CONSTRAINTS AFFECTING PROJECT FUNDS UTILIZATION IN WATER SERVICE BOARDS IN KENYA: A CASE OF TANA WATER SERVICES BOARD.

BY

MAINA POLLY MUTHONI

A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI.

2010

DECLARATION

This research project is my original work and has not been presented in this University or any other Institution of higher learning for award of a degree.

..... 14/09/2010 .....

Maina Polly Muthoni

Reg. No. L50/72230/08

Date

This research project report has been submitted for examination with my approval as the University Supervisor.

..... 14/09/2010 .....

Dr. Anne Aseey

Lecturer, Department of Education Studies

University of Nairobi.

Date

DEDICATION

This work is dedicated to my parents Mr. and Mrs. Maina for not giving up on life and for all the sacrifices they made in raising me up. To the memory of my sister Triza, who taught me to love deeply and unconditionally, to trust and to hold on, to suffer yet smile and above all to brave life courageously. To my best friend, Hilary, for his constant nudge, support and encouragement to complete this research. To my brother Simon, for his understanding, and prudent management of my affairs during the two years of my schooling.

ACKNOWLEDGEMENT

First and foremost I am grateful to the Almighty God for his unfailing love, provision, protection and unmerited mercy. I am kindly indebted to my supervisor, Dr. Anne Aseey who has supported me throughout my project with her patience and knowledge whilst allowing me the room to work in my own way. One simply could not wish for a better or friendlier supervisor.

Special thanks go to the Management and the entire Tana Water Services Board staff especially Eng. Timothy Kibaki, Nicholas Kariuki, Vincent Kachi and Daniel Ngugi for all the information they effortlessly provided. My sincere thanks go to all lecturers and staff of University of Nairobi and my colleagues in Masters Class of 2008 for their support throughout the Masters program in general and in particular this research project report.

Lastly, I offer my regards and blessings to all of those who supported me in any respect during my research project writing.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATION AND ACRONYMS

GOK	Government of Kenya
ICT	Information and Communication Technology
TWSB	Tana Water Services Board
MDGs	Millennium Development Goals
MPERs	Ministerial public expenditure reviews
MTEF	Medium Term Expenditure Framework
MWI	Ministry of Water and Irrigation
NESHP	National Environment Sanitation & Hygiene Policy
NPEP	National Poverty Eradication Plan
NWSS	National Water Services Strategy
PER	Public Expenditure Review
PRSP	Poverty Reduction Strategy Paper
NWCPC	National Water Conservation and Pipeline Corporation
PS	Permanent Secretary
SPA	Services Provision Agreement
SWAP	Sector Wide Approach to Planning
UF W	Unaccounted for Water
UN	United Nation
UNDP	United Nation Development Programme
WASREB	Water Services Regulatory Board
WRMA	Water Resources Management Authority
WRP	Water Reform Programme
WSB	Water Services Board
WSP	Water Services Provider
WSTF	Water Services Trust Fund
PRSP	Poverty Reduction Strategy Paper
ERSWEC	Economic Recovery strategy for wealth and employment creation
ASAL	Arid and Semi Arid Lands
ADB	African Development Bank
BADEA	Arab Bank For Economic Development For Africa
CAAC	Catchment Area Advisory Committees
CBO	Community Based Organization

DWOs	District Water Officers
ERSWEC	Economic Recovery Strategy For Wealth And Employment Creation
GNP	Growth National Product
OECD	Organization for Economic Cooperation Development
EU	European Union
JICA	Japan International Cooperation Agency
KIDDP	Kenya-Italy Debt For Development Programme
KV2030	Kenya Vision 2030
LATF	Local Authority Transfer Fund
WA02	Water Act 2002
WSTF	Water Services Trust Fund
DANIDA	Danish International Development Agency
SIDA	Swedish International Development Cooperation Agency
UNICEF	United Nations International Children's Emergency Fund
DF	Devolved Funds (DF)" targeting communities at district and constituency

ABSTRACT

Project management is the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals and objectives (Chatfield, 2007).The primary challenge of project management is to achieve all of the project goals (Lewis R. Ireland (2006) and objectives while honoring the preconceived project constraints (Joseph Phillips (2003). Typical constraints are scope, time, and budget. The secondary and more ambitious challenge is to optimize the allocation and integration of inputs necessary to meet pre-defined objectives (Chatfield, 2007).

The objectives of the study was to; examine whether funding requirements influences project funds utilization in water service Boards in Kenya; to establish to what extent Institutional capacity influences project funds utilization in water service boards in Kenya; to determine if management information systems influences project funds utilization in water service boards in Kenya and lastly to assess whether sector policy framework influences project funds utilization in water service boards in Kenya

The study was carried out Tana Water Services Board in Nyeri and involved studying four capital projects. The study used closed and open–ended questionnaires to collect data and regression analysis to find the association between funding requirements, institutional capacity, management information system and policy Framework and project fund utilization of projects funds in Water Service Boards. Forecasting model was developed and tested for accuracy in obtaining predictions. The finding of the study indicated that the model was significant. This is demonstrated in the part of the analysis where R^2 for the association between Funding Requirements, Institutional Capacity, Management Information system and Policy Framework and project fund utilization of projects funds in Water Service Boards was 84.3%. All the independent variables were also linearly related with the dependent variable thus a model of four predictor variables could be used to rate project fund utilization of projects funds in Water Service Boards thus the study showed that there exist a significant relationship between funding requirements, institutional capacity, management information system and policy framework and project fund utilization of projects funds in Water Service Boards

The study recommends that the actors in the water sector should strive to build capacity for long term implementation of project and create sectors specific systems. The development partners should also try and improve assurance of funds by adopting longer funding cycles whereas the GOK should harmonize registration touching on water, sewerage and sanitation with the Water Act 2002 to minimize conflicts

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to the Report of the World Panel on Financing Water Infrastructure June, (2003) Water is the most important natural resource, indispensable for life and at the same time the backbone of growth and prosperity for mankind. According to estimations by the United Nations (UN), more people die presently due to insufficient access to safe water and basic sanitation than in military conflicts. Because of the importance of water services for the economic growth of a country and the wellbeing of its population United Nations Development Programme (UNDP) recommends that governments should provide investments equivalent to 1% of the national product. The growing demands for water against the limited natural endowment and its increasing scarcity could result in armed conflicts and pandemics if infrastructure and management of water is not improved.

According to the Kenya Integrated Household Budget Survey (KIHBS) ,(2005/2006) the Water Services Supply situation in Kenya is poor for a majority of people with, on the overall, approximately 57% of households using water from sources considered safe. The survey points out that, Kenya with a population of over 35 million faces enormous challenges in providing sustainable access to safe water, sewerage systems and basic sanitation for its fast growing population. Therefore, sustainable access to safe water and basic sanitation is still declining in terms of quality and quantity.

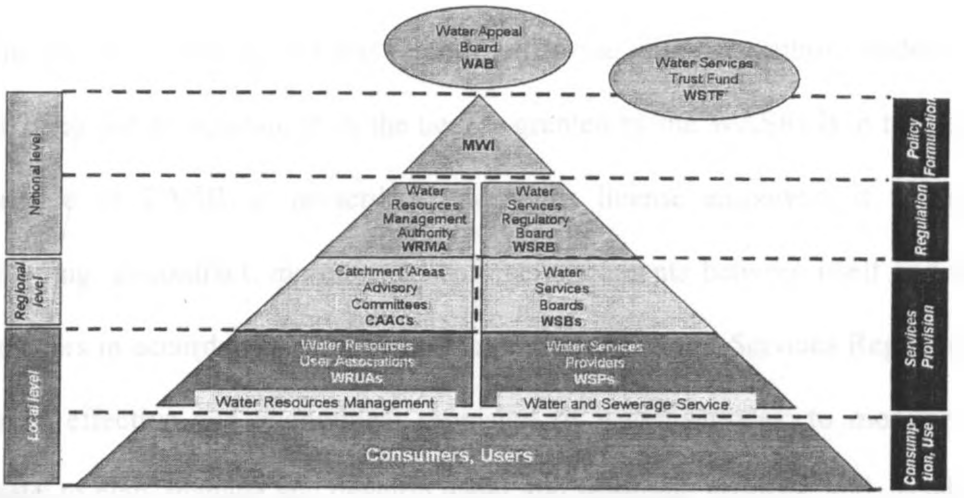
According to Kenya Vision, (2030) the Popular Version 2007, Water is central to the social and economic development of the country and its availability, or lack thereof, impacts the quality of life of the people. The key sectors of agriculture, livestock and fisheries, manufacturing and tourism depend on the availability and reliability of water resources. The sustainable management of water resources is, therefore, a pre-condition for Kenya's economic and social development. This fact is acknowledged in the Economic Recovery Strategy for Wealth and Employment Creation (2003); and the Poverty Reduction Strategy Paper (2002).

According to the Ministry of Planning and National Development ERS Mid- Term Review Popular Version, (2007) the main reasons why sustainable access to safe water and basic sanitation is declining in terms of quality and quantity are old infrastructure, inadequate management and maintenance of existing infrastructure, insufficient sustainability, investments not enough, concentrating on the options of fast tracking access and informal service provision and operating outside a framework of basic standards and regulation.

Despite the efforts of investments provided in the past years by the Government and development partners, existing facilities have continued to deteriorate and fail to meet the demand of the increasing population, particularly in many rural areas and the very rapidly growing settlements of the urban poor (NWSS, 2007). Safe water and basic sanitation must be regarded as a basic human right and should therefore be accessible and affordable to all

To address these critical challenges in the water sector in Kenya, the government is implementing fundamental reforms. The purpose of these reforms is to improve the management of water resources; improve access to water and sanitation services; enhance accountability for water resource management through decentralized provision of service and improve utilization of water resources, for both domestic and irrigation purposes.

The legal framework for the water sector reforms is the Water Act, 2002. The Act provides for the separation of roles in the water sector. All the new institutions within the water services supply sub-sector created by Water Act 2002 have been established; Water Services Regulatory Board (WASREB) to set standards and regulate the sub-sector; Water Appeal Board(WAB) to adjudicate on disputes; eight Water Services Board (WSBs) to be responsible for the efficient and economical provision of water services; Water Services Trust Fund (WSTF) to finance pro-poor investments; Water Services Providers (WSPs) to be agents in the provision of water and sewerage services utilizing acceptable business principles in their operations. The Ministry of Water and Irrigation (MWI) is responsible for overall sector oversight including policy formulation, coordination and resource mobilization.



Source: Ministry of Water and Irrigation - National Water Services Strategy (2007-2015)

Figure 1. Institutions in the water sector created by the WA02.

Water Service Boards have been established at the regional level and delineated on the basis of catchments, administrative boundaries and economic viability. They are responsible for efficient and economical water and sewerage service provision in their areas of jurisdiction. To support their role, they are to maintain and acquire assets, plan, develop and manage the systems in their areas. The Boards are to effect their mandate by contracting the Water Service Providers (WSPs) as agents for this purpose. They are to monitor and enforce provision agreements (SPAs) with the WSPs in accordance with the license requirements.

1.1.1 Overview of Tana Water Services Board

Tana Water Services Board was established as one of the institutions under the Water Act 2002 and got its mandate from the license granted by the WASREB in the year 2005. The mandate of TWSB as prescribed under this license empowers it to engage in the following: to contract, monitor and enforce agreements between itself and water service providers in accordance with regulations set by the Water Services Regulatory Board; to ensure effective and economical provision of water services; to monitor and acquire assets; to plan, manage and develop water and sewerage services; and, to take custody of water services provision assets.

Tana Water Services Board covers 36 administrative Districts in parts of Central and Eastern Provinces of the country namely:- Kieni East, Kieni West, Nyeri Central, Tetu, Mukurwe-ini, Nyeri South, Mathira East, Mathira West, Murang'a East, Kandara, Kigumo, Murang'a South, Kiharu, Kangema, Mathioya, Kirinyaga West, Kirinyaga East, Kirinyaga South, Kirinyaga Central, Embu West, Manyatta, Embu East, Mbeere North, Mbeere South, Meru Central, Imenti North, Imenti South, Buuri, Igembe North, Igembe South, Tigania East, Tigania West, Meru South, Maara, Tharaka North and Tharaka South.

The privatization of water services has attracted many development partners who are ready to invest in the water sector. These include mainly: the European Union, DANIDA, SIDA, UNICEF, JICA and others. The GOK is also a major funder of development projects in WSBs and every financial year there is a budgetary allocation for each board for its capital works.

1.2 Statement of the Problem

According to the Investment Programme for The Economic Recovery Strategy for Wealth and Employment Creation (June ,2004) Kenya faces serious challenges with regards to provision of water services despite the efforts of investments provided in the past years by the Government and development partners since existing facilities have continued to deteriorate and fail to meet the demand of the increasing population, particularly in many rural areas and the very rapidly growing settlements of the urban poor.

For more than a decade, the international development community has increased its focus on measuring and improving results (Lancaster, 1999). Donors and developing countries alike want to know that aid is being used as effectively as possible, and they want to be able to measure results. The aim is to ensure that development work leads to tangible and sustained improvements in the lives of people in developing countries.

This is implicit in the Millennium Development Goals (MDGs), which were adopted by 189 countries in 2000, and the Monterrey Consensus of 2002, which stressed the need to mobilize financial resources more efficiently. The Joint Marrakesh Memorandum in 2004 signaled a renewed emphasis on making aid effective. This was reinforced by the Paris Declaration of 2005.

Studies on impact of foreign aid on growth in developing countries, besides having a good case for increased flow of foreign aid, raise questions on the utilization of these funds on their designated projects (White, 1992). The donor community has become increasingly concerned that part of development assistance intended for crucial projects,

finance projects other than those earmarked for funding. For example, a study done by Uganda Debt Relief Network (2000) revealed that only 35% of the external funds reached the designated targets, underscoring the notion that aid to developing countries is fungible.

According to TWSB Strategic Plan 2009-2012, during the 2007/2008 financial year, TWSB received Kshs. 270M for development purposes but only managed to utilize 165M equating to 61% absorption rate. In the 2008/2009 financial year the rate deteriorated to 30% followed by a 39% absorption rate in the 2009/2010 financial year despite increased amount of funding by other development partners like the European Union (TWSB Strategic Plan 2009).

This low development funds absorption rate is a concern for the researcher since the WSBs continues to receive massive government and donor funding for infrastructural growth but the level of water coverage in the country continues to remain low.

1.3 Purpose of the Study

The purpose of the study was to investigate the constraints affecting projects funds utilization in WSBs in Kenya including the current status and identification of challenges, obstacles as well as opportunities for improving the same.

1.4 Research Objectives

The research was guided by the following objectives;

1. To examine whether funding requirements influences project funds utilization in water service Boards in Kenya.
2. To establish to what extent Institutional capacity influences project funds utilization in water service boards in Kenya.
3. To determine if management information systems influences project funds utilization in water service boards in Kenya.
4. To assess whether sector policy framework influences project funds utilization in water service boards in Kenya.

1.5 Research Questions

1. Does funding requirements influence the utilization of project funds in Water Service Boards in Kenya?
2. To what extent does Institutional capacity influence the utilization of project funds in Water Service Boards in Kenya?
3. Do Management Information Systems influence project funds utilization in Water Service Boards in Kenya?
4. Does the water sector policy framework influence the utilization of project funds in Water Service Boards in Kenya?

1.6 Research Hypothesis

1. H_O: There is no significant relationship between project funds utilization in water service boards in Kenya and the funding requirements of development partners.

   H_1: Stringent funding requirements influences project funds utilization in water service boards in Kenya.

2. H_O: There is no significant relationship between project funds utilization in water service boards in Kenya and the institutional capacity of an organization.

   H_1: Low Institutional Capacity influences project funds utilization in water service boards in Kenya.

3. H_O: There is no significant relationship between project funds utilization in water service boards in Kenya and the availability of accurate and reliable management information system.

   H_1: Lack of accurate and reliable management information system in the water sector influences project funds utilization in water service boards in Kenya.

4. H_O: There is no significant relationship between project funds utilization in water service boards in Kenya and the policy framework set in the water sector.

   H_1: Lack of a proper policy framework influences project funds utilization in water service Boards in Kenya.

1.7 Scope of the Study

The study involved obtaining information from Tana Water Services Board Staff on four donor funded projects namely ADB, EU, JICA and KIDDP implemented in TWSB's area of jurisdiction since its inception in 2005.

1.8 Significance of the Study

Water is an essential element for human survival and the combination of safe drinking water, adequate sanitation and hygiene is recognized as fundamental to human well-being. Water is also the most import natural resource, indispensable for life and at the same time the backbone of growth and prosperity for mankind and the growing demands for water against the limited natural endowment and its increasing scarcity could result in armed conflicts and pandemics if infrastructure and management of water is not improved (NWSS, 2007).

The study examined the major constraining factors that Water Service Boards face in their endeavor to utilize allocated funds in developing, expanding or rehabilitating water utilities. The findings of this study therefore will be of great help to the Water Service Boards when developing strategic and business plans, project proposals and while negotiating for funding allocation with the GOK and other development partners.

The findings of this study will also be utilized by the Water Services Regulatory Board, Water Services Trust Fund and the Parent Ministry of Water and Irrigation in formulating policies and strategies that aims at improving the operations of Water Service Boards in Kenya.

The findings will also be vital to other stakeholders with interest in partnering with the Water Services Board in an effort to support efficient provision of clean, affordable, reliable and quality water services in Kenya. The stakeholders may include development partners, the Government of Kenya through the Ministry of Finance, Ministry of Environment, Ministry of Health, The Ministry of Local Government, financial institutions and fund mobilizers. The study will enable the stakeholders to know the critical areas that call for attention in the sector and thereby facilitating coordination of efforts towards the attainment of the mandate of Water Service Boards in Kenya.

The general public too will benefit both directly and indirectly as a result of improved services, provision of clean, affordable, reliable and quality water and increased coverage which will result to socio-economic prosperity

1.9 Limitation of the Study

Best and Kahn (2000) observed that limitations are those conditions beyond the control of the researcher that may place restriction on the conclusions of the study and their application to other institutions

The study focused on Tana Water Services Board which is one of the eight water services board in Kenya. The researcher had a challenge of time and resources while carrying out the study.

1.9 Delimitation of the Study

The accessibility of respondents and experience with the TWSB provided invaluable benefit in undertaking the study. The quarterly Board papers, annual company newsletter, annual reports, and the Boards' website provided literature for review. The established Project Management Unit (PMU) for all development projects provided the right contact respondents.

1.10 Assumptions of the Study

The questionnaire and the interviews collected reliable information from respondents and provides ease of analysis of such information. The respondent provided honest information about the knowledge of the development projects in their area.

The study focused on Tana Water Services Board which is one of the eight water services board in Kenya. The researcher had a challenge of time and resources while carrying out the study.

1.9 Delimitation of the Study

The accessibility of respondents and experience with the TWSB provided invaluable benefit in undertaking the study. The quarterly Board papers, annual company newsletter, annual reports, and the Boards' website provided literature for review. The established Project Management Unit (PMU) for all development projects provided the right contact respondents.

1.10 Assumptions of the Study

The questionnaire and the interviews collected reliable information from respondents and provides ease of analysis of such information. The respondent provided honest information about the knowledge of the development projects in their area.

1.11 Definition of significant terms

Capital projects: Long-term investment project requiring relatively large sums to acquire, develop, improve, and/or maintain a capital asset.

Capabilities: Refer to a broad range of collective skills of organizations.

Constraints : These are those bottlenecks that hinders timely and efficient utilization of project funds

Competencies: Refer to the individual skills and abilities

Funds utilization: This refers to the monetary resources allocated to an organization by its principle or donor for implementation of certain projects.

Institutions: Formal organizations

Project: This refers to a set of related activities aimed at producing a product or service with a definite time, scope and budget.

Stakeholder: This refers to all those people who have an interest in the water sub-sector directly or indirectly.

Water Service Boards: These are regional water institutions mandated by the MWI to provide water and sewerage services in their area of jurisdiction.

1.11 Definition of significant terms

Capital projects: Long-term investment project requiring relatively large sums to acquire, develop, improve, and/or maintain a capital asset.

Capabilities: Refer to a broad range of collective skills of organizations.

Constraints : These are those bottlenecks that hinders timely and efficient utilization of project funds

Competencies: Refer to the individual skills and abilities

Funds utilization: This refers to the monetary resources allocated to an organization by its principle or donor for implementation of certain projects.

Institutions: Formal organizations

Project: This refers to a set of related activities aimed at producing a product or service with a definite time, scope and budget.

Stakeholder: This refers to all those people who have an interest in the water sub-sector directly or indirectly.

Water Service Boards: These are regional water institutions mandated by the MWI to provide water and sewerage services in their area of jurisdiction.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The study examined the constraints that affect project funds utilization in Water Service Boards in Kenya. This section reviews the various literatures on Aid Effectiveness, the role of GOK in development projects, Management information systems, the policy framework in the water sector, funding requirements for capital projects by development partners, and institutional capacity in the water sector.

This literature review assists in giving a clear picture of what to expect in the investigation. This chapter also gives a clear understanding of the nature of the problem being investigated. This literature study forms a fundamental and integral part of planning and undertaking of the research project (Smith, 2002).

2.2 Effectiveness of donor aid in implementing development projects in developing countries

For more than a decade, the international development community has increased its focus on measuring and improving results (Lancaster, 1999). Donors and developing countries alike want to know that aid is being used as effectively as possible, and they want to be able to measure results. The aim is to ensure that development work leads to tangible and sustained improvements in the lives of people in developing countries.

This is implicit in the Millennium Development Goals (MDGs), which were adopted by 189 countries in 2000, and the Monterrey Consensus of 2002, which stressed the need to mobilize financial resources more efficiently. The Joint Marrakesh Memorandum in 2004 signaled a renewed emphasis on making aid effective. This was reinforced by the Paris Declaration of 2005 and is being emphasized in the work already underway for the Accra 2008 meeting.

This commitment by donors to ensure that their assistance is effective has prompted the establishment of monitoring mechanisms and vetting of projects to ensure that these projects are able to meet the needs of development in a sustainable way (Lancaster, 1999). The results of this study showing that these conditions attached by donors to their funds and the reliability of most sources of finance conflict the efforts made by donors to ensure that their contribution to development projects must be effective.

Though foreign aid has continued to play an important role in developing countries, especially sub-Sahara Africa, it is interesting to note that after half a century of channeling resources to the Third World, little development has taken place (Devarajan *et al* 1998). In almost all of sub-Saharan Africa there is a high degree of indebtedness, high unemployment, absolute poverty and poor economic performance. The average per capita income in the region has fallen since 1970 despite the high aid flows. This scenario has prompted aid donor agencies and experts to revisit the earlier discussions on the effectiveness of foreign aid (Lancaster, 1999).

Studies on impacts of foreign aid on savings and growth in developing countries, besides having made a good case for increased flow of foreign aid, raise questions on the utilization of these funds on their designated projects (White, 1992). The donor community has become increasingly concerned that part of the development assistance intended for crucial projects, finances projects other than those earmarked for funding. For example, a study by Uganda Debt Relief Network, 2000, revealed that only 35% of the external funds reached the designated targets, underscoring the notion that aid to developing countries is fungible. Whereas the question of fungibility is important, empirical analysis of the linkage between aid and total expenditure is necessary when assessing the impact of aid in developing countries. Several studies on the question of fungibility; among them (Heller, 1975); (Khilji and Zampelli, 1994); (Pack and Pack, 1993) - conclude that aid to developing countries is fungible. Others, like Levy (1987), McGuire (1987), Gang and Khan (1990), Pack and Pack (1990), and Nathi and Sobhee (1999), using time series data in individual countries, found no significant diversion of funds, and all concur with the argument that foreign aid funds are spent on the designated purposes. Further, recent studies by Feyzioglu *et al.* (1998) and Devarajan *et al.* (1998) that have combined both aggregated and disaggregated data found aid to be non-fungible at national levels but fungible across sectors.

2.3 The role of Government as a partner in development projects

In order to respond to the consistent challenge of poverty and inequality, the Government of Kenya (GoK) introduced decentralized development planning and finance through "Devolved Funds (DF)" targeting communities at district and constituency levels.

Through these DFs the government directly transfers resources to constituencies in order to finance community identified priority projects socio-economic development projects. These are resources over and above sector ministry budgetary allocations and are aimed at giving communities ownership of resources for effective local development. Their importance is recognized in the GoK's long term development blue print, "Vision 2030", which puts strong emphasis on enhancing equity, improving governance and social justice through the allocation of increased resources to DFs (Vision 2030 Secretariat).

However, various stakeholders have raised concerns over institutional problems, community capacity weakness and poor governance as undermining the effectiveness and impact of the DFs. As a result, the WB (2006) commissioned an Institutional and Capacity Building Needs Assessment Study which found that the lack of coherent policy framework to coordinate and harmonize operations, limited awareness and low community participation due to knowledge gaps and capacity limitations, inadequate mechanism for transparency and accountability and poor monitoring and evaluation for results are some of the challenges that ultimately compromise the impact of DFs. The implementation of devolved funds has met challenges;

First, the devolved funds have met Weak Institutional Capacity. Implementation experiences to date revealed gaps in effectiveness with which DFs have performed, including weak capacities at the national level to manage and coordinate development and at community level to identify, prioritize, successfully implement and sustain projects. Increasing resource flows to finance programs/projects at district/constituency levels have come without corresponding investment in capacity building.

The additional project case work created by DFs puts heavy pressure on the limited technical staff at District level and below.

Second, there is lack of stakeholders' participation: Even though the governing principle of the DF is to encourage community participation, an institutional framework for community involvement is missing. The overall characteristic of the DFs therefore is that: Local councils as well as parliament retain control of resources and Local communities lack awareness about the objective, rules and procedures governing their access to DFs, and their roles and mandates. Appropriate community participation tools and approaches such as Participatory Rural Appraisal (PRA) have not been adequately utilized for entrenching community participation.

Consequently, there is Inadequate Transparency and Accountability. Within the highly contested political environment in Kenya, DFs have also been a locus for intense political competition due to the over involvement of political leadership which has caused prejudice to the planning, participation and implementation processes. Many projects are being used to leverage political support. Accountability mechanisms also appear weak as a result of inadequate mechanisms for communities to exact public accountability.

Lastly, there is poor monitoring and evaluation mechanisms. In general, since capacities for districts and constituencies to monitor and evaluate projects are inadequate, M&E mechanisms are not well developed. At the community level, there is a lacuna in terms of who and how projects should be monitored. In addition, there is a glaring lack of computers and modern data storage and retrieval systems for enhancing financial management.

The government has made efforts to channel funds to needs of the community through the DF, though the concept has gained support from donors institutional support for the initiative is inadequate (T1, 2005)

2.4 Management of Information Systems in the water sector in Kenya

Peter Drucker had theorized the rise of the "knowledge worker" back in the 1950s. He described how fewer workers would be doing physical labor, and more would be applying their minds.

In 1984, John Nesbitt theorized that the future would be driven largely by information: companies that managed information well could obtain an advantage, however the profitability of what he calls the "information float" (information that the company had and others desired) would all but disappear as inexpensive computers made information more accessible.

Daniel Bell (1985) examined the sociological consequences of information technology, while Gloria Schuck and Shoshana Zuboff looked at psychological factors (19850), Zuboff (1988), in her five year study of eight pioneering corporations made the important distinction between "automating technologies" and "infomating technologies". She studied the effect that both had on individual workers, managers, and organizational structures. She largely confirmed Peter Drucker's predictions three decades earlier, about the importance of flexible decentralized structure, work teams, knowledge sharing, and the central role of the knowledge worker.

Since 1990 many theorists have written on the strategic importance of information, including J.B. Quinn (1992), J. Carlos Jarillo (1993), D.L. Barton (1995), Manuel Castells (1996), J.P. Lieleskin (1996) Thomas Stewart (1997) K.E. Sveiby (1997), Gilbert J. Probst (1999) and Shapiro and Varian (1999).

Shoshanna (1988) claims that information technology is widening the divide between senior managers (who typically make strategic decisions) and operational level managers (who typically make routine decisions). She claims that prior to the widespread use of computer systems, managers, even at the most senior level, engaged in both strategic decisions and routine administration, but as computers facilitated (She called it "deskilled") routine processes, these activities were moved further down the hierarchy, leaving senior management free for strategic decisions making. Access to information systems have allowed senior managers to take a much more comprehensive view of project management than ever before.

Substantial information insufficiencies exist in all areas of the Water Supply Services sub-sector. This is due to the fact that baseline data, especially for the fast growing areas are missing or if existing in some pilot areas, are outdated. Additionally, existing information systems cover only limited areas and are often not sustainable. In addition, research on viable options and best practices is insufficient and making it difficult for decision makers to give directions. Reporting based on such data and good research results becomes unreliable especially for aggregated data on national level (NWSS, 2007).

Donor agencies, sometimes in collaboration with other Ministries, maintain their own information systems which produce misleading results and therefore insufficient information at the national level makes it impossible to set realistic targets for policies and strategies (NWSS,2007). This hampers acceptable priority settings for sustainability; equally inadequate information/data makes it difficult to channel investments where the biggest benefit can be achieved thereby comprising project implementation of Water Service Boards in Kenya.

2.5 Kenya Water Sector Policy framework

According to Business dictionary.com, a policy framework is a set of principles and long-term goals that form the basis of making rules and guidelines, and to give overall direction to planning and development of an organization.

A framework is a support structure established to act as a means for meeting a given need. It consists of people, entities, rules and systems. The elements of a good framework are clear roles and relationships between actors, rules of operation and adherence to the rules and accountability to a higher authority. This framework should then ultimately, act as a means to achieve intended policy outcomes. It is these principles that form the basis for this rapid assessment of the Kenya water, sanitation and sewerage framework.

The present institutional arrangements for the management of the water sector in Kenya can be traced to the launch in 1974 of the National water Master Plan whose primary aim was to ensure availability of potable water, at a reasonable distance, to all households by the year 2000.

The Plan aimed to achieve this objective by actively developing water supply systems, sinking of boreholes, construction of catchments dams and provision of the conveyance infrastructure in the form of pipes and furrows. To do so require that the Government directly provide water services to consumers, in addition to its other roles of making policy, regulating the use of water resources and financing activities in the water sector.

The legal framework for carrying out these functions was found in the law then prevailing, the water Act, Chapter 372 of the Laws of Kenya. In line with the Master Plan, the Government upgraded the Department of water Development (DWD) of the ministry of Agriculture into a full ministry of Water which embarked on an ambitious water supply development programme. By the year 2000, it had developed, and was managing, 73 piped urban water systems serving about 1.4 million people and 555 piped rural water supply systems serving 4.7 million people.

In 1988 the Government established the National Water Conservation and Pipeline Corporation (NWCPC), as a state corporation under the State Corporations Act, Chapter 446 of the Laws of Kenya, to take over the Management of Government operated water supply systems that could be run on a commercial basis. By 2000 the NWCPC was operating piped water supply systems in 21 urban centre serving a population of 2.3 million people and 14 large water supply systems in rural areas serving a population of 1.5 million people.

Alongside the DWD and the NWCPC the large municipalities were licensed to supply water within their areas and by the year 2000, ten municipalities supplied 3.9 million urban dwellers. Additionally, about 2.3 million people were receiving some level of service from systems operated by self- help (community) groups who had built the systems, often with funding from donor organizations and technical support from the district officers of the Department of water Development (Government of Kenya, 1999).

Persons not served under any of the above arrangements did not have a systematic water service, and had to make do with such supply as they were able to provide for themselves, typically by directly collecting water from a watercourse or some other water source on a daily basis.

Indeed, despite the Government's ambitious water supply development programme, by 2000, less than half the rural population had access to potable water and, in urban areas, only two thirds of the population had access to potable and reliable supplies.

In the 1980s the Government begun experiencing budgetary constraints and it became clear that, on its own, it could not deliver water to all Kenyans by the year 2000. Attention therefore turned to finding ways of involving others in the provision of water services in place of the Government, a process that came to be known popularly as "handing over."

There was general agreement over the need to hand over Government water supply systems but much less agreement over what it meant for the Government to hand over public water supply systems to others. In 1997 the Government published manual giving guidelines on handing over of rural water supply systems to communities (Ministry of Land Reclamation, Regional and Water Development, 1997). The Manual indicated that "... at the moment the ministry is only transferring the management of the water supply schemes.

The communities will act as custodians of the water supply schemes, including the assets, when they take over the responsibility for operating and maintaining them." But, the goal of community management should be ownership of the water supplies, including the associated assets. The Manual stated the criteria for handing over to be the capacity of the community to take over; ability to pay; capacity to operate and maintain the system; involvement of women in management and ability and willingness to form a community based group with legal status.

By 2002 ten schemes serving about 85, 000 people had been handed over under these guidelines, focusing on management and revenue collection, not full asset transfer. Building on this experience, the Government developed a fully fledged policy, the National Water Policy in 1999. It has tackled issues pertaining to water resources management, water and sewerage development, institutional framework and financing of the sector. In each case an attempt has been made to discuss the problems associated with each area and suggest the appropriate strategies and the desired policies that the government will put in place to resolve those problems (National Water Policy, 1999).

The Policy stated that the Government's role would be redefined away from direct service provision to regulatory functions: service provision would be left to municipalities, the private sector and communities. The Policy also stated that the Water Act, Chapter 372 would be reviewed and updated, attention being paid to the transfer of water facilities. Regulations would be introduced to give other institutions the legal mandate to provide water services and to provide mechanisms for regulation. The Policy justified handing over, arguing that ownership of water facility encourages proper operation and maintenance: facilities should therefore be handed over to those responsible for their operation and maintenance.

While developing the National Water Policy, the Government also established a National Task Force to review the Water Act, Chapter 372 and draft a Bill to replace the Water Act. The Water bill 2002 was published on 15th June 2002 and passed by Parliament on 18th July 2002. It was gazetted in October 2002 as the Water Act, 2002 and went into effect in 2003 when effective implementation of its provisions commenced.

Building on this initiative, the current government set out on an agenda of reform with water resources development and management as one of its priorities. In his opening address to parliament, President Mwai Kibaki stated that his Government, ". . . is committed to ensuring that Kenyans have access to clean water." In this context, the Minister for Water Affairs established the new *2002 Water Act*, intended to tackle the worsening water services experienced over the earlier decade. This step has given poverty reduction in Kenya a new possibility.

This *Water Act* established an autonomous Water Resources Management Authority, destined to manage and protect Kenya's resources. It also shaped an institutional framework that gave responsibility for providing decentralized services to eight regional Water Services Boards (WSB). These Boards manage water services assets and ensure that they remain in the public realm. An essential aspect of the reform outlined in the *Water Act* is the separation of water and sanitation from the management of resources.

The separation of functions in the sector, with different autonomous bodies having specific responsibilities in the sector and the multitude of development partners, civil society and private sector participation calls for improved coordination by the Ministry of Water and Irrigation (MWI). A number of development agencies do not yet participate in joint programming under the leadership of the MWI and in joint program reviews. Additionally, not all development agencies have aligned their support to sector policy and strategies.

The separation of functions through the sector reform, as well as the involvement of numerous development partners, civil society and private sector partners calls for enhanced coordination by the Ministry of Water and Irrigation in order to ensure sustainability of the sector.

2.6 Funding Requirements for Capital projects by development partners

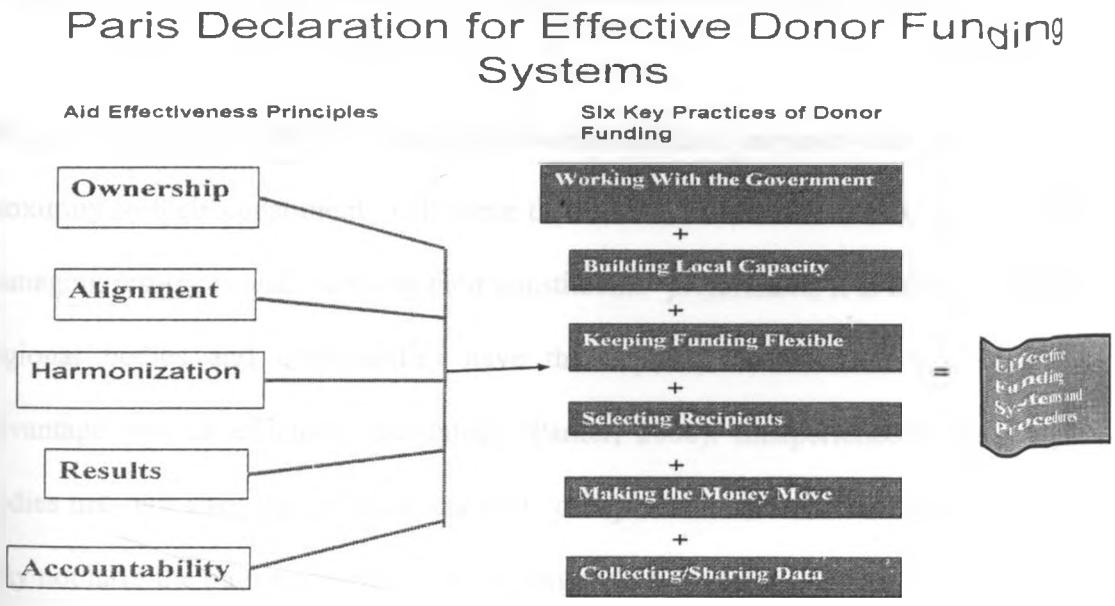
Project funding should begin in the earliest stages of project planning. Without funding, there is no project. In simple terms, there are five basic steps to funding a project: Identify funding sources, Identify funding requirements, Detail project scope, Determine cost estimate and applying for funding (Moore, 1995).

One single major impediment to sector reforms is the poor state of infrastructure which influences the service delivery level of Water Service Boards and therefore funding needs to be enhanced. Sufficient funds are not available in order to rehabilitate and extend existing systems or to build new infrastructure for Water Supply Services. Low performance and poor income results keeps many potential donors away from the water sector (NWSS, 2007).

The Kenya Government recognizes the need of harmonization and alignments of the whole of the water sector, it therefore started to consider or implement a Sector Wide Approach to Planning (SWAP). This is a process of funding the water sector, whether internal or external i.e. all development partners by supporting a single policy and development programme under the leadership of the Government of Kenya. The common approaches to management arrangements such as planning and budgeting procedures, procurement, disbursement and audit procedures, and performance monitoring across the sector. The MWI has succeeded in launching the SWAP process and organized the first SWAP conference in October 2006.

For this conference a rudimentary Sector Investment Plan (SIP) was prepared which still needs substantial improvements and a link to the planning of investments by WSBs. The GOK and all major development partners signed a Partnership Principles Agreement in 2006 which was an important step in proceeding with the implementation of the recommendations of the Paris Declaration (2005) as outlined in figure 2.0. However a number of development agencies do not yet participate in joint programming under the leadership of the MWI and in joint program reviews. Additionally, not all development agencies have aligned their support to sector policy and strategies (NWSS, 2007).

Further, the principles agreed upon in the Paris declaration, 2005 (outlined in the figure below) are still not always practiced by donors and multilateral bodies (ODI, 2008).



Source www. oecd .org

Figure 2. Paris declaration for effective aid funding, 2005

2.7 Capacity Development

According to Antoinette Gosses , 2006, 'Capacity Development entails the sustainable creation, utilization and retention of the abilities of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives, in order to reduce poverty, enhance self-reliance and improve people's lives' (UNDP, Capacity Development Practice Note, 2006).

The role of donors, partners and 'capacity development' organization is not to "do" capacity development but to promote it. (Hailey and R. James, 2006). Assessing, improving, and accommodating varying degrees of local capacity has become more and more important as decentralization policies transfer larger responsibilities as well as budgets from national governments to local governments and communities.

While one of the common rationales for decentralization proposes that regional bodies' proximity to their constituents will force them to be better than central governments at managing resources and matching their constituents' preferences, it is not at all clear that regional bodies and communities have the capacity to translate this information advantage into an efficiency advantage (Parker, 2000). Inexperienced, small regional bodies may not have the technical capacity to implement and maintain projects and they may not have the training to effectively manage larger budgets (Jarillo, 1993).

2.7 Capacity Development

According to Antoinette Gosses , 2006, 'Capacity Development entails the sustainable creation, utilization and retention of the abilities of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives, in order to reduce poverty, enhance self-reliance and improve people's lives' (UNDP, Capacity Development Practice Note, 2006).

The role of donors, partners and 'capacity development' organization is not to "do" capacity development but to promote it. (Hailey and R. James, 2006). Assessing, improving, and accommodating varying degrees of local capacity has become more and more important as decentralization policies transfer larger responsibilities as well as budgets from national governments to local governments and communities.

While one of the common rationales for decentralization proposes that regional bodies' proximity to their constituents will force them to be better than central governments at managing resources and matching their constituents' preferences, it is not at all clear that regional bodies and communities have the capacity to translate this information advantage into an efficiency advantage (Parker, 2000). Inexperienced, small regional bodies may not have the technical capacity to implement and maintain projects and they may not have the training to effectively manage larger budgets (Jarillo, 1993).

Vitek (1999) defines Institutional capacity as the extent to which an organization is able to fully spend the allocated financial resources from its development partners in an effective and efficient way. This capacity is necessary for making a maximum contribution to economic and social cohesion with the resources available.

2.8 Challenges affecting Water Service Boards

According to the National Water Services Strategy (2007) which was derived from the water sector policy contained in Sessional paper No. 1 of 1999 on Water Resource Management and Development, the water sector faces various challenges some of which are outlined herewith;

First, the Sector suffers low public and government understanding of the framework. A communication strategy on the reforms has been developed but has not yet reached the district level effectively. On top of this, staff have been seconded to WSBs and the WRMA, but some staff continue to play the original role they played at the MW&I. Furthermore, some WSBs are seconding the staff to the WSPs where there are gaps. The staff now has to re-orient themselves to their new tasks. Additionally, the existence of many players on the scene makes the public confused.

Secondly, the transfer of assets has never been finalized. Communities are apprehensive about the transfer of assets to the respective boards and as a result, some groups were reluctant to give up their self developed assets. The communication on how the boards will handle the community projects remains unclear for many.

The community based organizations who have developed their water supplies through self help or donor support feel that there is need to have a say in the use and management of assets.

Thirdly, the Water Sector Institutions suffer capacity constraints. WSBs in particular have limited capacity to fulfill their roles. An attempt to address this challenge was made by entering arrangements with Support Organizations (SOs) and Quality Control Agents (QCAs). The SOs' were to support the communities in preparing good project proposals while the QCAs would monitor the SOs' activities. However, the process of engaging the SO and QCA services was difficult for the WSBs. The approach was not clear to all and as a result, varied responses were received which were extremely difficult to evaluate in terms of capability and scope of works. While WSBs rely mostly on funds promised by donors, in the long run, WSBs need to develop mechanisms for raising funds for operations and development of infrastructure. More competence and financial record keeping, especially in the case of local government and community providers, is also required.

Fourthly, the donors and support agents on the other hand would like to see a realistic conclusion of the transfer plan. Most of these have not aligned their support to sector policy and strategies.

Consequently, the Water Sector is burdened with Vulnerable and unreliable infrastructure. Unreliable power, roads and telephone infrastructure, old and obsolete water supply facilities and non-functional systems and prolonged droughts and heavy

floods frustrate water supply efforts. The cost of rebuilding these devastated works is enormous.

Lastly the Water Sector has inaccurate and unreliable sector data. While some progress has been made in data, collection and management, through the effort of current reforms, the data on coverage, access, functionality of water and sewerage systems and water resources vary depending on source. Most of the data used in the reforms are from the1998 JICA after care study.

2.9 Theory of Constraints (TOC) in Project Management

The primary challenge of project management is to achieve all of the project goals and objectives while honoring the preconceived project constraints, Lamb, Robert, Boyden (2002) Typical constraints are scope, time, and budget. The secondary and more ambitious challenge is to optimize the allocation and integration of inputs necessary to meet pre-defined objectives.

Dr. Eliyahu M. Goldratt (1984) in his theory of constraints asserts that any manageable system is limited in achieving more of its goal by a very small number of constraints, and that there is always at least one constraint. Theory of Constraints is based on the premise that the rate of goal achievement is limited by at least one constraining process. Only by increasing flow through the constraint can overall throughput be increased (Cox, Jeff; Goldratt, Eliyahu M. (1986).

Constraints can be internal or external to the system. An internal constraint is in evidence when the market demands more from the system than it can deliver. If this is the case, then the focus of the organization should be on discovering that constraint and following the five focusing steps to open it up (and potentially remove it).

An external constraint exists when the system can produce more than the market will bear. If this is the case, then the organization should focus on mechanisms to create more demand for its products or services. Internal constraints are often caused by equipment, people and policies, McKinsey (2001).

This theory has provided a substantially better insight into the dimensions and complexity of the problem facing WSBs in project management. It also equips the researcher with a complete and thorough justification of the subsequent steps as well as with a realization of the importance of undertaking the research.

2.10 Conceptual Framework

The conceptual framework is a graphical representation showing the relationship between the independent variables and dependent variables. The dependent variables are influenced by the independent variables when the later is manipulated (Borg& Gall, 1989 and Kothari, 1999).

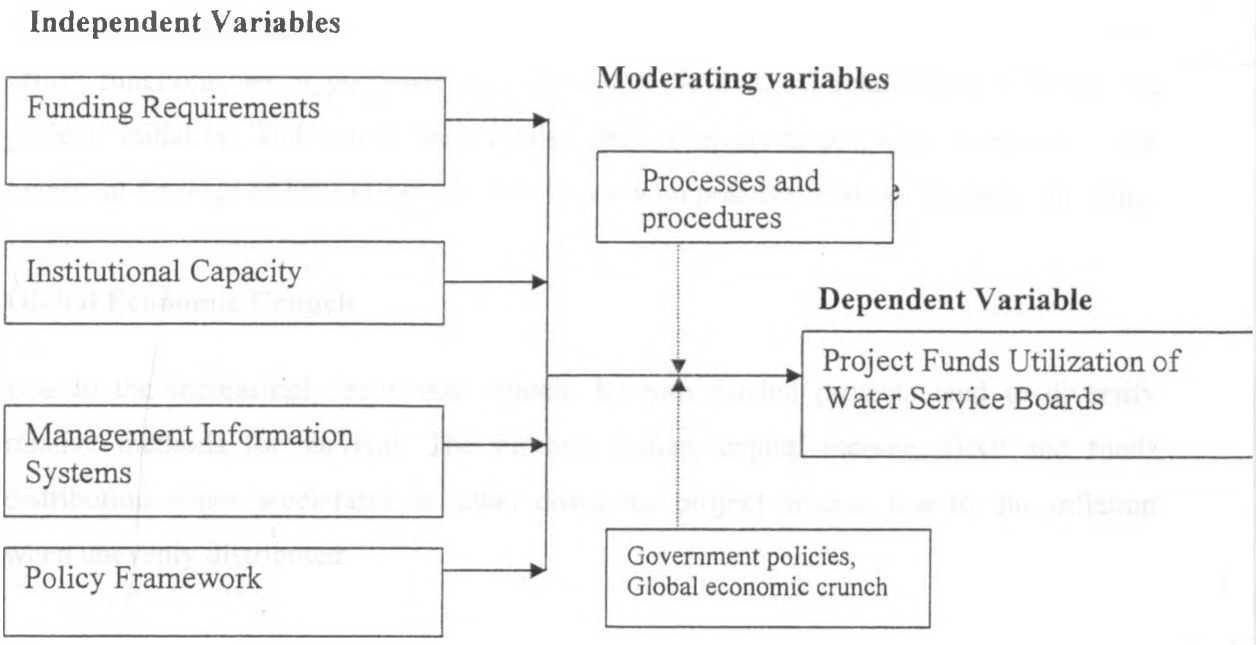


Figure 3. Conceptual Framework

Moderating Factors

Processes and procedures

A smaller but well planned project can orchestrate more coverage in the development press than it would ordinarily expect i.e. A successful process in a project implementation has a direct impact on the final expectation of the result. Enlist the services of an engineer or business PR firm or consultants, who knows the ropes, or make it a priority and do it yourself has a great effect on the final result.

Governance policies

Board of director literature (for example, Lipton and Lorsch 1992; and Jensen 1993) argues that the optimal success of any project depends on how influential the Government policies are toward its initiatives. The function for the optimal success is concave upwards.

Thus, due to the firms in our sample and the concave nature of government policies, utility functions, we hypothesize that there will be a direct relationship between the project initiatives and shareholders funds offers. This prediction is an extension of the empirical findings of Frye (1998) on his overview on positive relationship between firms.

Global Economic Crunch

Due to the increasingly economic crunch, Kenyan funded projects tend to diversify relative methods for survival. The funding bodies, capital income, GNP and funds distribution either accelerates or lower down the project process due to this inflation when unevenly distributed

2.11 Summary

Literature review reveals that numerous studies have been done on project financing and its impact on development in Africa. Others have highlighted the factors that have influenced or hindered successful implementation of development projects. In his analysis of eight African countries with Kenya included on Effectiveness of foreign aid, Carlsson, 1997, establishes three sets of interrelated factors that influence the impact of development aid in Africa. First, the macroeconomic environment in which development efforts take place has a powerful impact on their likelihood of success. Aid is far less likely to be successful in a context of fiscal crisis and economic instability. Second, the recipient country must have the capacity and willingness to harness aid resources effectively. Aid is more likely to be effective when it is fully integrated into a sound development strategy established by the government. Third, the nature of the donor-recipient relationship has a critical impact on the effectiveness of aid utilization. Particularly, the sustainability of aid requires that the recipient have a full sense of

"ownership" over the programmes and projects that are formulated and implemented. Each of these three factors is related and tends to reinforce one another (Carlsson, 1997).

The primary challenge of project management is to achieve all of the project goals and objectives while honoring the preconceived project constraints. Typical constraints are scope, time, and budget. The secondary and more ambitious challenge is to optimize the allocation and integration of inputs necessary to meet pre-defined objectives.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter a brief description of the research methods is discussed. They include the research design, target population, sample size and sampling procedures, research instruments, the procedure for data collection and analysis, instruments validity and reliability.

3.2 Research Design

The researcher undertook a study of four water projects implemented by Tana Water Services Board. To get appropriate information on project funds utilization, some staff in the Planning & Strategy Department, Technical Department and Finance Department of TWSB were selected as respondent since they were best placed to understand the challenges faced by the water service boards.

The study adopted a correlation research design to examine the constraints affecting projects funds utilization in Water Service Boards in Kenya. This design enabled the researcher to assess the degree of relationship that exists between two or more variables. It analyzes the correlation between two or more variables (Orodho, 2003). This design enabled the researcher to generate both numerical and descriptive data that were used in measuring correlation between variables. Correlation research design was able to produce statistical information about aspects of project funds utilization in Water Service Boards in Kenya that interest policy makers.

3.3 Target Population

The researcher obtained information from the Planning, Finance and Technical department staff of Tana Water Services Board. The total staff establishment of TWSB is fifty seven but the researcher only interview eighteen officers those that are directly involved in project implementation. Kombo, K. and Tromp (2006) define a population as a group of individuals, objects or items from which samples are taken for measurement.

Table 3.1 The Target Population

CATEGORY	STRATA	TARGET POPULATION
Technical Department	20	2
Planning & Strategy Department	4	2
Project Management Unit	6	5
Finance Department	10	5
Water Service Division	10	2
Asset Development Division	4	1
Resource Mobilization Section	3	1
TOTAL	**57**	**18**

3.4 Sampling and Sampling Procedures

According to Orodho and Kombo (2002) sampling is the process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group.

Mugenda and Mugenda (2003) argue that for a sample to be representative enough, it should be at least 10% of the target population hence the researcher chose 31% of the total population. The method used to come up with this sample was census sampling method as the researcher had full knowledge of the location and contact people in Tana Catchment's area. In total the sampling procedure provided the researcher with a sample size of 18 as shown in table 3.0.

3.5 Data Collection Methods

This study used questionnaires for the purpose of gathering information from the TWSB Staff. Both the primary and secondary data was collected for the purpose of this study. The primary data was collected using structured questionnaire, while secondary data was collected from Board Papers submitted to Tana Water Services Board of Directors. The questionnaire had both open and closed ended questions. Open ended questions were used to seek in depth information.

The questionnaire with adequate instructions and easy to understand language was self-administered to eighteen staff of TWSB various departments and sections. The questionnaire asked specific questions which called for specific answers (Lovell, 1977). The questionnaire was preferred due to the suitability for the study as suggested by Mugenda (1999) who observed that questionnaires are commonly used to obtain important information about population. Each item in the questionnaire was developed to address a specific research question of the study.

3.6 Validity

Mugenda and Mugenda (1999) define validity as the degree to which results obtained from analysis of the data actually represents the phenomenon under study. In order to improve validity the researcher ensured that the research instruments are accurate conducting a pilot study and ensuring the questions are getting the right responses to measure what is intended. Information gathered will also be crosschecked with other sources to ensure authenticity and accuracy.

3.7 Reliability

Mugenda and Mugenda (1999) define reliability as a measure of the degree to which a research instruments yields consistent results or data after repeated trials. A measure is considered reliable if a person's score on the same test given twice is similar.. To test for reliability of the questionnaire, the researcher used a test-retest technique. An appropriate sample was identified in TWSB but outside the study sample. The developed questionnaire was administered to them. The answered questionnaire was scored. The same questionnaire was administered to the same group of subject after a period of two weeks then the correlation between the two separate measurements was computed while assuming there is no change in the underlying condition between test 1 and test 2. The analysis of the data represented the phenomenon under study.

3.8 Data Analysis

The data collected was analyzed using descriptive statistics. After the data collection, the researcher; Pre-processed the data to eliminate unwanted and unusable data which could have been contradictory or ambiguous, developed a coding scheme by creating codes and scales from the responses which was then summarized and analyzed. The data was then stored in paper and electronic storage and finally the researcher used the Statistical Package of Social Science (SPSS) to analyze the data.

The researcher used a probabilistic model to predict the extent to which the identified independent variables affected the dependent variable. The population regression line is represented by the following equation:

$$Y = \beta_o + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \epsilon$$

Where;

Y = Utilization of projects funds in Water Service Boards – The dependent variable

β_o = This is the Y-intercept which is a constant not a variable and it occurs when $x_1=x_2=x_3=x_4=0$

x_1 = Funding Requirements – independent variable

x_2 = Institutional Capacity – independent variable

x_3 = Management Information system – independent variable

x_4 = Policy Framework – independent variable

ϵ = error variable which represents all the factors that affects the dependent variable but were not included in the model either because they were difficult to measure or not known.

3.8 Data Analysis

The data collected was analyzed using descriptive statistics. After the data collection, the researcher; Pre-processed the data to eliminate unwanted and unusable data which could have been contradictory or ambiguous, developed a coding scheme by creating codes and scales from the responses which was then summarized and analyzed. The data was then stored in paper and electronic storage and finally the researcher used the Statistical Package of Social Science (SPSS) to analyze the data.

The researcher used a probabilistic model to predict the extent to which the identified independent variables affected the dependent variable. The population regression line is represented by the following equation:

$Y = \beta_o + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \epsilon$

Where;

Y = Utilization of projects funds in Water Service Boards – The dependent variable

β_o = This is the Y-intercept which is a constant not a variable and it occurs when $x_1=x_2=x_3=x_4=0$

x_1 = Funding Requirements – independent variable

x_2 = Institutional Capacity – independent variable

x_3 = Management Information system – independent variable

x_4 = Policy Framework – independent variable

ϵ = error variable which represents all the factors that affects the dependent variable but were not included in the model either because they were difficult to measure or not known.

3.9. Operationalization of variables

The researcher identifies the following indicators or properties denoted by the main variables under the study in order to make them measurable. The measurement will be both objective and subjective.

Table 3.2 Operationalization of variables

Objective	Variable	Indicator	Measurement scale	Study design	Level of Sca
To examine whether funding requirements influences project funds utilization in water service boards in Kenya	**Independent Variables** a)Funding requirements	a) Level of donor involving in procurement process b) Amount of funds disbursed per project c) Amount of funds utilized per project in the stipulated time	70%	Correlation Descriptive survey	Ordinal
	Dependent Variable a)Utilization of project funds	utilization of allocated funds	100%		Nominal
To establish to what extent Institutional capacity influences project funds utilization in water service boards	**Independent Variables** a)Institutional capacity	a)Number of Staff with Technical and Managerial Skills b)Availability of adequate & reliable operation equipment	80%	Correlation Descriptive survey	ordinal
	Dependent Variable a)Utilization of project funds	utilization of allocated funds	100%	Correlation	Nominal
To determine if management Information Systems influences project funds utilization in water service boards in Kenya	**Independent Variables** a)MIS	a) Adequacy and reliability of reports generated b) Existence of IT supported reporting system c) Existence of fully operational financial Management information system	100%	Correlation Descriptive survey	ordinal
	Dependent Variable a)Utilization of project funds	utilization of allocated funds	100%	Correlation	

To assess whether sector policy framework influences project funds utilization in water service boards in Kenya	**Independent Variables** a)Policy Framework	a) Number of complains made by the Board on policy issues to the principle & regulator and the rate & usefulness of feedback b) Number of public awareness forums held for stakeholders to sensitize & firm sector policies	70% 70%	Correlation Descriptive survey Correlation	Ordinai Nominal
	Dependent Variable a)Utilization of project funds		100%		
To determine if political goodwill is a factor affecting project funds utilization in water service boards	**Independent Variables** e)Political Goodwill	a)No of projects halted by political interference	70%	Correlation Descriptive survey	Ordinal
	Dependent Variable a)Utilization of project funds	utilization of allocated funds	100%	Correlation	Nominal

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1. Introduction

This chapter covers data analysis, discussions and findings of the research. The data is summarized by means of statistical averages (including rankings) and presented in the form of tables.

4.2 Social Demographic Information

A total of 18 questionnaires were issued out. The completed questionnaires were edited for completeness and consistency. Of the 18 questionnaires used in the sample, all 18 questionnaires returned. The returned questionnaires' represented a response rate of 100%, which the study was adequate for analysis

4.2.1: Distribution of respondents on gender

As can be observed, in Figure 4.1, the respondents were made up of 66.7 % male and 33.3 % female.

Table 4.1: Gender Composition

	Frequency	Percent	Cumulative Percent
Male	12	66.7	66.7
Female	6	33.3	100
Total	18	100.0	

4.2.2: Distribution of respondents by leadership position

As shown in table 4.2, most of the respondents (72.2 %) were of middle level management, 16.7% were sectional heads and only 11.1% were in senior management

Table 4.2: Position in the organization

	Frequency	Percent	Cumulative Percent
Senior management	2	11.1	11.1
Middle management	13	72.2	83.3
Sectional heads	3	16.7	100.0
Total	**18**	**100.0**	

Experience in Project Planning and Implementation of the respondents

As indicated in Table 4.3, 27.7% of the respondents had more than 8 years experience in Project Planning & Implementation, 50% had 3-5 years experience, 16.7% of the respondents had 1-2 years experience in Project Planning & Implementation while only 5.6% had 6 to 8 years of experience in Project Planning& Implementation

Table 4.3: Number of years involved in project planning and implementation

	Frequency	Percent	Cumulative Percent
1 to 2 years	3	16.7	16.7
3 to 5 years	9	50.0	66.7
6 to 8 years	1	5.6	72.3
More than 8 years	5	27.7	100.0
Total	**18**	**100.0**	

4.2.2: Distribution of respondents by projects

As shown in figure 4.4, the respondents were involved in all the identified projects. Specifically 27.8% were involved in EU projects, 27.8% were in JICA projects, 22.2% were involved in KIDDP, and 22.2% were working in ADB projects.

Table 4.4: Project involvement distribution

	Frequency	Percent	Cumulative Percent
JICA	5	27.8	27.8
ADB	4	22.2	50
EU	5	27.8	77.8
KIDDP	4	22.2	100.0
Total	**18**	**100.0**	

4.2.2: Distribution of respondents by role in projects

The findings presented in Table 4.4 show that, 11.1% were fund mobilizer, 27.7% were both planners and project engineers while 16.7% were serving in the capacity of project accountant and project overseer respectively.

Table 4.5: Number of years involved in project planning and implementation

	Frequency	Percent	Cumulative Percent
Fund mobilizer	2	11.1	11.1
Planner	5	27.7	38.8
Project engineer	5	27.7	66.5
Project accountant	3	16.7	83.2
Project overseer	3	16.7	100.0
Total	**18**	**100.0**	

4.2.2: Distribution of respondents by projects

As shown in figure 4.4, the respondents were involved in all the identified projects. Specifically 27.8% were involved in EU projects, 27.8% were in JICA projects, 22.2% were involved in KIDDP, and 22.2% were working in ADB projects.

Table 4.4: Project involvement distribution

	Frequency	Percent	Cumulative Percent
JICA	5	27.8	27.8
ADB	4	22.2	50
EU	5	27.8	77.8
KIDDP	4	22.2	100.0
Total	**18**	**100.0**	

4.2.2: Distribution of respondents by role in projects

The findings presented in Table 4.4 show that, 11.1% were fund mobilizer, 27.7% were both planners and project engineers while 16.7% were serving in the capacity of project accountant and project overseer respectively.

Table 4.5: Number of years involved in project planning and implementation

	Frequency	Percent	Cumulative Percent
Fund mobilizer	2	11.1	11.1
Planner	5	27.7	38.8
Project engineer	5	27.7	66.5
Project accountant	3	16.7	83.2
Project overseer	3	16.7	100.0
Total	**18**	**100.0**	

4.3. Descriptive statistics

4.3.1: Regression Analysis

The average rating of Utilization of projects funds in Water Service Boards was mean of 0.6098 and a standard deviation of 0.49386, Funding Requirements had a mean of 4.1707 with a standard deviation of 0.73832, Institutional Capacity had mean of 4.4146 with standard deviation of 0.80547, Management Information system had a mean of 4.3171 with a standard deviation of 0.93378 while Policy Framework had a mean of 3.8049 with standard deviation of 0.81300. There is moderate variability in respondents' opinion as shown by the values of standard deviations. The dependent variable was taken as a binary and lumped on a scale of 0-1.

Table 4.6: Descriptive Statistics

	Mean	Std. Deviation
Utilization of projects funds in Water Service Boards	.0.6098	.49386
Funding Requirements	4.1707	.73832
Institutional Capacity	4.4146	.80547
Management Information system	4.3171	.93378
Policy Framework	3.8049	.81300

4.3.2: Correlation analysis

Two predictor variable are said to be correlated if their coefficient of correlations is greater than 0.5. In such a situation one of the variables must be dropped from the analysis. As shown in table 4.7, none of the predictor variables had coefficient of correlation between themselves more than 0.5 hence all of them were included in the model.

The matrix also indicated high correlation between the response and predictor variables, that is, Institutional Capacity with the highest correlation followed by Funding Requirements, Management Information system and Policy Framework.

Table 4.7: Pearson Correlation Correlations

	Utilization of projects funds in Water Service Boards	Funding Requirements	Institutional Capacity	Management Information system	Policy Framewor
ion of projects funds in Service Boards	1.000				
Requirements	.536	1.000			
ional Capacity	.752	.118	1.000		
ment Information	.467	.128	.247	1.000	
Framework	.307	.254	.254	.380	1.0

4.3.3 Strength of the model

Analysis in table 4.8 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R2 equals 0.843, that is, Funding Requirements, Institutional capacity, Management Information system and Policy Framework explain 84.3 percent of Utilization of projects funds in Water Service Boards leaving only 15.7 percent unexplained. The P- value of 0.000 (Less than 0.05) implies that the model of Utilization of projects funds in Water Service Boards is significant at the 5 percent significance since the R^2 is > 70%.

The matrix also indicated high correlation between the response and predictor variables, that is, Institutional Capacity with the highest correlation followed by Funding Requirements, Management Information system and Policy Framework.

Table 4.7: Pearson Correlation Correlations

	Utilization of projects funds in Water Service Boards	Funding Requirements	Institutional Capacity	Management Information system	Policy Framewor
on of projects funds in ervice Boards	1.000				
Requirements	.536	1.000			
onal Capacity	.752	.118	1.000		
ment Information	.467	.128	.247	1.000	
ramework	.307	.254	.254	.380	1.0

4.3.3 Strength of the model

Analysis in table 4.8 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R2 equals 0.843, that is, Funding Requirements, Institutional capacity, Management Information system and Policy Framework explain 84.3 percent of Utilization of projects funds in Water Service Boards leaving only 15.7 percent unexplained. The P- value of 0.000 (Less than 0.05) implies that the model of Utilization of projects funds in Water Service Boards is significant at the 5 percent significance since the R^2 is > 70%.

T tabl;

R	R Square	Adjusted R Square	Std. Error of the Mean	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.918(a)	.843	.805	.51038	.843	1.242	4	36	.000

Predictors: (Constant), Funding Requirements, Institutional Capacity, Management Information system and Policy Framework

Dependent Variable: Utilization of projects funds in Water Service Boards

Table 4.9: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.852	4	.213	1.242	.000
Residual	6.173	36	.171		
Total	7.024	40			

Predictors: (Constant), Funding Requirements, Institutional Capacity, Management Information system and Policy Framework

Dependent Variable: Utilization of projects funds in Water Service Boards

ANOVA findings (P- value of 0.00) in Table 4.9 shows that there is correlation between the predictors variables (Funding Requirements, Institutional Capacity, Management Information system and Policy Framework) and response variable (Utilization of projects funds in Water Service Boards)

tabl;

R	R Square	Adjusted R Square	Std. Error of the Mean	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.918(a)	.843	.805	.51038	.843	1.242	4	36	.000

Predictors: (Constant), Funding Requirements, Institutional Capacity, Management Information system and Policy Framework

Dependent Variable: Utilization of projects funds in Water Service Boards

Table 4.9: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.852	4	.213	1.242	.000
Residual	6.173	36	.171		
Total	7.024	40			

Predictors: (Constant), Funding Requirements, Institutional Capacity, Management Information system and Policy Framework

Dependent Variable: Utilization of projects funds in Water Service Boards

ANOVA findings (P- value of 0.00) in Table 4.9 shows that there is correlation between the predictors variables (Funding Requirements, Institutional Capacity, Management Information system and Policy Framework) and response variable (Utilization of projects funds in Water Service Boards)

Regression equation

The established multiple linear regression equation becomes:

$Y = 0.260 + 0.131X_1 + 0.170X_2 + 0.051X_3 + 0.048X_4$

Where

Y = Utilization of projects funds in Water Service Boards – The dependent variable

x_1 = Funding Requirements – independent variable

x_2 = Institutional Capacity – independent variable

x_3 = Management Information system – independent variable

x_4 = Policy Framework – independent variable

Constant = 0.260, shows that if Funding Requirements, Institutional Capacity, Management Information system and Policy Framework were all rated as zero, Utilization of projects funds in Water Service Boards rating would be 0.260

X_1= 0.131, shows that one unit change in Funding Requirements results in 0.131 units increase in Utilization of projects funds in Water Service Boards

X_2= 0.170, shows that one unit change in Institutional Capacity results in 0.170 units increase in Utilization of projects funds in Water Service Boards

X_3= 0.051, shows that one unit change in Management Information system results in 0.051 units increase in Utilization of projects funds in Water Service Boards

X_4= 0.048, shows that one unit change in Policy Framework results in 0.048 units increase in Utilization of projects funds in Water Service Boards

Regression equation

The established multiple linear regression equation becomes:

$Y = 0.260 + 0.131X_1 + 0.170X_2 + 0.051X_3 + 0.048X_4$

Where

Y = Utilization of projects funds in Water Service Boards – The dependent variable

x_1 = Funding Requirements – independent variable

x_2 = Institutional Capacity – independent variable

x_3 = Management Information system – independent variable

x_4 = Policy Framework – independent variable

Constant = 0.260, shows that if Funding Requirements, Institutional Capacity, Management Information system and Policy Framework were all rated as zero, Utilization of projects funds in Water Service Boards rating would be 0.260

X_1= 0.131, shows that one unit change in Funding Requirements results in 0.131 units increase in Utilization of projects funds in Water Service Boards

X_2= 0.170, shows that one unit change in Institutional Capacity results in 0.170 units increase in Utilization of projects funds in Water Service Boards

X_3= 0.051, shows that one unit change in Management Information system results in 0.051 units increase in Utilization of projects funds in Water Service Boards

X_4= 0.048, shows that one unit change in Policy Framework results in 0.048 units increase in Utilization of projects funds in Water Service Boards

Table 4.10: Coefficients of regression equation

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
(Constant)		.260	.460		0.565	.231
Funding Requirements	X_1	.131	.048	.254	2.729	.001
Institutional Capacity	X_2	.170	.045	-.300	3.778	.000
Management Information system	X_3	.051	.023	.113	2.217	.002
Policy Framework	X_4	.048	.022	.093	2.182	.000

Dependent Variable: Utilization of projects funds in Water Service Boards

Individual statistical significance

Hypothesis statement1:

Funding requirements of development partners significantly influence project funds utilization in water service boards in Kenya.

Hypothesis statement 2:

The institutional capacity of an organization influences project funds utilization in water service boards in Kenya

Hypothesis statement 3:

The availability of accurate and reliable management information system influences project funds utilization in water service boards in Kenya

Hypothesis statement 4:

The policy framework set in the water sector significantly influence project funds utilization in water service boards in Kenya

Table 4.10: Hypothesis testing

Hypothesis	Critical t value	t statistics	Conclusion
H_0: There is no significant relationship between funding requirements of development partners and project funds utilization in water service boards in Kenya. H_1: There is a significant relationship between funding requirements of development partners and project funds utilization in water service boards in Kenya.	1.96	2.729	Reject H_0,
H_0: There is no significant relationship between institutional capacity of an organization and project funds utilization in water service boards in Kenya H_1: There is a significant relationship between institutional capacity of an organization and project funds utilization in water service boards in Kenya	1.96	3.778	Reject H_0,
H_0: There is no significant relationship between availability of accurate and reliable management information system and project funds utilization in water service boards in Kenya H_1: There is a significant relationship	1.96	2.217	Reject H_0,

The policy framework set in the water sector significantly influence project funds utilization in water service boards in Kenya

Table 4.10: Hypothesis testing

Hypothesis	Critical t value	t statistics	Conclusion
H_0: There is no significant relationship between funding requirements of development partners and project funds utilization in water service boards in Kenya. H_1: There is a significant relationship between funding requirements of development partners and project funds utilization in water service boards in Kenya.	1.96	2.729	Reject H_0,
H_0: There is no significant relationship between institutional capacity of an organization and project funds utilization in water service boards in Kenya H_1: There is a significant relationship between institutional capacity of an organization and project funds utilization in water service boards in Kenya	1.96	3.778	Reject H_0,
H_0: There is no significant relationship between availability of accurate and reliable management information system and project funds utilization in water service boards in Kenya H_1: There is a significant relationship	1.96	2.217	Reject H_0,

between availability of accurate and reliable management information system and project funds utilization in water service boards in Kenya			
Ho: There is no significant relationship between policy framework set in the water sector and project funds utilization in water service boards in Kenya H_1: There is a significant relationship between policy framework set in the water sector and project funds utilization in water service boards in Kenya	1.96	2.182	Reject H_0,

Since all the t values for the individual predictor variables are more than 1.96, there is enough evidence to support $\mathbf{H_1}$ thus there is a significant relationship between the response and all predictor variables at 0.05 level of significance.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.0: Introduction

In this chapter we discuss the main findings, discuss, draw conclusions and make recommendations

5.1: Summary of the findings

The objectives of this study were; to examine whether funding requirements influences project funds utilization in water service Boards in Kenya, to establish to what extent Institutional capacity affects project funds utilization in water service boards in Kenya, to determine if management information systems is a factor affecting project funds utilization in water service boards in Kenya and to assess whether sector policy framework affects project funds utilization in water service boards in Kenya.

From the findings, 27.7% of the respondents had more than 8 years experience in Project Planning & Implementation, 50% had 3-5 years experience, and 16.7% of the respondents had 1-2 years experience in Project Planning& Implementation while only 5.6% had 6 to 8 years of experience in Project Planning& Implementation

It was noted that the respondents were involved in all the identified projects. Specifically 27.8% were involved in EU projects, 22.2% were in JICA projects, 22.2% were involved in KIDDP, and 27.8% were working in ADB projects.

It was apparent that 11.1% were fund mobilizer, 27.7% were both planners and project engineers while 16.7% were serving in the capacity of project accountant and project overseer respectively.

The study indentified the following indicators as the most significance in determining project funds utilization in water service boards in Kenya; Institutional Capacity (mean of 4.4146), Management Information system (mean of 4.3171) and Funding Requirements (mean of 4.1707).

5.2 Discussions of the findings

The study used regression analysis to find the association between Funding Requirements, Institutional Capacity, Management Information system and Policy Framework and project fund utilization of projects funds in Water Service Boards. Forecasting model was developed and tested for accuracy in obtaining predictions. The finding of the study indicated that the model was significant. This is demonstrated in the part of the analysis where R^2 for the association between Funding Requirements, Institutional Capacity, Management Information system and Policy Framework and project fund utilization of projects funds in Water Service Boards was 84.3%.

All the independent variables were also linearly related with the dependent variable thus a model of four predictor variables could be used to rate project fund utilization of

projects funds in Water Service Boards thus there exist a significant relationship between Funding Requirements, Institutional Capacity, Management Information system and Policy Framework and project fund utilization of projects funds in Water Service Boards

5.3 Conclusion

The study sought to examine the constraints affecting project funds utilization in Water Service Boards in Kenya. The study found out that Water Service Boards are plagued with disbursement delays (Bureaucracy, delayed reports), of the allocated development funds from the central government which in turn delay the implementation of the scheduled projects. The short funding cycles and unpredictable funding do not allow implementation of long term objectives of these Water Service Boards.

The study also found out that reporting and financial management arrangements for donor funded activities are driven by requirements of donor agencies rather than the wider information and management priorities of government. As a result there are multiple reporting systems in place which make the project implementers focus on reports rather than activities.

The study also found out that there is a variety of procurement systems across public sector organizations reflecting different levels of donor involvement and a lack of donor confidence in the government's procurement processes. This is a reflection not just of concern about corruption and resource leakage but also of cumbersome procedures and inadequate numbers of experienced staff particularly those with the skills to specific contract effectively.

From the study it was evident that counterpart funding from the government has been variable and the process of authorizing payments to contractors is often slow and complex.

The study also found wanting the ability and skill of WSBs to prepare suitable plans, programmes and projects in due time, to decide on programmes and projects, to arrange the co-ordination among principal partners, to cope with the administrative and reporting requirements, and to finance and supervise implementation properly.

Development projects have created dependency syndrome on the institutional framework. Some frameworks initiatives are not seen even to compliment the already established projects, but always look out for donors to initiate the development projects

5.3 Recommendations

With numerous projects being run, the success of these projects is varied; Institutions should have parameters to measure the success with set targets for each project in order to avoid an assumption that all projects are successful.

The GOK and the donor agencies, should strive to build capacity for long-term implementation of projects since capacity is determined by the design of the whole implementation system and also by its functioning. The capacity development should be wholesome and comprise structure, human resources, systems and tools.

TWSB, and in particular the GOK, should create sector specific information systems and speedily invest in IT systems to reduce data burden on workforce. The GOK should also ensure regular and timely release of counterpart funds.

The development partners should also try and improve the assurance of funds for programs by adopting longer funding cycles so that there are sufficient funds for the implementers. They should also adopt biannual reporting to assist implementers to focus on activities rather than reports.

To achieve today's levels of absorptive capacity, technical assistance is instrumental in: knowledge of products and services, technology transfer programs, policy support, including exposure to regional and global development processes therefore the stakeholders in project implementation should put this in the forefront at the planning stages.

Due to the separation of functions in the sector, with different autonomous bodies having specific responsibilities in the sector and multitude of development partners, civil society and private sector participation calls for improved coordination by the MWI.

The GOK should harmonize legislations touching on water, sewerage and sanitation with the Water Act 2002 to minimize conflicts. These include the Lands Act,the Roads Act, the Agriculture Act, the Public Health Act, the Forests Act and the Local Government Act among others touching on water. Land ownership allows one with a title deed to have access and activities up to the river bank.

The Agriculture Act spells out the farming distance from the river bank but this is always ignored and farmers cultivate to the river. NEMA deals with pollution and effluent discharges under Environmental Management and Coordination Act (1999) while WRMA deals with pollution and the polluter pays principle under the Water Act 2002. Today, some aspects of the Water Act, Cap 372 are still in force e.g. the water rights provisions. There is urgent need to bring all operations into the new dispensation under the Water Act, 2002.

The MWI should harmonize and prioritize use of funds: The water sector receives significant funding, particularly from non-state actors, but resources are not always directed to priority need. Re thinking the mode of resource allocation is, therefore, critical to avoid waste and inefficiency. This will require information sharing and coordination between the water sector stakeholders.

TWSB should involve private sector. Private companies bring in management expertise, technical skills and credit standing to finance investments. Partnerships can be fulfilled in different forms, such as service, management and lease contracts, concessions, joint ownership or commercialization.

TWSB should also strive to ensure the projects they spearhead are environmentally sustainable and involve efficient utilization of resources, for example construction of water intakes should take into consideration the continuous flow of the river to avoid affecting the ecosystem and other communities downstream. This will avoid water related conflicts.

5.4 Suggestion for further research

With this study only capturing only four variables it's recommended that research should be done to evaluate the influence of other factors on the utilization of funds allocated to development projects.

The researcher also recommends that a study of this nature be done on specific projects in the Roads sector like the Kenya Roads Boards with a focus on factors that have influenced the successful implementation of their projects whereas the Roads Act was constituted in 2007 far much later than the Water Act which came into force in 2002.

Research should be undertaken to establish why donors target certain projects and give them more funds than other projects.

Continuous monitoring and evaluation of projects should be done comprehensively and feedback provided to both all stakeholders and donors concerned. This will help inform them of their impact of their contribution.

REFERENCES

Antoinette Gosses, (2006). *Source book Stop teaching, start learning- the mystery of capacity development,* Ministry of Foreign Affairs.

AMREF Report, (2009). *Water and Sanitation, http://www.amerf.org* 10th January 2009.

Ayee, J, (2000). Paper on *"Democracy ,Poverty And Social Exclusion: is democracy ,the missing link"* presented to DPMF and international IDEA , Adisababa, Ethiopia.

Binswanger R. ,(1994). *Project Implementation and its implication on development,* Article No. 3

Barder, Owen, (2009-04-21). "*What is Poverty Reduction*?" CGD Working Papers.

Borg, R.W., (1996)."*Education Research: An Intoduction.*"6th Ed .New York: Longman

Budget Focus, (2008). *Budget Performance 2003-08 And Emerging Policy Issues* .Issue No 19.Institute of Economic Affairs, Water and Sanitation Sector, Nairobi

Carlos, Lopez, Thomas, Theisohn, (2003). *Ownership, Leadership and Transformation Can we do better for Capacity Development?* Earthscan, London, UNDP New York 2003.

Carlsson J. , (1997). *Foreign Aid in Africa, Centre for Development Studies,* Uppsala

Cox, Jeff; Goldratt, Eliyahu M., (1986). *The goal: a process of ongoing improvement.* North River Press. ISBN 0-88427-061-0.

Daniel Kaufmann , (2009). *Aid Effectiveness and Governance: The Good, the Bad and the Ugly,* Brookings Institution.

REFERENCES

Antoinette Gosses, (2006). *Source book Stop teaching, start learning- the mystery of capacity development,* Ministry of Foreign Affairs.

AMREF Report, (2009). *Water and Sanitation, http://www.amerf.org* 10th January 2009.

Ayee, J, (2000). Paper on *"Democracy ,Poverty And Social Exclusion: is democracy ,the missing link"* presented to DPMF and international IDEA , Adisababa, Ethiopia.

Binswanger R. ,(1994). *Project Implementation and its implication on development,* Article No. 3

Barder, Owen, (2009-04-21). "*What is Poverty Reduction*?" CGD Working Papers.

Borg, R.W., (1996)."*Education Research: An Intoduction.*"6th Ed .New York: Longman

Budget Focus, (2008). *Budget Performance 2003-08 And Emerging Policy Issues* .Issue No 19.Institute of Economic Affairs, Water and Sanitation Sector, Nairobi

Carlos, Lopez, Thomas, Theisohn, (2003). *Ownership, Leadership and Transformation Can we do better for Capacity Development?* Earthscan, London, UNDP New York 2003.

Carlsson J. , (1997). *Foreign Aid in Africa, Centre for Development Studies,* Uppsala

Cox, Jeff; Goldratt, Eliyahu M., (1986). *The goal: a process of ongoing improvement.* North River Press. ISBN 0-88427-061-0.

Daniel Kaufmann , (2009). *Aid Effectiveness and Governance: The Good, the Bad and the Ugly,* Brookings Institution.

Devarajan S. and Swaroop .V (1998), "*What does aid to Africa finance?*" Washington, D.C.

Feyzioglu T, Swaroop V and Min Zhu, (1998), "*A panel data analysis of the fungibility of foreign aid*". World Bank Economic Review, vol. 65: 429–45.

Gang, I.N. and H.A Khan, (1990). "*Some determinants of foreign aid to India, 1960–85*". World Development, 18(3): 431–42.

Geda, A., (2000). "*Challenges and Prospects for Financing Africa's Development*", Paper prepared for the preparatory workshop of the Africa Knowledge Networks Forum, UNECA, Addis Ababa.

Feyzioglu T, Swaroop V and Min Zhu, (1998). "*A panel data analysis of the fungibility of foreign aid*". World Bank Economic Review, vol. 65: 429–45.

Devarajan S. and Swaroop .V, (1998). "*What does aid to Africa finance*?" Washington, D.C.

Directorate of Personnel Management, (2002b): *Guidelines on Deepening Ministerial Rationalization,* Government Printer, Nairobi.

Drucker Peter , (1954).*The Practice of Management,* Harper and Row, New York, 1954.

Government of Kenya, (2002). *The Water Act 2002*, Government Printer, Nairobi.

Government of Kenya, (2003*). Economic Recovery Strategy for Wealth and Employment Creation*, Government Printer, Nairobi.

Government of Kenya, (2004). *Printed Estimates*, Government Printer, Nairobi.

Government of Kenya, (1994). *Water Master Plan*, Nairobi, Government Printers.

Government of Kenya, (1999). *National policy on water resources management*, Nairobi, Government Printers.

Government of Kenya ,(1982). *Report of the working party on Government expenditures*, Government Printer, Nairobi.

Government of Kenya , (1986). Sessional Paper No.1 of 1986 – *Economic Management for Renewed Growth*, Government Printer, Nairobi.

Government of Kenya, (1992). *National Policy Paper on Public Enterprise Reform and Privatisation*; Government Printer, Nairobi.

Government of Kenya, (1994). Sessional Paper No.1 of 1994- *Recovery and Sustainable Development*, Government Printer, Nairobi.

Government of Kenya, (1999), Sessional Paper No. 3 of 1999 on *National Poverty Eradication Plan* (1999) – 2015); Government Printer, Nairobi.

Government of Kenya, (2002). *Poverty Reduction Strategy Paper (PRSP)*, Government Printer, Nairobi.

Government of Kenya, (2003). *Public Expenditure Review*, Nairobi: Government Printers

Adamako, T. , (1998). *Community Financing –Challenges To Community Management* – Paper Presented at 24TH WEDC Conference ,Islamabad.

Heller, S.P, (1975). "*A model of public fiscal behavior in developing countries: Aid, investment and taxation*". American Economic Review, vol. 65, no. 3 (June): 429–45.

Heskett, J., (1986). *Managing in the Service Economy*, Harvard Business School Press, Boston.

Jarillo, J. Carlos ,(1993). *Strategic Networks: Creating borderless organizations,* Butterworth-Heinemann, Oxford

Hailey J., and R. James,(2006). *Unsettling Times for Civil Society Capacity Building* Paper presented at the Civil Society and Capacity Building Conference , INTRAC, Oxford

Kathuri, J.K. and Pal, A.D, (1993). "*Introduction to Education Research.* "Njoro: Education Material Centre, Egerton University

Kombo, K. and Tromp, L., (2006). *Proposal and thesis writing*, an introduction, Nairobi: Paulines Publications Africa.

Kothari, C.R, (2008). *Research Methodology,- Methods and Techniques*, New Delhi: New Age International (p) Ltd Publishers.

Lancaster, C., (1999). "*Aid effectiveness in Africa*: *The unfinished agenda*". Journal of African Economies, vol. 8, no. 4: 487–503.

Lamb, Robert, Boyden , (2002). *Competitive strategic management*, Englewood Cliffs, NJ: Prentice-Hall.

Liebeskind, J. P. , (1996). "*Knowledge, Strategy, and the Theory of the Firm",* Strategic Management Journal, vol 17, winter.

Lucey, T., (1996). *Quantitative Techniques*, New York: Ashford Colour Press.

McKinsey & Company, (2001). *Effective Capacity Building in* Non Profit Organisations, Venture Philanthropy Partners, p. 36

Heskett, J., (1986). *Managing in the Service Economy*, Harvard Business School Press, Boston.

Jarillo, J. Carlos ,(1993). *Strategic Networks: Creating borderless organizations,* Butterworth-Heinemann, Oxford

Hailey J., and R. James,(2006). *Unsettling Times for Civil Society Capacity Building* Paper presented at the Civil Society and Capacity Building Conference , INTRAC, Oxford

Kathuri, J.K. and Pal, A.D, (1993). "*Introduction to Education Research.* "Njoro: Education Material Centre, Egerton University

Kombo, K. and Tromp, L., (2006). *Proposal and thesis writing*, an introduction, Nairobi: Paulines Publications Africa.

Kothari, C.R, (2008). *Research Methodology,- Methods and Techniques*, New Delhi: New Age International (p) Ltd Publishers.

Lancaster, C., (1999). "*Aid effectiveness in Africa*: *The unfinished agenda*". Journal of African Economies, vol. 8, no. 4: 487–503.

Lamb, Robert, Boyden , (2002). *Competitive strategic management*, Englewood Cliffs, NJ: Prentice-Hall.

Liebeskind, J. P. , (1996). "*Knowledge, Strategy, and the Theory of the Firm",* Strategic Management Journal, vol 17, winter.

Lucey, T., (1996). *Quantitative Techniques*, New York: Ashford Colour Press.

McKinsey & Company, (2001). *Effective Capacity Building in* Non Profit Organisations, Venture Philanthropy Partners, p. 36

Ministry of Water Resources Management and Development, (2003a). *Report on the Establishment of the Ministry of Water. 1st Draft, 2003,* Ministry of Water Resources Management and Development, Nairobi.

Ministry of Water Resources Management and Development (2003b); *Workplan for the Ministerial Work Improvement Teams for the Financial Year 2003-2004*. Ministry of Water Resources Management and Develoment, Nairobi.

Ministry of Water Resources Management and Development, (2003c).*Towards a Water – secure Kenya – Draft Water Resources Sector Memorandum,* Ministry of Water Resources Management and Develoment, Nairobi.

Ministry of Water Resources Management and Development, (2004*). Zero Draft Investment Plan,* Ministry of Water Resources Management and Develoment, Nairobi.

Ministry of Water Resources Management and Development, (2003). *Strategic Plan for the Ministry of Water Resources Management and Development 1st Draft, 2003*, Ministry of Water Resources Management and Development, Nairobi.

Moore, Mark H., (1995). *Creating Public Value: Strategic Management in Government*, Cambridge: Harvard University Press.

Mosley, Paul, (1987). *Foreign Aid: Its Defense and Reform.* University Press of Kentucky.

MWI, Danida and Sida, (2004): *Water Resources Sector Memorandum. Ministry of Wtaer Resources Management and Development*, Danida and Sida, Nairobi.

Mugenda, O.M and Mugenda, and A G, (2003). *Research Methods: Quantitative and Qualitative Approaches*, Nairobi: Acts Press.

Mugenda, J (1999). *Research Methods: Quantitative And Qualitative Approaches.* Nairobi: Publishers Acts Press. A41

Ohmae, K., (1982). *The Mind of the Strategist McGraw Hill*, New York.

Orodho, A.J, (2003). *Essentials of Educational and Social Science Research Methods* .Nairobi: Masola Publishers.

Overseas Development Institute. (2008). "*Is water lagging behind on Aid Effectiveness*?"

Office of the President, Public Service Integrity Programme (2003): *A Source Book for Corruption Preventon in the Public Service*; Government Printer, Nairobi.

Pack, H. and J.R. Pack, (1990). *"Is foreign aid fungible? The case of Indonesia".* Economic Journal, vol. 100 no. 3: 188–94.

Parker, A. , (2000). *Forthcoming Decentralization: The Way Forward for Rural Development? Policy Research Working Paper Series* , World Bank: Washington DC).

Tana Water services Board *Strategic Plan* (2009-2015)

Tana Water services Board *Revised Master Plan* (2007)

United Nations , (1975). *Popular Participation In Decision –Making for Development* ,New York ,UN Department for Economic and Social Affairs.

UNDP, (2006). *Getting Africa on Track to Meet the Millennium Development Goals, MDGs on Water and Sanitation: A Status Overview of Sixteen African Countries,* Washington D.C.: United Nations Development Program.

Winner, R .D .And Dominick, J.R, (2003) .*Mass Media Research: an introduction* .Belmont Thomson Learning Inc.

Mugenda, J (1999). *Research Methods: Quantitative And Qualitative Approaches.* Nairobi: Publishers Acts Press. A41

Ohmae, K., (1982). *The Mind of the Strategist McGraw Hill*, New York.

Orodho, A.J, (2003). *Essentials of Educational and Social Science Research Methods* .Nairobi: Masola Publishers.

Overseas Development Institute. (2008). "*Is water lagging behind on Aid Effectiveness*?"

Office of the President, Public Service Integrity Programme (2003): *A Source Book for Corruption Preventon in the Public Service*; Government Printer, Nairobi.

Pack, H. and J.R. Pack, (1990). *"Is foreign aid fungible? The case of Indonesia".* Economic Journal, vol. 100 no. 3: 188–94.

Parker, A. , (2000). *Forthcoming Decentralization: The Way Forward for Rural Development? Policy Research Working Paper Series* , World Bank: Washington DC).

Tana Water services Board *Strategic Plan* (2009-2015)

Tana Water services Board *Revised Master Plan* (2007)

United Nations , (1975). *Popular Participation In Decision –Making for Development* ,New York ,UN Department for Economic and Social Affairs.

UNDP, (2006). *Getting Africa on Track to Meet the Millennium Development Goals, MDGs on Water and Sanitation: A Status Overview of Sixteen African Countries,* Washington D.C.: United Nations Development Program.

Winner, R .D .And Dominick, J.R, (2003) .*Mass Media Research: an introduction* .Belmont Thomson Learning Inc.

Wathne, Cecilie and Hedger, Edward (2009). *Aid effectiveness through the recipient lens*

White, H., (1992). "*The macroeconomic impact of development aid: A critical survey*". Journal of Development Studies, vol. 28: 163–240.

APPENDICES

APPENDIX 1: Letter of Introduction

Maina Polly Muthoni
P.O. Box 20811-00100
NAIROBI

Tana Water service Board

P.O. Box 1292-10100

NYERI.

Dear Sir / Madam,

RE: ACADEMIC RESEARCH

I am a student of University of Nairobi–pursuing a Masters Degree in Project Planning and Management and conducting an academic research on constraints affecting project funds utilization in Water Service Boards in Kenya.

Your organization has been chosen to provide information relating to issues of projects funds utilization in the Water Service Boards in Kenya. I humbly request you to fill the enclosed questionnaire as accurately as possible.

The questionnaire has four sections that will focus on Funding requirements, Management Information system, Policy framework and Institutional Capacity. The information that you will give is confidential and will be used only for the purpose of my academic research.

Thank you in advance.

Sincerely,

Maina Polly
L50/72230/08

APPENDIX 2

PROJECT POST - IMPLEMENTATION QUESTIONNAIRE

Instructions

Please answer these questions to the best of your knowledge.

Write your response in the space provided.

Please put a tick (√) where appropriate.

1. Background Information

1.1 Gender

a) Male ☐

b) Female ☐

1.2 What leadership position do you hold in the Organization?

a) Senior Management ☐

b) Middle level Management ☐

c) Sectional Head ☐

d) Operations ☐

1.3 How long have you been in involved in Project Planning & Implementation?

a) Less than one year ☐

b) 1 to 2years ☐

c) 3 to 5 years ☐

d) 6 to 8 years ☐

e) More than 8 years ☐

1.4 Which Project are/were you involved in (pick one which you were involved fully from inception to completion)?

a) JICA ☐

b) ADB ☐

c) EU ☐

d) KIDDP ☐

1.5 How long was the project scheduled to take to complete?

a) Less than one year ☐

b) 1 to 2years ☐

c) 3 to 5 years ☐

d) 6 to 8 years ☐

1.6 How long did the project take to complete?

e) Less than one year ☐

f) 1 to 2years ☐

g) 3 to 5 years ☐

h) 6 to 8 years ☐

1.7 What was your role on the project?

a) Fund Mobilizer ☐

b) Planner ☐

c) Project Engineer ☐

d) Project Accountant ☐

e) Imprest Administator ☐

f) Project Overseer ☐

g) Other ☐

1.8 Did you have prior adequate training and skills in the area of your involvement in the project?

Yes ☐ No ☐

1.7 If yes how did you rate the adequacy of the imparted training and skills in the area of your involvement?

Very high [ ]
High [ ]
Low [ ]
Negligible [ ]

2.0 Overall Success

2.1 How do you rate the project success in your view?

Very satisfied [ ]
Moderately satisfied [ ]
Satisfied [ ]
Somewhat dissatisfied [ ]
Very dissatisfied [ ]

A. INSTITUTIONAL CAPACITY

In this section use the scale 1 – 5 where 1 is to a great extent and 5 is low extent to answer the following question.

Description of the Water Supply System

3.1 How would you rate the extent of the below system consideration in the following system description on the contained details?

challenges	1	2	3	4	5
Source of supply					
Treatment					
Storage					
Distribution					

3.2 Did the system description contain Identification and evaluation of all critical facilities and equipment whose failure would result in a water outage or water quality failure?

Absolutely yes	[ ]
Somehow yes	[ ]
Neither yes nor no	[ ]
Somehow no	[ ]
Absolutely no	[ ]

Planning / Timelines

3.3 What is your agreement with the timely implementation of the project schedule?

a) Yes Strongly agree ☐
b) Agree ☐
c) Neutral ☐
d) Disagree ☐
e) Strongly disagree ☐

3.4 In hindsight, was the project development approach taken satisfying, the most appropriate?

Very satisfying	[ ]
Moderately satisfying	[ ]
Satisfying	[ ]
Somehow dissatisfying	[ ]
Very dissatisfying	[ ]

3.5 How do you rate the importance of Project Execution Plan to you?

Very high	[ ]
Moderate	[ ]
Low	[ ]

3.6 Additional comments:

4 Quality

4.1 How would you rate the quality of the final product or system?

Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐ Very poor ☐

4.2 Were quality assurance processes employed?

Yes ☐ No ☐ Don't know ☐

4.3 If yes how did you rate the effectiveness of the quality assurance result

Very effective ☐

Effective ☐

Somewhat not ☐

4.3 At what extent do they consider sufficient testing of the product or system carried out prior to implementation important?

Least extent

Low extent

Large extent

Moderately large extent

Very large extent

4.4 Was a Testing Plan developed?

Yes ☐ No ☐ Don't know ☐

3.6 Additional comments:

4 Quality

4.1 How would you rate the quality of the final product or system?

Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐ Very Poor ☐

4.2 Were quality assurance processes employed?

Yes ☐ No ☐ Don't know ☐

4.3 If yes how did you rate the effectiveness of the quality assurance result

Very effective ☐

Effective ☐

Somewhat not ☐

4.3 At what extent do they consider sufficient testing of the product or system carried out prior to implementation important?

Least extent

Low extent

Large extent

Moderately large extent

Very large extent

4.4 Was a Testing Plan developed?

Yes ☐ No ☐ Don't know ☐

4.5 Additional comments:

6.0 Deliverables

6.1 Were the project requirements clearly understood?

Yes ☐ No ☐ Some ☐

If not, what do you think the problem was?

6.2 Is the technical solution operating as expected?

Yes ☐ No ☐ Not entirely ☐ Don't know ☐

If not, what is the reason?

6.3 Additional comments:

7.0 Implementation

7.1 Do you think the project was ready to go live when it did?

Yes ☐ No ☐ Don't know ☐

If not, why not?

7.2 Did the implementation process go according to plan?

Yes ☐ No ☐ Don't know ☐

If not, what problems were encountered?

7.3 Was a contingency plan in place?

Yes ☐ No ☐ Don't know ☐

7.4 Additional comments:

8.0 Human Resource

8.1 Was the project staffed appropriately?

Yes ☐ No ☐

If not, what positions could have been staffed better?

8. 2. How would you rate the teamwork and morale of the project team?

Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐ Very Poor ☐

8.3. Was your role and responsibilities clearly defined and understood?

Yes ☐ No ☐ Somewhat ☐

If not, what was unclear?

8.4 Were roles and responsibilities of other project team members clearly defined and understood?

Yes ☐ No ☐ Some ☐

If not, what particular roles and responsibilities were unclear?

8.5. Do you think the Project Manager performed his or her role effectively?

Yes ☐ No ☐ Somewhat ☐

If not, what could have been done better?

9. 0 Communication

9.1 Was the level of communication between you and the Project Manager effective?

Yes ☐ No ☐ Somewhat ☐

9.2 How would you rate the level of communication within the project team?

Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐ Very Poor ☐

10. It is difficult to fully utilize allocated project funds due to inadequate institutional capacity in Water Service Boards' To what extent do you agree with this statement? (Tick appropriately)

f) Strongly agree ☐
g) Agree ☐
h) Neutral ☐
i) Disagree ☐
j) Strongly disagree ☐

B: FUNDING REQUIREMENTS

11.0. Financial Capacity

11.1 Did the project plan contain a revenue/expenditure analysis that compares all anticipated water system revenues with planned expenditures say for a 5 year period?

Yes ☐ No ☐

11.2 Did the project plan contain identification of reserve accounts for emergency funding and equipment replacement?

Yes ☐ No ☐

11.3 Did the project produce Quarterly reports comparing actual expenditures to budgeted expenses?

Yes ☐ No ☐

11.4 Did the project have purchasing procedures or policy to prevent misuse of funds?

Yes ☐ No ☐

11.5 It is difficult to fully utilize allocated project funds due to stringent and sometimes conflicting funding requirements from the development partners in Water Service Boards' To what extent do you agree with this statement? (Tick appropriately)

a) Strongly agree ☐
b) Agree ☐
c) Neutral ☐
d) Disagree ☐
e) Strongly disagree ☐

12.0 Resources

12.1 Were the funds allocated to the project disbursed in time?

Yes ☐ No ☐

If not what were the consequences?

12.2 Were the funds disbursed for the project utilized according to the project schedules?

Yes ☐ No ☐

If not what caused the delays?

12.3 Additional comments:

C: MANAGEMENT INFORMATION SYSTEMS

Does the water sector have a common IT supported reporting information system?

Yes ☐ No ☐

14. Has any research carried out by your company on water related issues?

Yes ☐ No ☐

15. How frequently do you send reports on operation to funding agencies?

a) Monthly ☐
b) Quarterly ☐
c) Yearly ☐
d) All of the above ☐

16. In your opinion indicate how you view the adequacy and reliability of the operation reports submitted to funding agencies.

a) Excellent ☐
b) Good ☐
c) Fair ☐
d) Poor ☐

17. 'It is difficult to fully utilize allocated project funds due to lack of an accurate and reliable management information system in Water Service Boards' To what extent do you agree with this statement? (Tick appropriately)

a) Strongly agree ☐

b) Agree ☐

c) Neutral ☐

d) Disagree ☐

e) Strongly disagree ☐

18. Additional comments

D: WATER SECTOR POLICY FRAMEWORK

19. Was there a description of the primary responsibilities and identification of all key personnel, including board of directors or councils, involved in the management or operation of the system or personnel?

Yes ☐ No ☐ Somewhat ☐

20. Was there identification, including the names and phone numbers, of those responsible for policy decisions ensuring compliance with national regulatory requirements, and the day-to-day operation of the system?

Yes ☐ No ☐ Somewhat ☐

21. Have you ever held a public baraza to create awareness on water sector reforms?

Yes ☐ No ☐

22. Have you ever held a stakeholders education on water sector reform agenda?

Yes ☐ No ☐

23. In your opinion indicate how you view the adequacy and reliability of the methods used by the policy makers to communicate a policy decision in the water sector.

a) Excellent ☐

b) Good ☐

c) Fair ☐

d) Poor ☐

24. How often do you meet with the policy makers to deliberate on issues affecting the water sector?

a) Hardly ever meet ☐

b) Monthly ☐

c) Quarterly ☐

d) Yearly ☐

e) When need arises ☐

25. (a) Are there instances when you encounter conflicts with the community you serve or stakeholders in the water sector?

Yes ☐ No ☐

26.1 If yes, in your opinion what are the common sources of these conflicts?

a) Leadership wrangles ☐

b) Misuse of Funds ☐

c) Lack of Information ☐

d) Political interference ☐

26. 'It is difficult to fully utilize allocated project funds due to lack of a proper policy framework. To what extent do you agree with this statement? (Tick appropriately)

a) Strongly agree ☐

b) Agree ☐

c) Neutral ☐

d) Disagree ☐

e) Strongly disagree ☐

c) Fair ☐

d) Poor ☐

24. How often do you meet with the policy makers to deliberate on issues affecting the water sector?

a) Hardly ever meet ☐

b) Monthly ☐

c) Quarterly ☐

d) Yearly ☐

e) When need arises ☐

25. (a) Are there instances when you encounter conflicts with the community you serve or stakeholders in the water sector?

Yes ☐ No ☐

26.1 If yes, in your opinion what are the common sources of these conflicts?

a) Leadership wrangles ☐

b) Misuse of Funds ☐

c) Lack of Information ☐

d) Political interference ☐

26. 'It is difficult to fully utilize allocated project funds due to lack of a proper policy framework. To what extent do you agree with this statement? (Tick appropriately)

a) Strongly agree ☐

b) Agree ☐

c) Neutral ☐

d) Disagree ☐

e) Strongly disagree ☐

27. **Issues / Other**

27.1 What significant issues were encountered during the project, and how were these handled?

27.2 Was the project environment conducive to effective productivity?

Yes ☐ No ☐

If not, what was inadequate or needed improvement?

27.3 Is there anything else you would like to comment on regarding the project?

28. The following are some of the constraints affecting project funds utilization in Water Service Boards in Kenya. In your opinion, please indicate by ticking the extent to which they affect the project funds utilization.
    1. To great extent
    2. To some extent
    3. Moderately
    4. Not at all
    5. Do not know

Constraints affecting project funds utilization in WSBs' in Kenya	**1**	**2**	**3**	**4**	**5**
Stringent funding requirements					
Low institutional capacity					
Lack of a proper coordinated policy framework within the sector					
Lack of accurate and reliable management information system					