          |      |     |   |
| The management team of this project endeavor has autonomy on behalf of the community  23 Decisions made by the management team are adhered too  24 We always have meetings monthly to review the self water supply system  25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management   | C4    | D. C  |       |          |      |     |   |
| The management team of this project endeavor has autonomy on behalf of the community  Decisions made by the management team are adhered too  We always have meetings monthly to review the self water supply system  We have a mechanism in place to ensure proper monitoring and evaluation  Often when self water supply system is failing we have an avenue of raising our concerns  We get immediate feedback from the management  | Secu  | ion D: Controlling  |       |          |      |     |   |
| The management team of this project endeavor has autonomy on behalf of the community  Decisions made by the management team are adhered too  We always have meetings monthly to review the self water supply system  We have a mechanism in place to ensure proper monitoring and evaluation  Often when self water supply system is failing we have an avenue of raising our concerns  We get immediate feedback from the management  |       |   | 5     | 1        | 2    | 2   | 1 |
| behalf of the community  23 Decisions made by the management team are adhered too  24 We always have meetings monthly to review the self water supply system  25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management  | 22    | The management team of this project and according to autonomy on      | 3     | -        | 3    |     | 1 |
| Decisions made by the management team are adhered too  We always have meetings monthly to review the self water supply system  We have a mechanism in place to ensure proper monitoring and evaluation  Often when self water supply system is failing we have an avenue of raising our concerns  We get immediate feedback from the management  | 22    |   |       |          |      |     |   |
| 24 We always have meetings monthly to review the self water supply system  25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management   | 22    | •   |       | 1        |      |     |   |
| system  25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management  |       |   |       |          |      |     |   |
| 25 We have a mechanism in place to ensure proper monitoring and evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management  | 24    |   |       |          |      |     |   |
| evaluation  26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management  | 2.5   | •   |       |          |      |     |   |
| 26 Often when self water supply system is failing we have an avenue of raising our concerns  27 We get immediate feedback from the management  | 25    |   |       |          |      |     |   |
| raising our concerns  27 We get immediate feedback from the management   |       |   |       |          |      |     |   |
| 27 We get immediate feedback from the management   | 26    |   |       |          |      |     |   |
|  |       |   |       |          |      |     |   |
| 28 Decision is made in time to bridge gone that could rise due to an   |       |   |       |          |      |     |   |
|  | 28    | Decision is made in time to bridge gaps that could rise due to an     |       |          |      |     |   |
| avoidable circumstances  |       | avoidable circumstances   |       |          |      |     |   |
| 29 We have proper records keeping in place to document our resolutions   | 29    | We have proper records keeping in place to document our resolutions   |       |          |      |     |   |
|  |       |   |       |          |      |     |   |
|  |       |   |       |          |      |     |   |
| Section E: Delivery of self water supply systems   | Secti | ion E: Delivery of self water supply systems                          |       |          |      |     |   |
|  |       |   |       |          |      |     |   |
| 30 The project solicits funding from local community contribution, donor   | 30    | The project solicits funding from local community contribution, donor |       |          |      |     |   |
| and the central government   |       | and the central government  |       |          |      |     |   |
| 31 Local contribution is much more than what we get from donors/NGO  | 31    | Local contribution is much more than what we get from donors/NGO      |       |          |      |     |   |
| 32 Without donor funding our project would be in vain  | 32    | Without donor funding our project would be in vain                    |       |          |      |     |   |
| 33 The people used to repair the self water supply systems are qualified   | 33    | The people used to repair the self water supply systems are qualified |       |          |      |     |   |
| 34 The ratio of service providers and the water source points is   | 34    |   |       |          |      |     |   |
| commendable  |       |   |       |          |      |     |   |
| 35 The community is involved in identification of water points   | 35    | The community is involved in identification of water points           |       |          |      |     |   |
| 36 The will of the Water users household is consented with   |       |   |       |          |      |     |   |
| 37 Community is mobilized to participate in the construction   | -     |   |       | <u> </u> |      |     |   |
| 38 There is a follow up team in place to monitor what was implemented  |       |   |       | <u> </u> |      |     |   |

| 39 | There are technical people to oversee the repairs done where there is |  |  |  |
|----|---|--|--|--|
|    | need  |  |  |  |
| 40 | Spare parts are readily available when wanted                         |  |  |  |
| 41 | The cost for maintenance is manageable by the Water users             |  |  |  |
|    | household   |  |  |  |
| 42 | The maintenance is done in time by the service providers              |  |  |  |

## **Appendix III**

#### **Interview Guide**

An Interview Guide for district water officers, KWDT Staff and Programme Managers development partners

I am *Deneth Ngabirano* a participant at Uganda Management Institute, doing a Masters course in Project Planning and Management. This interview guide is designed to study the "relationship between management functions and self water supply systems. Case Study of Katosi Women Development Trust in Mukono District Uganda." You are kindly requested to answer all the questions. The information provided will be helpful in bettering provision of safe clean water systems in Katosi Mukono District. Your response will be kept confidential.

#### Planning and delivery of self water supply system

- 1) Describe the planning processes in this project endeavor in Katosi Women Development Trust
- 2) How do you mobilize for funding to cater for the various water sources required?
- 3) How do you handle the issue of budgeting to ensure fulfillment of set objectives without resource misallocations

## Delivery of self water supply systems

- 4) Which criterion do you use to get the qualified persons to ensure delivery of clean water?
- 5) What parties are involved in soliciting for the funding?

6) How do you handle issues of personnel to cater for services in terms of recruiting the right people, self project identification, implementation and operations and maintenance of such water sources?

# 7) Can you describe how planning benefits the success of delivery of self water supply systems?

#### **Organizing**

- 8) How is the structure of this project looking at the framework within which efforts are coordinated to ensure self water supply systems in place?
- 9) Which water systems are in place? What do you have to say on each please be objective hinting on the weakness and strong point of each.
- 10) How is the staffing does it enhance good management who provide good leadership in this project?
- 11) How do you select such leaders and what do you base on to come up with the choice of the person to entrust with leadership/management?
- 12) How do you remunerate them to ensure that they don't swindle your funds?

# 13) In linkage between organizing and delivery of self water supply system Controlling and delivery of self water supply system

- 14) How do you come up with vital decision and what do you depend on to come up with such decisions?
- 15) What mechanisms do you have in place to ensure proper Monitoring and evaluation within the above project?
- 16) How do you handle the issue of recording keeping (documentation) and what exactly do you keep in your records

- 17) Anything interesting you would wish the research to recognize its significance or to raise it to the people concerned for properly attention?
- 18) Any linkage between control and delivery of self water supply system in Katosi water project?