

FACTORS INFLUENCING PROJECT FUNDS UTILIZATION IN WATER SERVICE
BOARDS IN KENYA: THE CASE OF TANA WATER SERVICES BOARD

BY

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A PROJECT SUBMITTED IN PARTIAL FULLFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF DEGREE OF MASTER OF ARTS IN PROJECT PLANNING AND
MANAGEMENT OF THE UNIVERSITY OF NAIROBI.

MAY 2014

DECLARATION

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

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DEDICATION

I dedicate this work to all the people who helped me in doing the project.

I particularly dedicate to my family and friends for their patience and assistance.

ACKNOWLEDGEMENT

Many people have contributed in one way or another towards the success of this work and I would like to convey my appreciation to them. First and foremost, I would like to acknowledge the input of my supervisor Eng. James Wachira Theuri for his guidance, patient and support throughout the project development period. He took time of the busy schedules to assist me and for this I will always be grateful for preparation of this document.

Last but not least, I would like to thank all members Tana Water Service Board, Nyeri region for their support during project period.

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ABBREVIATION AND ACRONYMS

DANIDA	Danish International Development Agency
DF	Devolved Funds
EU	European Union
GOK	Government Of Kenya
JICA	Japan International Cooperation Agency
KIDDP	Kenya-Italy Dept For Development Programme
MDGs	Millennium Development Goals
MPERs	Ministerial Public Expenditure Reviews
MWI	Ministry of Water and Irrigation
NWSS	National Water Services Strategy
SIDA	Swedish International Development Cooperation Agency
SWAP	Sector Wide Approach to Planning
TWSB	Tana Water Services Board
UN	United Nations
UNDP	United Nation Development Programme
UNICEF	United Nation International Children’s Emergency Fund
WASREB	Water Services Regulatory Board
WSP	Water Services Provider
WSTF	Water Services Trust Fund

ABSTRACT

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 the population, particularly in many rural areas and the very rapidly growing settlements of the urban poor. This challenge is more so due to over reliance of external funding to build sustainable water systems. Poor project funds utilization makes many water projects not to see the day light. Therefore, this study set out to investigate factors affecting projects funds utilization in Water Service Boards in Kenya. It therefore focused on the influence of funding requirements, institutional capacity, management information systems and policy framework on project funds utilization. The study was conducted through a descriptive research design. The study targeted workers in Tana Water Service Board in Nyeri. The study was conducted through a census. Both primary and secondary data were used to collect information for the study. Descriptive statistics as well as inferential statistics was used for the analysis. This infers that institutional capacity contributes most to the project funds utilization followed by management information system, policy frame work and institutional capacity. This study also established that funds allocated to projects by the government and other organizations should be disbursed in time. The study also found that most of the projects were not staffed appropriately. This study therefore recommends that more staff should be employed to work in projects so as to staff projects appropriately.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Kenya's population estimated to be 38 Million puts pressure on existing water catchment areas, changing weather patterns and loss of forest cover (GOK, 2009). Water is life-and clean water not only sustains life but prevents water-borne diseases. The Millennium Development Goal 7 calls for environmental stability that will ensure access to clean and safe water for all (UNDP, 2006).

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 (UNDP,2006), 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 (UNDP, 2006). The growing demand 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 Kenya Vision 2030 (UNDP, 2006), 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, 2008) the main reason 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.

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 the people in developing countries.

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.

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-sectors created by Water Act 2002 have been established; Water Service 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. 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 (SPs) with the WSPs in accordance with the license requirements.

1.1.1 Tana Water Services Board

The Tana Water Service Board (TWSB) is one of the eight Water Services Boards created under the Ministry of Water and Irrigation following the enactment of the Water Act (2002). TWSB covers 38 administrative districts in the counties of Nyeri, Murang'a, Kirinyaga, Embu, Tharaka-Nithi and Meru covering an area of 19,169 km² with a population of 4,238,469 (2009 census). 40 per cent of the area is either arid or semi-arid. About 80 per cent of the residents live in rural areas (TWSB, 2013).

Currently, 37 per cent of the population receives their water from water supply schemes that were inherited from the Ministry Of Water and Irrigation. TWSB works towards increasing access to safe, adequate and sustainable water and sewerage services to both the rural and urban populations. To achieve this, the Board develops, rehabilitates, replaces and manages infrastructure in the area, procures and leases water sewerage facilities, applies regulations on water services tariffs, licenses and monitors the performance of Water Services Providers (WSPs), as well as supports communities to access safe water and sanitation services (TWSB, 2013).

The vision of the TWSB is to provide sustainable access to quality water and enhanced sanitation for socio-economic prosperity. On the other hand, the mission of TWSB is to ensure sustainable provision of safe water and enhanced sanitation services by developing, rehabilitating and leasing quality utilities and contracting effective WSPs for life-long enrichment of our stakeholders.

As provided for in the license granted by the WASREB, the TWSB is mandated to; contract, monitor and enforce agreements between itself and WSPs in accordance with regulations set by the WASREB; ensure effective and economical provision of water services; monitor and acquire assets; plan, manage and develop water and sewerage services; and take custody of water service provision assets (TWSB, 2013).

1.2 Statement of the Problem

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.

The privatization of water services in Kenya 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.

According to TWSB Strategic Plan 2009-2012, during the 2007/2008 financial year, TWSB received Kshs 270 Million for development purposes but only managed to utilize Kshs 165 Million 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).

However, despite the increased government funding of Water Projects and continued donor funding for infrastructural growth the level of water coverage in the country is still low. This

study therefore aims at identifying the constraints and challenges affecting the project fund utilization in WSBs in Kenya and opportunities for improving the same.

1.3 Objectives Of the study

1.3.1 Specific Objectives

The research project was to be guided by the following:

- i) To find out the effect funding requirements on project funds utilization in Tana Water Service Board.
- ii) To establish the extent institutional capacity affects project funds utilization in Tana Water Service Board.
- iii) To explore the effect of management information systems on project funds utilization in Tana Water Services Board.
- iv) To investigate the influence of sector policy framework on project funds utilization in Tana Water Services Board.

1.4 Research Hypothesis

H₀₁: There is no significant relationship between the funding requirements and project funds utilization in Tana Water Services Board.

H₀₂: There is no significant relationship between the institutional capacity of an organization and project funds utilization in Tana Water Services Board.

H₀₃: There is no significant relationship between the availability of accurate and reliable management information system and project funds utilization in Tana Water Service Board.

H₀₄: There is no significant relationship between the policy framework set in the water sector and project fund utilization in Tana Water Service Board.

1.5 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 (UNDP, 2006)

Water is also the most important 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 (UNDP, 2006).

The study will examine the major constraining factors that Water Service Boards face in utilizing allocated funds in developing, expanding or rehabilitating water utilities. The findings of this study therefore will be of great help to the Water Service Board 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 relevant to Water Service Regulatory Board, Water Service 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 Service 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 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.

1.6 Delimitation of the Study

This study sought to investigate the factors affecting projects funds utilization in WSBs in Kenya. The study was limited to four variables funding requirements, institutional capacity, management information and sector policy framework. The study will also be limited to Tana Water Services Board.

1.7 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 Service Board which is one of the eight water services board in Kenya. Since this was a case study, the findings of this study cannot be generalized to other water services boards.

In addition, the researcher encountered unwillingness by respondents to reveal information as it was on the ground. To counter this, the respondents were assured of confidentiality for any information given. The study further assured the respondents that the study was purely an academic endeavour and therefore the information given was not revealed to any other authority but used to meet an academic requirement.

This study used questionnaires to collect data. The study was therefore limited to quantitative data. However, the researcher included open ended questions in the questionnaires so as to give the respondents an opportunity to express their feelings in relations to the objectives of the study.

1.8 Assumptions of the Study

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

1.9 Definition of significant terms

Capital Projects: long term investment project requiring relatively large sums to acquire, develop, improve and/or maintain a capital asset such as land, buildings, dykes or roads.

Capabilities: Refer to a broad range of collective skills of organizations like ability, means, power, potential, facility, capacity, qualification(s), faculty, competent, proficiency and potentiality to perform tasks.

Constraints: a constraint is anything that prevents the system from achieving more of its goal.

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. Institutions are identified with a specific purpose and permanence, transcending individual human lives and intentions, and with the making and enforcing of rules governing cooperative human behavior.

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.

Institutional Capacity: Relates to the ability of an organization to identify and solve implementation problems; in negative terms, the concept points to the organization's failures and the limits to successful solutions to a given type of problem.

Management Information System: This is a system that provides information needed to manage organizations efficiently and effectively.

1.10 Organization of the Study

The study was organized as stipulated in the table of contents.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

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.

2.2 Donor Aid in Implementing Development Projects

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 mechanism and vetting of projects to ensure that these projects are able to meet the needs of development in a sustainable way (Lancaster, 1999). The result of this

study showing that these conditions attached 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-Saharan Africa, it is interesting to note that after a 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 effectiveness of foreign aid.

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); (Pack and Pack, 1990)-conclude that aid to developing countries is fungible. Others like Levy (1987) using time series data in individual countries, found no significant diversion of funds, and all concur with the argument that foreign aid funds are sent on the designated purposes.

2.3 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 constituencies 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 made at giving communities ownership of resources for effective local development. Their importance is recognized in the GOK’s long term development blue print, “Vision 20130”, which puts strong emphasis on enhancing equity, improving governance and social justice through the allocation of increased resources to DFs (Government of Kenya, 1999).

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 as noted below:-

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 characteristics 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 mechanism for communities to exact public accountability.

Lastly, there are 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.

2.4 THEORETICAL FRAMEWORK

2.4.1 Systems Theory In Institutional Capacity

The institutional theory examines the influence of the external factors of the firm and how enterprises adopt policies and implement strategies that are legitimate within their organizational fields. Organizations consider industry norms, firm tradition and management fads among other concerns to formulate their strategies. There are three major sources of external pressures: functional, political and social which force organizations to implement appropriate strategies actions (Robertson, 2004).

One way to address institutionalization is to revive the institution theory that has been used in organizational analysis, as well as in number of other areas of social science. In this theory, organizations are defined in terms of their capacity to create and maintain a boundary from the environment and from other organizations must import resources from the environment but the more institutionalized are hypothesized to have effective gatekeepers to control those transactions (Rasmusen & Zupan, 2009).

Capacity is the ability of people, organization and society as a whole to manage their affairs successfully. Capacity refers to the overall ability of a system to perform and sustain itself; the coherent combination of competencies and capabilities. As top the role and purpose of capacity building there is an underlying agreement that capacity building is about change making things better, adding value, developing new assets or talents. It is about how best to develop new capabilities (i.e. institutional assets or collective skills) and new competencies (i.e. individual skills and energy or new personal behaviors). These can take place at many different levels (micro, meso and macro) with different elements of target groups (Venkatesh & Morris, 2000).

2.4.2 Unified Theory of Acceptance

UTAUT provides a refined view of how the determinants of intention and behavior evolve over time. It assumes that there are three direct determinants of intention to use (performance expectancy, effort expectancy and social influence) and two direct determinants of usage behavior (intention and facilitating conditions) (Venkatesh, et al., 2003). These relationships are moderated by gender, age, experience and voluntariness of use. Empirical testing of UTAUT shows that performance expectancy, effort expectancy, and social influence have significant relationships with the intention to use technologies. Later studies found that social influence affect perceived usefulness and perceived ease of use (Lu, et al., 2005). However, in post adoption research, social influence on the continuance intention was inconsistent; some studies reported significant relationships, but other studies reported non-significant relationships (Chiu & Wang, 2008). UTAUT is one theory that covers extensive individual difference constructs including gender, age, experience, and voluntariness of use as moderating variables. Even though there are some inconsistencies in previous studies on individual differences, scholars reported significant moderating effects by individual differences such as gender (Venkatesh & Morris, 2000; Venkatesh, et al., 2003), age, prior experience and voluntariness of use.

In relation to this study most firms are reluctant in fully adopting information communication and technology has highly been influenced by age, experience, perceived complexity as well as social influence.

2.4.3 Public Interest Theory

The first group of regulation theories account for regulation from the point of view of aiming for public interest. This public interest can be further described as the best possible allocation of

scarce resources is to a significant extent coordinated by the market mechanism is optimal. Because these conditions are frequently not adhered to in practice, the allocation of resources is not optimal and a demand for methods for improving the allocation arises. According to Chih-Yao, Yu-Teng and Kuo-Ting (2012) one of the methods of achieving efficiency in the allocation of resources is government regulation. According to public interest theory, government regulation is the instrument for overcoming the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results.

In the first place, regulation can improve the allocation by facilitating, maintaining or imitating market operation. The exchange of goods and production factors in markets assumes the definition, allocation and assertion of individual property rights and freedom to contract. The guarantee of property rights and any necessary enforcement of contract compliance can be more efficiently organized collectively than individually (Posner, 2003).

Furthermore, the costs of market transactions are reduced by property and contract law. The freedom to contract can however, also be used to achieve cooperation between parties opposed to market operation (Robertson, 2004). Agreements between producers give rise to prices deviating from the marginal costs and an efficient quantity of goods is put on the market. Antimonopoly legislation is aimed at maintaining the market operation through monitoring the creation of positions of economic power and by prohibiting competition limiting agreements or punishing the misuse thereof (Smith, Bradley & Jarell, 2005). Imperfect competition can also result from the special characteristics of the production process in relation to the magnitude of the demand in the market. At a given magnitude of demand average total costs would be minimized if the production were to be concentrated in one company (Tullock, 2004).

Public interest theory explains regulation from viewpoints not restricted to imperfect competition and unbalanced market operation (Rasmusen & Zupan, 2009). For a number of reasons, markets may not exist for some goods for which the utility or the ‘willingness to pay’ exceeds the production costs (Robertson, 2004). Markets might not exist as a result of information problems and transaction costs in the case of external effects and public goods. In these cases, regulation can improve the allocative efficiency of the economy.

2.4.4 Budgetary Theory

Budget theory is an academic study of political and social motivations behind government and civil society budgeting. The executive budget is a financial innovation designed to empower city mayors and city managers with the capacity to implement needed policy reforms in the p

Progressive Era. Public budgeting, as a field of study, has grown tremendously in recent years both in form and substance. With such growth comes a need to have a coherent theory or body of theories that allows one to understand the field, its essential core that guides its development, and its scope for dealing with real world problems (Posner, 2003).

Constitutional economics studies such issues as the proper national wealth distribution including the government spending, which in many transitional and developing countries is completely controlled by the executive. The latter undermines the principle of powers’ “checks and balances”, as it creates a critical financial dependence (Tool, 2002).

There is significant difference in board practices as a function of government funding levels, which mark a shift of energy away from some activities, and towards other activities (such as financial monitoring and advocacy).

2.5 Empirical Review

2.5.1 Funding Requirements

Project funding should begin in the earliest stages of project planning. Without funding, there is no project. There is no project. In the 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 impending to sector reforms is the poor state of infrastructure which influences the service delivery level of Water Service Board and therefore funding needs to be enhanced. Sufficient funds are not available in order to rehabilitate and extend 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).

Kenya Government recognizes the need of humanitarian 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 arrangement 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.

2.5.2 Institutional Capacity

According to 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.

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

While 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. 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. Capacity development in WSBs in Kenya will ensure proper project management and general project success in water sector in Kenya.

2.5.3 Management of Information Systems

In 1984, John Nesbit 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 company had others desired) would all but disappear as inexpensive computers made information more accessible.

Daniel Bell (1985) examined the sociological consequences of information technology Zuboff (1988), in her five year study of eight technologies” and “automating 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.

Shoshonna (1998) 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 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 becomes unreliable especially for aggregated data on national level.

2.5.4 Policy Framework

A framework is a support structure established to act 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 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 full Ministry 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 1.4million people and 555 piped rural water supply systems serving 4.7million people.

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 "handling over".

There was general agreement over the need to handle over Government water supply systems but much less agreement over what is meant for the Government to hand over public water supply systems to others. In 1997 the Government published manual giving guidelines on handling over rural water supply systems to communities. 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 maintain them.” But, the goal of community management should be ownership of the 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 these guidelines, focusing on management and revenue collection, not fully 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 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.

2.6 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.

Independent variables

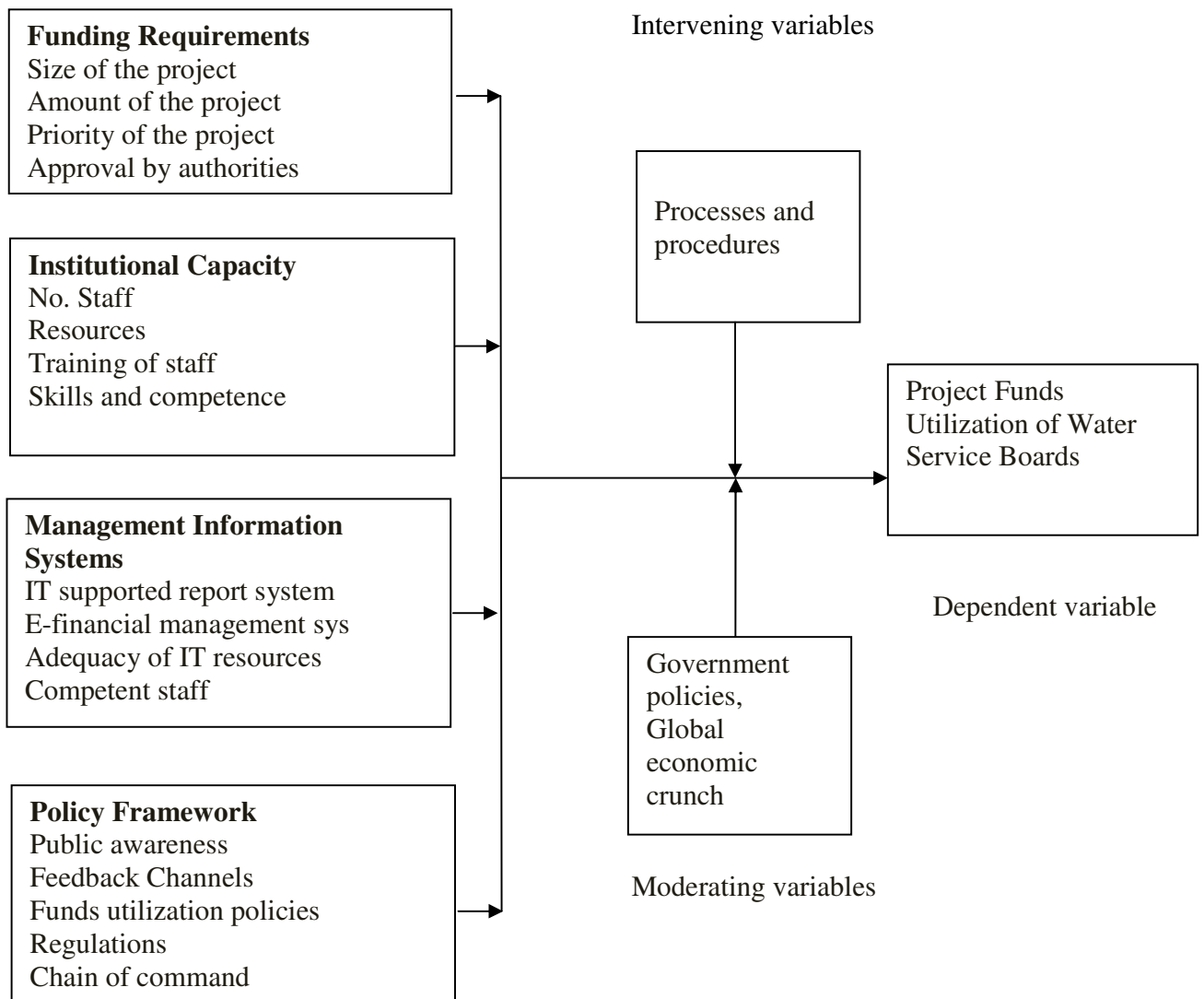


Figure One: Conceptual Framework

2.7 Research Gap

Various studies have been conducted in Kenya in relation to funds utilization. For instance Kaliba (2012) did a study Factors influencing utilization of constituency development funds; a case of Samburu east constituency in Kenya and Kiruri (2012) conducted a study factors influencing utilization of funds among funded organizations in the total war against HIV and Aids project (A case of Nairobi Region). Nevertheless, there is no study that have been conducted to establish the effect of funding requirements, institutional capacity, management information systems and sector policy framework on projects fund utilization in WSBs in Kenya.

2.8 Summary of Chapter Two

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. 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 stability. In addition, 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. Further, 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 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.

The primary challenge of project management is to achieve all the project goals and objectives while honouring the preconceived project constrains. Typical constrains 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

This chapter presents the research methodology used in the study. It covers the research design, target population, sample design, data collection, validity and reliability of data collection instruments, data analysis techniques, and ethical considerations.

3.2 Research Design

A research design is the general plan of how one goes about answering the research question (Saunders et al., 2007). A descriptive survey research design was used to obtain data. This design is considerate for the type of objective of this study and the implied comparative analysis. The researcher undertook a study of four water projects implemented by Tana Water Services Board. To get appropriate information on project fund utilization, some staff in the Planning & Strategy Department, Technical Department and Finance Department of TWSB was selected as respondent since they are best placed to understand the challenges faced by the water service boards.

3.3 Target Population

According to Isdor Chein, (1982), a population can be defined as an entire set of relevant units of analysis or data. The target population of this study was the top and middle management staff from Tana Water Service Board of Nyeri Region. The researcher obtained information from the Planning, Finance and Technical department staff of Tana Water Services Board of Nyeri Region.

Table 3.1: Target Population

Category	Target Population, Nyeri Board	Percentage%
Fund Mobilizers	6	11%
Planning Division	16	28%
Project Engineers	16	28%
Finance and Account	10	17%
Planning and Strategy	10	17%
Total	58	100%

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.

Sampling technique provides a range of methods that enables reduction of data to be collected, by focusing on data from a sub group rather than all cases of elements. The sampling design used is non-probabilistic since it allows a selection of individuals who have been involved as the researcher had full knowledge of the location and contact people in Tana Catchment's area. Since the study population was small, the study was thus conducted through a census targeting all the 58 respondents.

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 from Board annual reports and quarterly reports. The questionnaire had both the 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 were self-administered to eighteen staff of TWSB various departments and sections. The questionnaire were preferred due to the sustainability for the study as suggested by Mugenda (2003) 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 Data Collection Procedure

This refers to the means the study will use to gather the required data or information (Kothari, 2004). The study administered the questionnaire individually to all respondents. The questionnaire was administered by use of a drop off and pick up later method to the sampled respondents. According to Cooper and Schindler (2003) the use of the Drop-off/Pick-Up (DOPU) method results in significantly high response rates. In addition, the DOPU technique is an effective means to reduce potential non-response bias through increased response rate.

3.7 Data Validity and Reliability

Mugenda and Mugenda (2003) defines a pilot test as a stage where research instruments (questionnaires, observation schedules) are administered to a number of individuals in the target population who are not included in the sample size so as to test the reliability and validity of the instruments.

Validity as noted by Cramer and Howitt (2005) is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study. Content validity was employed in this study and it is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular concept. To establish the validity of the research instrument the researcher sought the opinions of experts in the field of study especially the supervisor. This helped to improve the content validity of the data that was collected.

Reliability on the other hand refers to a measure of the degree to which the research instruments yield consistent results (Mugenda & Mugenda, 2003). The researcher selected a pilot group of 5 individuals from the target population to test the reliability of the research instruments. The

reliability of the questionnaires was measured statistically by use of Cronbach's alpha. Internal consistency techniques will be applied using Cronbach's Alpha. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. Coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability and 0.8 or higher indicated good reliability (Mugenda and Mugenda, 2003)

3.8 Data Analysis

The data collected was analyzed using inferential statistics. After the data collection, the researcher examined and checked for completeness and clarity. Coding scheme was developed by creating codes and scales from the responses which were 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. Descriptive statistics and inferential statistics to analyze the data. Descriptive statistics include frequency distribution, mean, standard deviation and percentages.

Multiple regression model was also used to predict the extent to which the identified independent variables affect the dependent variable. The dependent variable, that is; utilization of project funds in Water Services Boards, was explained by the following independent variable: Funding Requirements; Institutional Capacity; Management Information System and Policy Framework. The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y= utilization of project funds; β_0 = Constant Term; β_1 , β_2 , β_3 and β_4 = Beta coefficients; X_1 =Funding Requirements; X_2 = Institutional Capacity; X_3 = Management Information System; X_4 =Policy Framework; ε =Error term

3.9 Operationalization of variables

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

OPERATIONALIZATION OF VARIABLES					
No. Objective	Variable	Indicator	Measurement scale	Study design	Level of Scale
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 utilization of allocated funds	70%	Correlation Descriptive survey	Ordinal
	Dependent Variable a)Utilization of project funds		100%		Nominal
To establish to what extent Institutional capacity affects 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 utilization of allocated funds	80%	Correlation Descriptive survey Correlation	ordinal Nominal
	Dependent Variable a)Utilization of project funds		100%		
To explore the role of management Information Systems in 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 utilization of allocated funds		Correlation Descriptive survey	ordinal
	Dependent Variable a)Utilization of project funds		100%		Correlation
To assess whether sector policy framework affects project funds utilization in water service boards in Kenya	Independent Variables a)Policy Framework	a) Number of complains made by the Board of 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%	Correlation Descriptive survey	Ordinal
	Dependent Variable a)Utilization of project funds		70%		Correlation
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 utilization of allocated funds	70%	Correlation Descriptive survey	Ordinal Nominal
	Dependent Variable a)Utilization of project funds		100%		Correlation

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3.10 Ethical Issues

In carrying out a project the researcher observed all ethical consideration.

CHAPTER 4

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter focused on data analysis interpretation and presentation. The purpose of the study was to investigate the constraints affecting project funds utilization in water service boards in Kenya by focusing on Tana water services board. The study also sought to establish the effect funding requirements, institutional capacity, management information systems and sector policy framework on project funds utilization in Tana Wter Services Board. The researcher made use of frequency tables and percentages to present data.

4.1.1. Response Rate

The sample size of this study was 58 respondents. Out of this sample size 57 questionnaires were filled and returned to the researcher which represents a sample size of 98.27% response rate. The response rate was adequate for this analysis and conforms to Babbie (2002) stipulation that any response of 50% and above is adequate for analysis.

4.2 General Information

The general information in this study included the gender of the respondents, their leadership position, the duration of time they had been involved in Project Planning and Implementation, the duration of time the project took to complete and the duration of the time the project scheduled took to complete.

The respondents were asked to indicate their gender. The results are presented in table 4.1 below.

Table 4.1: Gender of the Respondents

	Frequency	Percent
Male	32	56.17
Female	25	43.86
Total	57	100

As shown in table 4.1 above, 56.17% of the respondents indicated that they were male while 4.86% indicated that they were female. This shows that most of the respondents were male.

The respondents were also asked to indicate their leadership positions in their organizations.

Table 4.2: Leadership Position

	Frequency	Percent
Senior Management	5	8.77
Middle level Management	24	42.11
Sectional Head	15	26.32
Operations	13	22.82
Total	57	100.00

From the findings, 42.11% of the respondents indicated that they were working in the middle level management, 26.32% indicated that they were working as section heads, 22.81% indicated

that they were working in the operations and 8.77% indicated that they were working in the senior management. These findings clearly show that most of the respondents in this study were working in the middle level management.

The respondents were further asked to indicate for how long have had been involved in Project Planning and Implementation.

Table 4.3: Duration in Project Planning and Implementation

	Frequency	Percent
Less than one year	2	3.51
1 to 2 years	10	17.54
3 to 5 years	23	40.35
6 to 8 years	13	22.81
More than 8 years	9	15.79
Total	57	100.00

According to the findings, 40.35% of the respondents reported that they had been involved in Project Planning and Implementation for between 3 and 5 years, 22.81% indicated 6 to 8 years, 17.54% indicated between 1 and 2 years and 15.79% indicated more than 8 years and 3.51% indicated less than one year. These findings clearly show that most of the respondents had been involved in Project Planning and Implementation for between 3 and 5 years.

The study sought to find out which projects the respondents were involved in fully from inception to completion.

Table 4.4: Projects Involved in full Utilization

	Frequency	Percent
JICA	11	19.30
ADB	10	17.54
EU	23	40.35
KIDDP	13	22.81
Total	57	100.00

According to the findings, 40.35% of the respondents indicated that they had been involved in EU fully from inception to completion, 22.81% indicated that they were involved in KIDDP, 19.30% indicated that they were involved in JICA and 17.54% indicated that they were involved in ADB. From these findings, we can deduce that most respondents were involved in EU.

The respondents were also asked to indicate for how long the project was scheduled to take complete.

Table 4.5: Scheduled Time for Project Completion

	Frequency	Percent
Less than one year	11	29.30
1 to 2 years	25	43.86
3 to 5 years	14	24.56
6 to 8 years	7	12.28
Total	57	100.00

According to the findings, 43.86% of the respondents indicated that their projects had scheduled to take between 1 and 2 years to complete, 24.56% indicated that they been scheduled to take between 3 and 5 years, 19.30% indicated that they had been scheduled to take less than a year and 12.28% indicated that they had been scheduled to take between 6 and 8 years. This shows that most of the project had been scheduled to take 1 and 2 years.

The respondents were further asked to indicate how long the projects took to complete.

4. 6: Duration Taken to Complete the Project

	Frequency	Percent
Less than one year	8	14.04
1 and 2 years	22	38.60
3 and 5 years	13	22.81
6 and 8 years	14	24.56
Total	57	100.00

From the findings, 38.60% indicated that their projects took between 1 and 2 years, 24.56% indicated that their projects took between 6 and 8 years, 22.81% indicated that their projects took between 3 and 5 years, and 14.04% indicated that their projects took less than one year. From these findings we can deduce that most of the projects took between 1 and 2 years.

4.3 Funding Requirements

The study sought to find out the effect of funding requirements on the project funds utilization in Tana Water Services Board.

The respondents were asked to indicate the extent to which funds requirements influence projects funds utilization in Tana Water Services Board.

Table 4.7: Influence of funds requirement on projects funds utilization

	Frequency	Percent
Very great extent	12	21.05
Great extent	32	56.14
Moderate extent	8	14.04
Low extent	5	8.77
Total	57	100.00

As shown in table 4.7 above, 56.14% of the respondents indicated that funds requirement influence projects funds utilization in Tana Water Services Board to a great extent, 21.05% indicated to a very great extent, 14.04% indicated to amoderate extent and 8.77% indicated to a low extent. From these findings, we can deduce that funds utilization in Tana Water Services Board to a great extent.

The respondents were asked to indicate whether the project plan contain a revenue/expenditure analysis that compares all anticipated that compares all anticipated water revenues with planned expenditures for a 5 year period.

Table 4.8: Revenue/expenditure analysis in project plan

	Frequency	Percent
Yes	37	64.91
No	20	35.09
Total	57	100.00

According to the findings, 64.91% of the respondents indicated that the project plan contain a revenue/expenditure analysis that compares all anticipated water system revenues with planned expenditures for a 5 year period while 35.09% disagreed. From these findings we can deduce that the project plan contain a revenue/expenditure analysis that compares all anticipated water system revenues with planned expenditures for a 5 year period.

The respondents were also asked to indicate whether the project produces quarterly reports comparing actual expenditures to budgeted expenses.

Table 4.9: Quarterly reports comparing actual expenditures to budgeted expenses

	Frequency	Percent
Yes	34	59.65
No	23	40.35
Total	57	100.00

According to the findings, 59.65% of the respondents reported that the project produces quarterly reports comparing actual expenditures to budgeted expenses while 40.35% reported that the project does not produce quarterly reports comparing actual expenditures to budgeted expenses. From these findings we can deduce that the project produces quarterly reports comparing actual expenditures to budgeted expenses.

The respondents were also asked to indicate whether the funds allocated to the project were disbursed in time.

Table 4.10: Disbursement of funds

	Frequency	Percent
Yes	16	28.07
No	41	71.93
Total	57	100.00

As indicated in table 4.10 above, 71.93% indicated that the funds allocated to the project were not disbursed in time while 28.07% indicated that the funds allocated to the project were disbursed in time. From these findings we can deduce that funds allocated to the project were not disbursed in time.

The respondents were further requested to indicate the extent to which the stated aspects of funding requirements influence projects funds utilization in Tana Water Services Board.

Table 4.11: Aspects of funding requirements

	Mean	Std deviation
Size of the project	4.321	0.978
Amount per project	4.213	0.716
Priority per project	4.087	0.726
Approval by authorities	3.786	0.783

From the findings, the respondents indicated with a mean of 4.321 and a standard deviation of 0.978 that the size of the project influences projects funds utilization in Tana Water Services Board to a great extent. The respondents also indicated with a mean of 4.213 and a standard deviation of 0.716 that the amount per project influences projects funds utilization in Tana Water Services Board to a great extent. Further, the respondents indicated with a mean of 4.087 and a standard deviation of 0.726 that the priority of the project influences projects funds utilization in Tana Water Services Board to a great extent. Lastly, the respondents indicated with a mean of 3.786 and a standard deviation of 0.783 that approval by authorities influences projects funds utilization in Tana Water Services Board to a great extent.

4.4 Institutional Capacity

The study also sought to establish the extent institutional capacity affects project funds further utilization in Tana Water Services Board.

The respondents were asked to indicate the extent to which institution capacity influences projects funds utilization in Tana Water Services Board. The results are shown in table 4.12 below.

Table 4.12: Influence of institution capacity on projects funds utilization

	Frequency	Percent
Very great extent	15	26.32
Great extent	28	49.12
Moderate extent	10	17.54
Low extent	4	7.02
Total	57	100.00

From the findings, 49.12% of the respondents indicated that institution capacity influences projects funds utilization in Tana Water Services Board to a great extent, 26.32% to a very great extent, 17.54% indicated to a moderate extent and 7.02% indicated to a low extent. From these findings we can deduce that institution capacity influences projects funds utilization in Tana Water Services Board to a great extent.

The respondents were also asked to indicate whether the project was staffed appropriately.

Table 4.13 Staffing of the project

	Frequency	Percent
Yes	18	31.58
No	39	68.42
Total	57	100.00

According to the findings, 68.42% of the respondents that their projects were not staffed appropriately while 31.58% indicated that their projects were staffed appropriately. From these findings we can deduce that most of the projects were not staffed appropriately.

The respondents were further asked to rate the teamwork and morale of heir project team.

Table 4.14: Teamwork and morale of the project team

	Frequency	Percent
Excellent	3	5.26
Good	15	26.32
Moderate	13	22.81
Bad	23	40.35
Poor	3	5.26
Total	57	100.00

As indicated in table 4.14 above, 40.35% of the respondents rated the teamwork and morale of their project team as bad, 26.32% rated it as good, 28.81% rated it as moderate, 5.26% rated it as

excellent and the same percent rated it as poor. . From these findings we can deduce that teamwork and morale project teams were bad.

The respondents were also asked to indicate the extent to which the stated aspects of institution capacity influence projects funds utilization in Tana Water Services Board.

Table 4.15: Aspects of institution capacity

	Mean	Std deviation
No. of staff	4.391	0.617
Resources	3.433	0.827
Training of staff	4.091	1.092
Skills and competence	3.781	1.028

According to the findings, the respondents reported with a mean of 4.391 and a standard deviation of 0.617 that the number of staff influences projects funds utilization in Tana Water Services Board to a great extent. In addition, the respondents indicated with a mean of 4.091 and a standard deviation of 1.092 that training of staff influences projects funds utilization in Tana Water Services Board to a greater extent. Further, the respondents indicated with a mean of 3.781 and a standard deviation of 1.028 that skills and competence influences projects funds utilization in Tana Water Services Board to a great extent. Lastly, the respondents reported with a mean of 3.433 and a standard deviation of 0.827 that resources influence projects funds utilization in Tana Water Services Board to a moderate extent.

4.5 Management Information Systems

The study further sought to explore the effect of management information systems on project funds utilization in Tana Water Services Board.

The respondents were asked to indicate the extent to which the management information systems influence projects funds utilization in Tana Water Services Board.

Table 4.16: Influence of management information systems on projects funds utilization

	Frequency	Percent
Very great extent	11	19.30
Great extent	33	57.89
Moderate extent	9	15.79
Low extent	4	7.02
No extent at all	0	00
Total	57	100.00

From the findings, 57.89% of the respondents indicated that management information systems influences projects funds utilization in Tana Water Services Board to a great extent, 15.79% indicated to a moderate extent and 7.02% indicated to a low extent. From these findings we can deduce that management information systems influences projects funds utilization in Tana Water Services Board to a great extent.

The study also sought to establish whether Tana Water Services Board had adopted management information systems in project funds utilization.

Table 4.17: Adoption of management information systems

	Frequency	Percent
Yes	24	42.11
No	33	57.89
Total	57	100.00

According to the findings, 57.89% of the respondents indicated that Tana Water Services Board had not adopted management information systems in project funds utilization while 42.11% indicated that Tana Water Services Board had adopted management information systems project funds utilization. From these findings we can deduce that Tana Water Services Board had not adopted management information systems in projects funds utilization.

The respondents were also asked to indicate whether the water sector has a common IT supported reporting information system.

Table 4.18: Common IT supported reporting information system

	Frequency	Percent
Yes	21	36.84%
No	36	63.16%
Total	57	100.00

From the findings, 63.16% of the respondents indicated that the water sector had no common IT supported reporting information system. The rest of the respondents (36.84%) reported that the water sector had a common IT supported reporting information system. From the findings, we can deduce that the water sector had no common IT supported reporting information system.

The respondents were asked to indicate the extent to which the stated aspects of management information systems influence funds utilization in Tana Water Services Board.

Table 4.19: Aspects of management information systems

	Mean	Std deviation
IT supported report system	4.091	0.781
E-financial management system	3.871	0.927
Adequacy of IT resources	3.917	0.827
Competent staff	4.021	0.827

From the findings, the respondents indicated with a mean of 4.091 and a standard deviation of 0.781 that IT supported report system influences projects funds utilization in Tana Water Services Board to a great extent. In addition, the respondents reported with a mean of 4.021 and a standard deviation of 0.827 that competent staff influence projects funds utilization in Tana Water Services Board to a great extent. Further, the respondents indicated with a mean of 3.917 and a standard deviation of 0.827 that adequacy of IT resources influences projects funds utilization in Tana Water Services Board to a great extent. Lastly, the respondents indicated with a mean of 3.871 and a standard deviation of 0.927 that E-financial management information system influences projects funds utilization in Tana Water Services Board to a great extent.

4.6 Sector Policy Framework

The study sought to investigate the influence of sector policy framework on project funds utilization in Tana Water Services Board.

The respondents were also asked to indicate whether there was 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.

Table.4.20: Description of the primary responsibilities and identification

	Frequency	Percent
Yes	43	75.44
No	14	24.56
Total	57	100.00

From the findings, 75.44% of the respondents indicated that there was a description of responsibilities and identification of all key personnel, including board of directors or councils, involved in the management or operation of the system or personnel while 24.56% disagreed. From these findings we can deduce that there was 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.

The respondents were asked to indicate how often they meet with the policy makers to deliberate on issues affecting the water sector.

Table 4.21; Meet with policy makers

	Frequency	Percent
Hardly ever meet	23	40.35
Quarterly	3	5.26
Yearly	10	17.54
When need arises	21	36.84
Total	57	100.00

From the findings, 40.35% of the respondents reported that they hardly ever meet with the policy makers to deliberate on issues affecting the water sector, 36.84% reported they met with the policy makers to deliberate on issues affecting the water sector when needs arise, 17.54% indicated that they met yearly with the policy makers to quarterly with the policy makers to

deliberate on issues affecting the water sector. From these findings, we can deduce that they hardly ever meet with the policy makers to deliberate on issues affecting the water sector.

The respondents were also asked to seek to indicate their views on the adequacy and reliability of the methods used by the policy makers to communicate a policy decision in the water sector.

Table 4.22: Adequacy and Reliability of the Methods

	Frequency	Percent
Good	6	10.33
Fair	16	28.07
Bad	26	45.61
Poor	9	15.79
Total	57	100.00

According to the findings, 45.61% of the respondents indicated that the adequacy and reliability of the methods used by the policy makers to communicate a policy decision in the water sector was bad, 28.07% indicated that it was fair, 15.79% indicated that it was poor and 10.53% indicated that it was good. From these findings we can deduce that the adequacy and reliability

of the methods used by the policy makers to communicate a policy decision in the water sector was bad.

The respondents were also asked to indicate whether they have ever held a public baraza to create awareness on water sector reform.

Table 4.23: Public baraza to create awareness on water sector reform

	Frequency	Percent
Yes	14	24.56%
No	43	75.44%
Total	57	100.00

From the findings, 75.44% indicated that they have never held a public baraza to create awareness on water sector reform and 24.56% indicated that they have ever held a public baraza to create awareness on water reform. From these findings, we can deduce that they have never held a public baraza to create awareness on water sector reform.

The respondents were also asked to indicate the extent to which the stated aspects of sector policy framework influence projects funds utilization in Tana Water Services Board.

Table 4.24: Aspects of sector policy framework

	Mean	Std. deviation
Public awareness	4.019	0.616
Feedback channels	3.918	0.736
Funds utilization policies	3.727	0.627
Regulations	3.871	0.726
Chain of command	4.091	0.827

From the findings, the respondents indicated with a mean of 4.091 and a standard deviation of 0.827 that chain of command influences projects funds utilization in Tana Water Services Board to a great extent. In addition, the respondents reported with a mean of 4.019 and a standard deviation of 0.616 that public awareness influences projects funds utilization in Tana Water Services Board to a great extent. The respondents indicated with a mean of 3.918 and a standard deviation of 0.736 that feedback channels influences projects funds utilization in Tana Water Services Board to a great extent. Additionally, the respondents indicated with a mean of 3.871 and a standard deviation of 0.725 that regulations influences projects funds utilization in Tana Water Services Board to a great extent. Lastly, the respondents indicated with mean of 3.727 and a standard deviation of 0.627 that funds utilization policies influence projects funds utilization in Tana Water Services Board. To a great extent.

4.7 Fund Utilization

The respondents were asked to rate projects funds utilization in Tana Water Services Board.

Table 4.25: Rating of Funds Utilization

	Frequency	Percent
Good	13	22.81
Fair	26	45.61
Bad	11	19.30
Poor	7	12.28
Total	57	100.00

According to the findings, 45.61% of the respondents reported that the projects funds utilization in Tana Water Services Board was fair, 22.81% indicated that it was good, 19.30% indicated that it was bad and 12.28% indicated that it was poor.. From these findings we can deduce that the projects funds utilization in Tana Water Services Board was fair.

The respondents were asked to rate the stated factors in relation to projects funds utilization in Tana Water Services Board.

Table 4.26: Aspects of Projects Fund Utilization

	Mean	Std. deviation
Stringent funding requirements	3.524	0.978
Institutional capacity	3.827	0.762
Policy framework within the sector	3.091	0.716
Management information systems	3.027	0.827

From the findings, the respondents indicated with a mean of 3.827 and a standard deviation of 0.762 that institutional capacity that projects funds utilization in Tana Water Services Board to a great extent. In addition, the respondents indicated with a mean of 3.524 and a standard deviation of 0.978 that stringent funding requirements influences funds utilization in Tana Water Services Board to a great extent. The respondents also indicated with a mean of 3.091 and a standard deviation of 0.716 policy framework within the sector influences projects funds utilization in Tana Water Services Board to a great extent. Lastly , the respondents indicated with a mean of 3.027 and a standard deviation of 0.827 that management information system influences projects funds utilization in Tana Water Services Board to a great extent.

4.8 Regression Analysis

The researcher conducted a multiple linear regression analysis so as to determine the relationship between the dependent variable and independent variable: funding requirement; institutional

capacity; management information system and a policy framework. The regression model as follows: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \Sigma$

Where; Y= utilization of project funds; β_0 = Constant Term; $\beta_1, \beta_2, \beta_3$ and β_4 = Beta coefficients; X_1 =Funding Requirement; X_2 =Institutional Capacity; X_3 = Management Information System; X_4 = Policy Framework; Σ = Error term

Table 4.27: Model Summary

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	0.897	0.805	0.789	0.6273

Coefficient of determination explained the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation (funding utilization) that is explained by all the four independent variables (funding requirements, institutional capacity, management information system and policy framework).

The four independent variables that were studied, explain only 80.5% of the funds utilization as represented by the R^2 . This therefore means that other factor not studied in this research contribute 19.5% of the funds utilization. Therefore, further research should be conducted to investigate the other factors (19.5%) that affect project funds utilization in water service board in Kenya.

Table 4.28: (Analysis of Variance)

	Sum of squares	df	Mean square	F-calculated	Sig.
Regression	2.534	2	1.267	9.475	0.179 ^a
Residue	9.307	54	2.327		
Total	3.465	56			

The study used ANOVA to test the relationship since the sample size was small, and the variables are few. Further ANOVA removes some of the random variability so that significant differences can be found more easily and also helps look at interactions between factors.

The sum of squares is a mathematical approach to determining the dispersion of data points. The degree of freedom (df) is the number of independent components minus the number of parameters estimated. F- statistics is a measure of the correlation between variables drawn at different levels of (a) subdivided population. Residual of a sample is the difference between the sample and the estimated function value. Significant indicates the relationship between variables.

The significant value is 0.0179 which is less than 0.05 thus the model is statistically significant in predicting how, funding requirements, institutional capacity, management information system and policy framework affects the project funds utilization. The F critical at 5% level of significant was 3.23. since F calculated is greater than the F critical (value =9.475), this show that the overall model was significant.

Table 4.29: Coefficient of Determination

	Model	Unstandardized coefficients		Beta	t	Sig.
		B	Std. Error			
1	Constant	1.139	1.2235		1.615	0.367
	Funding requirements	0.507	0.1032	0.152	4.223	0.0237
	Institutional capacity	0.792	0.3425	0.054	3.724	0.0151
	Management information	0.563	0.2178	0.116	3.936	0.0222
	Policy framework	0.448	0.1937	0.263	3.247	0.0399

Multiple regression analysis was conducted as to determine the relationship between projects funds utilization and the four variables. As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$) becomes: $Y = 1.139 + 0.507X_1 + 0.563X_2 + 0.792X_3 + 0.448X_4$

According to the regression equation, taking all factors into account (utilization of projects funds in water service boards, funding requirements, institutional capacity, management information system and policy framework) constant at zero, project funds utilization will be 1.139. the data findings analyzed also shows that taking all other independent variables at zero, a unit increase in funding requirements will lead to a 0.507 increase in projects funds utilization; a unit increase in

institutional capacity system will lead to a 0.792 increase in projects funds utilization, a unit increase in management information system will lead to a 0.563 increase in projects funds utilization and a unit increase in policy framework will lead to a 0.448 increase in projects funds utilization. This refers that institutional capacity contributes most to the projects funds utilization followed by management information system. At 5% level off significance and 95% level of c confidence,, funding requirement had a 0.0151 level of significant management information system showed a 0.0222 level of significance, and policy framework showed a 0.0399 level of significance hence the most significant factor is institutional capacity.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, discussions, conclusion drawn from the findings and recommendations made. The conclusions and recommendations drawn focus on the purpose of the study which was to investigate the constrains affecting project funds utilization in water service boards in Kenya by focusing on Tana Water services board. The study also sought to establish the effect funding requirements, institutional capacity, management information systems and sector policy framework on project funds utilization in Tana Water Services Board.

5.2 Summary of the Findings

Most of the respondents in this study were male. In addition, majority of the respondents were working in the middle level management and had been involved in Project Planning and Implementation for about 3 to 5 years. This study established that projects funds utilization in Tana Water Services Board was fair. The study also found that institutional capacity, stringent funding requirements, policy framework within the sector as well as management information systems influences projects funds utilization in Tana Water Services Board to a great extent.

5.2.1 Funding Requirements

The study ought to find the effect funding requirements on project funds utilization in Tana Water Services Board. This study established that funds requirement influence projects fund utilization in Tana Water Services Board to a great extent. The study also established that project plan contain a revenue/expenditure analysis that compares all anticipated water system revenue with planned expenditures for a 5 year period. In addition, the study found that the project produces quarterly reports comparing actual expenditures to budgeted expenses. This study also revealed that funds allocated to the project were not disbursed in time.

The study found that the size of the project influences projects fund utilization in Tana Water Services Board to a great extent. In addition, the amount per project influences projects fund utilization in Tana Water Services Board to a great extent. Further the priority of the project and its approval by authorities influences projects funds utilization in Tana Water Services Board to a great extent.

5.2.2 Institutional Capacity

The study also sought to establish the extent institutional capacity affects projects funds utilization in Tana Water Services Board. The study found that institutional capacity in Tana Water Services Board. The study also found that most of the projects were not staffed appropriately. The study also established that teamwork and morale of most project teams were bad.

The study established that the number of staff influences projects funds utilization in Tana Water Services Board to a great extent. In addition, training of staff influences project funds utilization in Tana Water Services Board to a great extent. Further, the skills and competence influences project funds utilization in Tana Water Services Board to a great extent. Lastly, resources influence projects funds utilization in Tana Water Services Board to a great extent. Lastly, resources influence projects fund utilization in Tana Water Services Board to a moderate extent.

5.2.3 Management Information Systems

The study further sought to explore the effect of management information system project funds utilization in Tana Water Services Board. This study found that management information systems influences projects fund utilization in Tana Water Services Board to a great extent. However the study established that Tana Water Services Board had not adopted management information systems in project funds utilization. In addition, the water sector had no common IT supported reporting information system.

This study found that IT supported report system influences projects funds utilization in Tana Water Services Board to a great extent. In addition, competent staffs influence projects funds utilization in Tana Water Services Board to a great extent. Further the study found that adequacy

of IT resources influences projects fund utilization in Tana Water Services Board to a great extent. Lastly, the study established that E-financial management system influences project fund utilization in Tana Water Services Board to a great extent.

5.2.4 Sector Policy Framework

The study sought to investigate the influence of sector policy framework on project funds utilization in Tana Water Services Board. The study found that there was 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. The study also established that most projects leaders in water services board hardly ever meet with the policy makers to deliberate on issues affecting the water sector. This study also found that the adequacy and reliability of the methods used by the policy makers to communicate a policy decision in the water sector was bad. In addition most projects have never held a public baraza to create awareness on water sector reform.

The study established that chain of command influences projects fund utilization in Tana Water Services Board to a great extent. In addition, public awareness influences projects funds utilization in Tana Water Services Board to a great extent. The study also found that feedback channels influence project fund utilization in Tana Water Services Board to a great extent. Additionally, the study revealed that regulations influence projects fund utilization in Tana Water Services Board to a great extent.

5.3 Conclusion of the Study

The study concludes that there is a positive relationship between funding requirement and projects fund utilization. A unit increase in funding requirements will lead to a 0.507 increase in projects funds utilization. The study found that the size of the project, the amount per project, priority of the project and its approval by authorities influences project fund utilization in Tana Water Services Board to a great extent.

The study also concludes that there is a positive relationship between institutional capacity and projects funds utilization. A unit increase in institutional capacity system will lead to a 0.792 increase in projects fund utilization. The study also found that the number of staff, training of staff, the skills and competence and resources influence projects fund utilization in Tana Water Services Board to a moderate extent.

The study further concludes that there is a positive relationship between management information system and projects funds utilization. A unit increase in management information system will lead to a 0.563 increase in projects funds utilization. The study further established that IT supported report system, competent, adequacy of IT resources and E-financial management system influences project fund utilization in Tana Water Services Board to a great extent.

The study also concludes that there is a positive relationship between policy framework and project funds utilization. A unit increase in policy framework will lead to a 0.448 increase in projects funds utilization. The study also found that chain of command, public awareness, feedback channels, regulations and funds utilization policies influence project fund utilization in Tana Water Services Board to a great extent.

5.4 Recommendations of the Study

This study established that funds allocated to the project were not disbursed in time. This study therefore recommends that funds allocated to projects by the government and other organisations should be disbursed in time.

The study also found that most of the projects were not staffed appropriately. This study therefore recommends that more staff should be employed to work in projects so as staff projects appropriately. The study also established that teamwork and morale of most project teams were bad. This study therefore recommends that the management of Tana Water Services Board should focus at improving the teamwork and the morale of the staffs.

The study also found that Tana Water Services Board had not adopted management information systems in project funds utilization. In addition, the water sector had no common IT supported

reporting information system. The study therefore recommends that the organization should adopt management information systems fully in projects fund utilization. In addition, the water services boards should have a common IT supported reporting information system.

The study also found that most projects leaders in water services board hardly ever meet with the policy makers to deliberate on issues affecting the water sector. The study therefore recommends that policy makers should ensure that they meet with water services boards to deliberate on appropriate policies in that sector.

5.5 Recommendation for Further Research

The study focused on the constrains affecting project funds utilization in Tana Water Services Board. Since this was the case study and its findings cannot be generalized to other water services boards in Kenya. The study also recommends that another study should be done to investigate the overall challenges affecting the project success.

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APPENDICES

Appendix 1: Letter of Introduction

ISSA MOHAMMED ISMAIL

P/O/ BOX 16040 -00610

NAIROBI

.....

Tana Water Services Board

P.O. BOX 1292 -00100

NYERI.

Dear Sir/Madam,

RE: ACADEMIC RESEARCH

I am a student of University of Nairobi-pursuing a Masters Degree in Project Planning and Mangement 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 me is confidential and will be used only for the purpose of my academic research.

Thank you in advance.

Sincerely,

Issa Mohammed

Appendix 2: Questionnaire

Instructions

Please answer these questions to the best of your knowledge.

Write your response in the spaces provided.

Please put a tick (√) where appropriate.

Background Information

1. Gender

Male

Female

2. What leadership position do you hold in the Organization?

Senior Management

Middle level Management

Sectional Head

Operations

3. How long have been involved in Project Planning and Implementation?

Less than one year

1 to 2 years

3 to 5 years []

6 to 8 years []

More than 8 years []

4. Which project are/were you involved in (pick one which you were involved fully from inception to completion)?

JICA []

ADB []

EU []

KIDDP []

5. How long has the project scheduled to take to complete?

Less than a year []

1 to 2 years []

3 to 5 years []

6 to 8 years []

6. How long did the project take to complete?

7. Less than a year []

8. 1 to 2 years []

9. 3 to 5 years []

10. 6 to 8 years

Funding Requirements

7. To what extent does funds requirement influence projects funds utilization in Tana Water Services Board?

Very great extent

Great extent

Moderate extent

Low extent

No extent at all

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

Yes No

9. Did the project produce quarterly reports comparing actual expenditures to budgeted expensed?

Yes No

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

Yes No

11.To what extent do the following aspects of funding requirements influence projects funds utilization in Tana Water Services Board?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
Size of the project					
Amount per project					
Priority of project					
Approval by authorities					

Institutional Capacity

12. To what extent does institution capacity influence projects funds utilization in Tana Water Services Board?

Very great extent []

Great extent []

Moderate extent []

Low extent []

No extent at all []

13. Was the project staffed appropriately?

Yes [] No []

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

Excellence []

Good []

Moderate []

Bad []

Poor []

15. To what extent do the following aspects of institution capacity influence projects funds utilization in Tana Water Services Board?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
No. staff					
Resources					
Training of staff					
Skills and competence					

Management Information Systems

16. To what extent do management information systems influence projects funds utilization in Tana Water Services Board?

Very great extent []

Great extent []

Moderate extent []

Low extent []

No extent at all []

17. Has your organization adopted management information systems in projects funds utilization?

Yes [] No []

18. Does the water sector have a common IT supported reporting information influence projects funds utilization in Tana Water Services Board?

Yes [] No []

19. To what extent do the following aspects of management information systems influence projects funds utilization in Tana Water Services Board?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
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IT supported report system					
E –financial management system					
Adequacy of IT resources					
Competent staff					

Policy Framework

20. 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 []

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

- Hardly ever meet []
- Monthly []
- Quarterly []
- Yearly []
- When need arises []

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

Excellent

Good

Fair

Bad

Poor

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

Yes

No

24. To what extent do the following aspects of sector policy framework influence projects funds utilization in Tana Water Services Board?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
Public awareness					
Feedback channels					
Regulations					
Chain of command					

Fund Utilization

25. How do you rate projects fund utilization in Tana Water Services Board?

Excellent []

Good []

Fair []

Bad []

Poor []

26. How do you rate the following in relation to projects funds utilization in Tana Water Services Board?

Stringent funding requirement					
Institutional capacity					
Policy framework within the sector					
Management information system					