

**DECENTRALIZED POLICY MANAGEMENT AND PERFORMANCE OF WATER
AND SANITATION DEVELOPMENT FACILITY-NORTH, LANGO SUB-REGION, IN
NORTHERN UGANDA**

By

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DECLARATION

I, Josephine Apajo, have read and fully understood the rules of Uganda Technology and Management University (UTAMU) concerning plagiarism. I hereby state that this work is my own and has not been submitted to any other institution for another degree or qualification, either in full or part. Throughout the work I have acknowledged all sources used in its compilation.

Signature:

Date:

APPROVAL

This is to certify that this dissertation titled, ‘Decentralized Policy Management and Performance of Water and Sanitation Development Facility-North, Lango Sub-region, in Northern Uganda’ was submitted with our approval as the authorized and nominated supervisors of Uganda Technology and Management University.

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Signature:

Date:

DEDICATION

I dedicate this dissertation to my children, parents and the entire wider family who have been my source of inspiration during the course of my study.

May God reward them!

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I thank the Almighty God and family for the strength, support and guidance without which the process of researching, writing and production of this dissertation would have been impossible.

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ABBREVIATIONS

CAO:	Chief Administrative Officer
CDO:	Community Development Officer
CNDPF:	Comprehensive National Development Planning Framework
ENRWG:	Environment and Natural resources working group
GIZ:	Deutsche Gesellschaft für Internationale Zusammenarbeit
CES:	Accompanying Measures Consultancy
JSP:	Joint Sector Performance
JPF:	Joint Partnership Fund
LCs:	Local Council
LCV	Local Council Five
LED	Local Economic Development
MWE:	Ministry of Water and Environment
NDP:	National Development Plan
PPDA	Public Procurement Disposal of Assets
RGCs	Rural Growth Centers
SAS	Senior Assistant Secretary
STs	Small Towns
TSU:	Technical Support Unit
UTAMU:	Uganda Technology and Management University.
UWSSD:	Urban Water Supply and Sewerage Services Department
WESWG:	Ministry of Water and Environment Sector Working Group
WSDFs:	Water and Sanitation Development Facilities

WSDF-N: Water and Sanitation Development Facility-North

WSS: Water and Sanitation Sector

WSSWG: Water and Sanitation Sector Working Group

CVI Content Validity Index

ABSTRACT

The research focused on the influence of decentralized policy management and performance of deconcentrated structures in the Ministry of Water and Environment in Uganda with a case study of Water and Sanitation Development Facility-North. It covered a selected number of districts of Lango sub-region in northern Uganda namely, Oyam, Apac, Dokolo, Lira and Amolatar. The performance was the dependent variable with decentralized policy management being the independent variable (i.e. measures of decentralized planning, implementation, monitoring). The objectives of this study was to discover and document the influence of decentralized planning, implementation and monitoring on performance and the employee capacity to manage the decentralized policy. The study sampled 138 respondents out of which 104 responded; 75% of the respondents were male and 19% female. The results of the research reflected a positive but weak relationship between decentralized planning ($r=0.379$, sig 0.00), decentralized implementation ($r=0.429$, sig 0.00) and decentralized monitoring ($r=0.262$, sig 0.012) on performance of the deconcentrated structures. Twenty one and a half per cent (21.5%) of Decentralized Performance is explained by decentralized Planning, decentralized Implementation and decentralized monitoring. Decentralized planning contributed 43% in performance while decentralized implementation contributed 35.5%. Employee capacity had a negative influence on the dependent and independent variables. Therefore, further research is suggested to investigate the other factors that contribute to decentralized policy management on the performance of deconcentrated structures which may include decentralized financing, procurement and management style among others.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The study examined the influence of Decentralized Policy Management (DPM) on the Performance of Water and Sanitation Development Facility North (WSDF-N), in the Ministry of Water and Environment (MWE); Lango sub-region, Northern Uganda. The decentralized policy management in this study meant “deconcentration” defined as the process through which the central authority establishes fully staffed branch offices. (Bray and Mukundan, 2003:3). In the study, decentralized policy management was the independent variable and performance was the dependent variables.

Ewan (2010:21) explained that decentralized policy management is as old as mankind in the field of natural science and is one of the government structures whose aim is to ensure quality and affordable public service delivery to users is timely, efficient and reliable. It is also an effective way of ensuring these institutions are properly accountable to the general public, as described in the NDP 1 (2010:352)

Governments are responsible for the provision of public services such as water, education, health, sanitation, road infrastructure among others. In the early 1990s, governments of the developing countries were failing in their public-service-delivery responsibilities at various levels. This failure took various forms such as extremely poor quality service delivery, corruption and absenteeism from workplaces by policy implementers. The problem proved bothersome to not only most of these governments but donor communities as well. To deal with

it, various reforms were instituted which included the introduction of decentralized policy management in most developing countries.

Larbi (1999:11) noted that poor service delivery pushed public administrators and managers in development countries to undergo reforms despite being driven more by external pressures that took place in form of structural adjustment programme. Mugabi (2004:2) explained that decentralized policy management in Uganda was unique in comparison to other African countries as it was government-led (and not donor driven) which enabled it to attract the attention of both the political and public administrators. The researcher concurs with the scholars because the reform introduced a new business style of management that encourages contracts management, private sector involvement and emphasis on customer orientation as opposed to the traditional style which was previously in place. .

Poteete (2000:1) explained that policies to decentralize management of natural resources are often motivated by a desire to regulate a system of management that is already decentralized such as forests, lakes, rivers, minerals, fisheries and wilderness products. In addition, Steffensen, (2010:15) noted that features of many tasks/activities in the water and sanitation sector (WSS) offer great opportunities for decentralized policy management, including the shifting of power, competencies, responsibilities and resources from the central government to the local government and not forgetting other regional offices. And since there is no blueprint for decentralization, its implementation style varies from country to country depending on the systems of governance, balance of functions and division of responsibilities, funding and staff management and capacity as explained by Steffensen, (2010:15). He continued to aver that rural

water supply is frequently devolved to the local governments while urban water supply is generally characterized by larger investments and is often under a separate kind of delegated management systems that involves assigning local government lesser roles and more often than involves frequent use of project (Steffensen (2010:4). The latter style often run the risk of undermining division of labour due to its confusing links of accountability, discrepancies between the stated decentralization objectives and practices, legal framework, lack of funding, human resource gaps and disagreements amongst stakeholders on their roles and responsibilities.

This study's aim was therefore to assess the influence of decentralized policy management - the delegated management systems – on Water and Sanitation development in the Lango sub-region of northern Uganda and how it influenced service delivery at the lower levels of the communities covered.

1.2 Background to the Study

1.2.1 Historical perspective

Titeca and Kristof (2005:20) discussed that decentralized policy management in Uganda started way back with the signing of the African Native Authority Ordinance of 1919 when chiefs who were appointed at the village, sub-county and county levels came to an agreement. Their finding was corroborated by Nelisson (2011:12). Mugabi (2004:2) added to the discussion that the constitution of Uganda at independence in 1962 introduced a decentralized policy management system as hybrid of federalism, semi-federalism and unitary systems that granted federal status to the kingdoms of Buganda, Ankole, Bunyoro, Toro, Busoga and provided for Councils to be established in the districts of Acholi, Bugisu, Bukedi, Karamoja, Kigezi, Lango, Madi, Sebei, Teso and West Nile (

In 1986, the importance of decentralized policy management was overemphasized and this led to the formation of resistance councils that are known today as the Local Council (LCs) that provide platforms on which local authorities interface with ordinary people at various administrative levels. In 1992, administrative officers at the rank of Under Secretary were posted to districts as District Executive Secretaries (today known as Chief Administrative Officer), according to Mugabi, (2004:3)

This was reinforced in the 1995 Constitution of the Republic of Uganda and the Local Governments Act of July 1997, in which it was stated that “decentralization shall be a principle applied from higher to lower levels of local governments to ensure peoples’ participation and democratic control in decision making is enshrined and that the government functions and powers of the people at appropriate level shall be decentralized so as to ensure that they are equipped to manage and direct their own affairs” (Mugabi, 2004:3).

In 1997, a decentralization policy was introduced in Uganda and provided for under the 1995 Constitution of the Republic of Uganda as underpinned by Mugabi (2004:4) and it states “Decentralization shall be a principle applying to all levels of local government from higher to lower local governments to ensure peoples’ participation and democratic control in decision making and that the government functions and powers of the people at appropriate level shall be decentralized so that they can best manage and direct their own”. The enactment of the Local Governments Act which was in July 1997 was followed up in June 2001 and November 2003

with emphasis placed on strengthening decentralization policy by ensuring there were constitutional provisions for its smooth implementation.

1.2.2 Theoretical background

This study was anchored on the theorem of decentralization (Vazquez, 2011:2), the Oates theorem of decentralization of 1997 states that *“in the presence of diverse preferences and needs, provision of services from a decentralized government will lead to increased citizen welfare”* with the assumptions of information asymmetry, tastes are heterogeneous and no interregional spillovers, decentralized policy management is best preferred (Pranab, 2002:190) and Graco (2003:2) concurred that citizens of each region will have control over information obtained locally and will directly implement their plans. Decentralized policy management is seen to increase in efficiency where central state authorities lack time and place of knowledge to implement policies and programmes that reflect people’s needs and preferences (Jutting et al, 2004:8)

And the organizational theory as contributed by Max Weber, Taylor and Abraham Maslow on the importance of planning, organizing, staffing, controlling, training of human resource and human relations to organization performance will inform the study. The researcher will appreciate the organizational theory behind the success of people with the aim of achieving set goals as a collective unit that they cannot individually. This kind of relationship is what is described in management as organizational structure which in turn leads to management systems that exist in the modern world today (Tran and Tian, 2013:229).

1.2.3 Conceptual Background

Pranab (2002:187) defined decentralized policy management as a governance concept involving the dispersion of some responsibilities to not only regional branch offices but also local governments that implement particular projects at the local level. Renu (2014:1) added that decentralization means bringing services closer to the local people to empower them through local bodies. Over 80% of all the countries have experienced decentralization in form and they are found in Europe, Asia (China and India) as well as most African countries such as Uganda, Kenya, Senegal, Malawi among others.

Steffensen (2010:10) indicated the five pillars of effective decentralized policy management that included (i) assignment of functions (ii) financing decentralized services (iii) human resource management within decentralized systems (iv) local accountability structures that take into account how decentralized services can be locally responsive and (v) the role of central government in carrying out its oversight role and coordinating its function.

Decentralized planning refers to planning at the bottom, according to Renu (2014:1) goes on to elaborate that local authorities are fully empowered to formulate, adopt, plan and implement without interference from the center. Ezigbo (2012:128) suggested that in decentralized policy management, top executives delegate much of their decision making powers to the lower tier and that under such structures, managers express confidence in the ability of employees to perform at

a higher level which increases innovation, faster decision making process, greater job satisfaction and commitment as well as optimizing talents of the employees within the organization.

For instance, the Permanent Secretary of Ministry of Water and Environment of Uganda delegated procurement and accounting function to the Branch Managers as sub-accounting officers. These facilities formulate, adopt and implement their work plans with minimal interference from the center and have full-fledged accounts and procurement committees to make payments and undertake procurements of up to 2.5 billion thresholds with minimal supervision from mother ministry as per the WSDF Manual (2014:141).

Ezigbo (2012;125) asserted that decentralized implementation is when execution of tasks are conducted at the lower level of management and only broad powers of policy making, planning, coordination, supervision and oversight are reserved for the top level of government.

Welsh and McGinn (1999:19) defined decentralized implementation as a shifting authority for implementation of rules, but not for making them. In the case of water and sanitation sector in Uganda, Ministry of Water and Environment has decentralized policy management structures “known as deconcentrated structures” across the country to fully implement water and sanitation mandate and that includes 8 regional Technical Support Units (TSU) in charge of rural water services, Four (4) regional Water and Sanitation Development Facilities in charge of development of piped water supply system in urban areas.

Four (4) regional Water Resources Management Zones to plan, implement, manage and monitor the implementation of activities and the four 4 regional Umbrella organizations in charge of

operations and maintenance of water supply systems. Tran and Tian (2013:231) noted that under decentralized implementation, front-line employees are always empowered to make on *the spot decisions* to meet customer needs.

Sebahara (2004:2) defined decentralized monitoring as the transfer of monitoring responsibility of public projects and programmes to the lower levels of government with minimal disturbance from the central government to empower project managers and stakeholders of the progress attained, goals achieved and the utilization of funds. Pranab (2002:185) explained that decentralization monitoring provides for checks and balances at the project level where locals continuously inspect and assess the performance of the decentralized projects thus enabling public servants to be more efficient and responsive to the citizens and is more effective if operated concurrently with the central government and requires protection against its own enthusiasts from the free-market advocates and from the anarcho-communitarians who ignore community failures that may be as serious as the market failures.

1.2.4 Contextual background

In many African countries (Uganda inclusive) privatization, commercialization and decentralization became part of reform agenda. In the case of Uganda, the introduction of Comprehensive National Development Planning Framework (CNDPF) in 2007 resulted into a shift in development planning mechanism from a needs-based to a proactive vision-based planning that resulted into Uganda Vision 2040 and National Development Plan.

The emergence of Local Economic Development (LED) as one of the pillars of decentralization; the emerging emphasis of Public Private Partnerships in planning and the need to provide for adequate participation of non-state actors in the planning and budgeting processes which introduced a new planning paradigm; strike a balance between bottom-up and top-down and re-orient Local Governments from being mere Service delivery units to wealth creating entities that will facilitate socio-economic transformation and ensure effective participation of Civil Society as per the local government development planning guidelines (2014:1).

To increase efficiency and effectiveness in service provision in the water and sanitation sector, the government of Uganda merged Water and Sanitation Sector Working Group (WSSWG) with the Environment and Natural resources working group (ENRWG) to form the Ministry Of Water and Environment Sector Working Group as asserted by Nuwamanya (2004:15).

The Ministry adopted the decentralized policy management in the implementation of water and sanitation services country wide which led to the establishment of Water and Sanitation Development Facilities (WSDFs) as decentralized management systems whose service delivery and funding mechanism focuses on provision of water supply and sanitation to small towns and rural growth centers in North and West Nile (WSDF-North), North East and Eastern (WSDF-East), Mid-Western and Central (WSDF-Central) and South Western and Western (WSDF-SW). This decentralized approach was piloted in the Southern parts of the country and its successful implementation approaches were upscale countrywide WSDF Operations Manual (2014: 156)

The WSDF has been developed as a funding instrument for water and sanitation infrastructure. “*Effective funding mechanism for small towns’ investments*”, WSDF Operations Manual 2014 to contribute towards two Joint Sector Performance and Urban Water Sewerage Services Department objectives (JPF-UWSSD) themes namely: (i) *To increase water supply service coverage for STs/RGC in a pro-poor sensitive*, and (ii) *To improve urban sanitation and hygiene services in STs/RGCs through* (a) Constructing Piped water supply systems and Sanitation facilities in STs/RGCs; (b) Carrying-out promotional campaigns aimed at improving latrine coverage, personal hygiene like hand washing after latrine-use, and catchment protection (c) Building capacities of local authorities and communities to sustainably operate and manage the investments and (d) Sensitizing communities on water and sanitation through Radio programmes, traditional methods and print media (Uganda Water and Sanitation Sector Strategic Plan - 2013-2018).

1.3 Statement of the Problem:

Gordon (2008:1-10) alluded to the fact that Uganda has one of the clearest legal frameworks for decentralized policy management on the African continent. However, although citizens continue to demand for quality and affordable services at the local level, they are not yet empowered to effectively engage in demanding for participation in planning, decision making and implementation of government projects and programmes as outlined in the NDP 1(2010: 352). Despite the government’s effort in introducing decentralized policy management, public services delivery continues to decline rapidly as a result of government’s declining ability to provide necessary funds, poor management, misuse of funds, lack of political will and commitment, conflict, limited knowledge and experience as well as unpredictable growth in demand caused by

rapid population growth, urbanization and highly centralized red tape service delivery yet the consumers of services like water are at the local level (Robinson 2007:2). Nelisson (2011:85) asserted that Uganda water service provision was as low as 18% in 1986 but increased only to 42% in 1991 and access to safe water has remained stagnant at 65% and sanitation levels have worsened to 32% as cited in the Ministry of Water and Environment Sector Performance Report (2014:22) despite government's efforts to decentralize its services to the grassroots. Therefore, this research analyzed the influence of decentralized policy management action on performance of Water and Sanitation Development Facility-North, Lango sub region, Northern Uganda.

1.4 Purpose of this Study

The research assessed the influence of decentralized policy management on performance of Water and Sanitation Development Facility North, Lango in northern Uganda.

1.4.1 Objectives of the Study

- 1) To establish the influence of decentralized planning on performance of WSDF-N
- 2) To examine the influence of decentralized implementation on performance of WSDF-N
- 3) To establish the influence between decentralized monitoring and performance of WSDF-N
- 4) To establish the influence of employee capacities on performance of decentralized policy management systems

1.5 Research questions

- (i) What is the influence of decentralized planning on performance of WSDF-N?
- (ii) How does decentralized implementation influence the performance of WSDF-N?
- (iii) What is the influence between decentralized monitoring and performance of WSDF-N?
- (iv) To what extent does the employee capacity in decentralized policy management influence performance of WSDF-N?

1.6 Hypothesis testing

The research tested 4 (four) sets of hypotheses and they are indicated below.

Ho: There is no significant relationship between decentralized planning on performance of WSDF-N

Ha: There is significant relationship between decentralized planning on performance of WSDF-N

Ho: There is no significant relationship between decentralized implementation on performance of WSDF -N

Ha: There is significant relationship between decentralized implementation on performance of WSDF-N

Ho: There is no significant relationship between decentralized monitoring on performance of WSDF-N

Ha: There is significant relationship between decentralized monitoring performance of WSDF-N

Ho: There is no significant influence between employee capacity as reflected in the performance of WSDF-N and decentralized implementation, planning, monitoring.

Ha: There is significant influence of employee capacity on decentralized implementation, planning, monitoring and performance of WSDF-N

1.7 Conceptual framework

The conceptual framework was guided by decentralized public policy management with emphasis on decentralized planning, implementation and monitoring how that impacts the performance of public sectors. The conceptual framework indicated the relationship between the independent variable (decentralization policy management) and dependent variable (performance). The conceptual framework of the study adopted the argument presented by Steffensen (2010: 10-12) that decentralized policy management promotes people's participation in important government functions such as decision making, identification of problems, priority setting, planning and monitoring the implementation of any programmes which in turn ensures better allocation and utilization of resources. He emphasized that when people are involved in their own governance through decentralization policy management, accountability on the part of office bearers is enhanced hence leading to more efficient utilization of public resources which, in turn, promotes development.

Figure 1.1 Conceptual frameworks

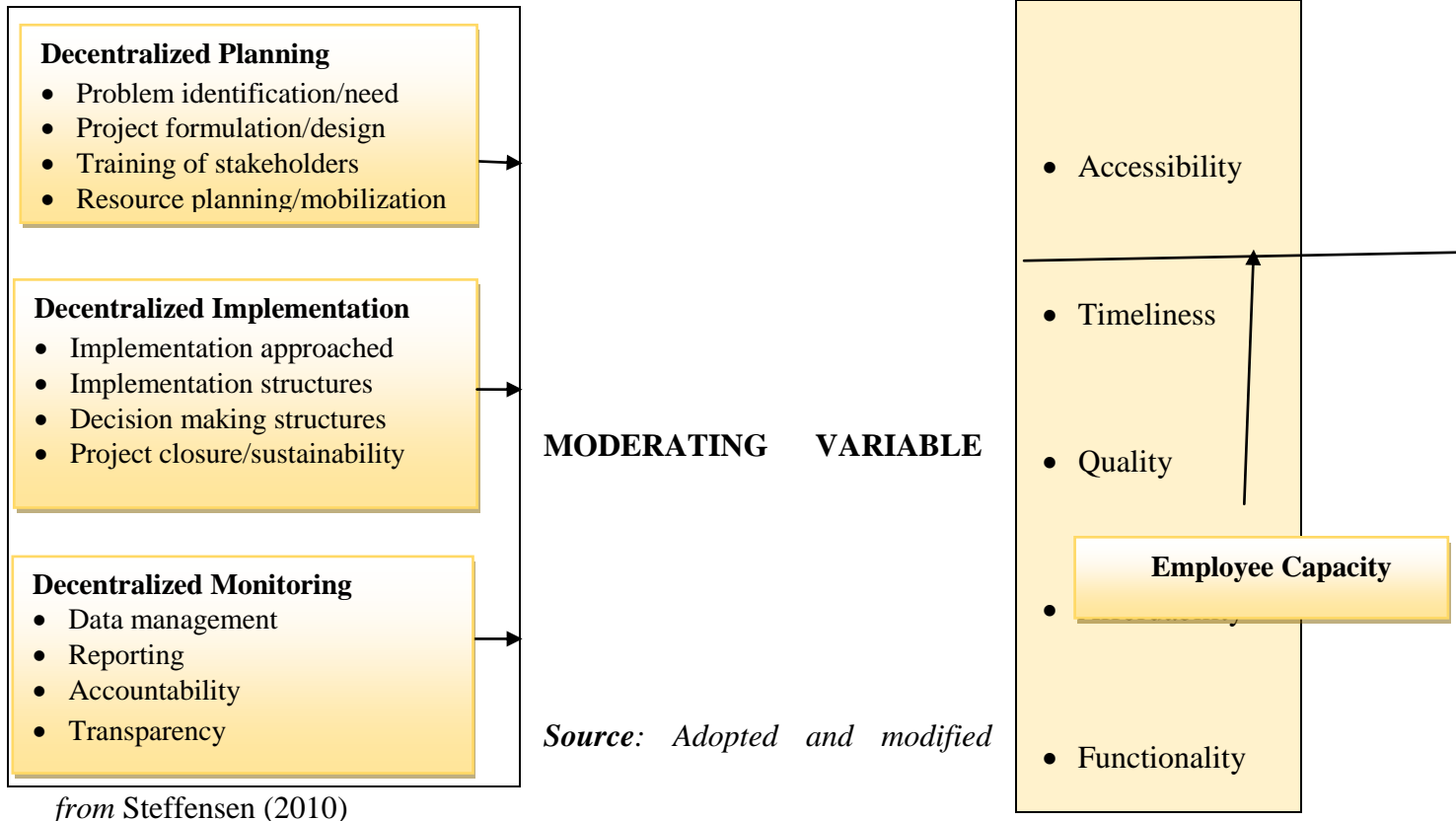
Independent variables

Dependent variables

DECENTRALIZED POLICY

MANAGEMENT

PERFORMANCE



1.7.1 Relationship of Variables

The study adopted a many to one relationship whereby Decentralized policy management had many variables all pointing to the performance of Water and Sanitation Development Facility-North. Decentralized policy management as the independent variable was measured by decentralized planning whose variables included decentralized problem identification, project design and resource mobilization and these planning activities have either positively or

negatively influenced performance of WSDF-N. Performance being the dependent variable for the study was measured by affordability, accessibility, quality, timeliness and functionality as indicated in the conceptual framework. The dependent variables are likely to have positive outcomes with well implemented decentralized policy management. Employee capacity was the intervening variable. For decentralized structures to be effective, continuous capacity building, training and sensitization positively skew the performance.

1.8 Significance of the Study

The research contributed to the debate of decentralization in assessing the influence of decentralized policy management system on performance of water and sanitation development facilities in Uganda, with special emphasis on small town water projects within northern Uganda. The study was to benefit and help guide the future researchers in their quest to hopefully bridge some of the gaps that previous researchers may have left as far as decentralization policy on performance is concerned.

1.9 Justification of the study

In Uganda, very good policies have been formulated. However, there are few cases where such policies have been properly implemented, monitored and evaluated. The biggest challenge has always been the documentation of implementation processes. Therefore, the justification of this study is in its bid to fill the documentation gap as a way of evaluating the implementation of decentralized policy management that was introduced in the Water and Sanitation Sector and how the cited policy has influenced the performance of Ministry of Water and Environment in Uganda.

1.10 Scope of the study.

1.10.1 Geographical Scope

The research covered water and sanitation projects implemented by WSDF-North within the Lango sub-region of northern Uganda.

1.10.2 Content Scope

The study was limited to administrative decentralization and specifically focused on decentralized policy management by taking into account the processes of decentralized planning, implementation and monitoring and evaluation and how they have influenced the performance of the WSDF-N in the ministry of water and environment in Uganda.

1.10.3 Time Scope

The study will take into consideration a time period of six years that is from 2009 to 2016.

1.11 Operational Definitions and concepts

Decentralized policy management refers to the transfer of authority and responsibility from one level of government to another while maintaining the same hierarchical level of accountability from the localized units to the central government ministry or agency which has been decentralized.

Delegation refers to the transfer of decision-making, management authority and responsibilities from the central government to specialized organizations with some degree of autonomy.

Administrative decentralization refers to transferring decision-making authority, resources and responsibilities from the central government to other levels of government, agencies and field offices of central government line agencies.

Decentralized planning refers to planning at the bottom

Decentralized implementation as a shifting authority for implementation of rules, but not for replicating them into the lower level of management since broader policy making powers such as planning, coordination, supervision and oversight are reserved for the top level of government.

Decentralized monitoring is the transfer of the responsibility of monitoring of public projects and programmes to the lower levels of government and information-gathering is decentralized at the regional offices or lower local governments

Deconcentration refers to the transfer of authority and responsibility from one level of central government to another while maintaining the same hierarchical level of accountability from the localized units to the central government ministry or agency whose operations have been decentralized.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the theoretical review, conceptual review and actual literature review. The actual literature review was based on the following objectives:

It is argued that decentralization promotes local involvement in decision-making and supervision is expected to reap both allocation gains (i.e. increased effectiveness through better targeting and better response to priority needs) as well as efficiency gains (through better tuning to local circumstances and increased governance and accountability). This means that decentralization is expected to enhance both the effectiveness and efficiency in the allocation and use of public funds. This is not least the case scenario where immediate beneficiaries (either directly or through representation) are involved in planning or allocation of public resources as described by Hans (2007:4).

2.2 Theoretical review

Decentralized policy management is viewed as an effective mechanism of extending and deepening democratization process to the grass-roots in order to promote people-based development within the context of prioritizing human rights, according to Andersen (2007:4-5). Decentralization have historically included the promotion of accountability, transparency, efficiency in governance and service delivery and the empowerment of the masses from grass-root levels through promotion of participation of individuals and communities in their own governance. Sow (2015:22) emphasised that revenue decentralization policy management showed positive relationships and had statistically significant impacts on public service delivery.

These findings might imply the need to accompany expenditure decentralization with sufficient revenue decentralization to ensure improvement of performance.

2.3 Conceptual review

The conceptual framework of the study adopted the argument presented by Steffensen (2010: 10-12) that decentralized policy management promotes people's participation in important government functions such as decision making, identification of problems, priority setting, planning and monitoring the implementation of any programmes which in turn ensures better allocation and utilization of resources.

2.4 Decentralized planning and performance

Decentralized planning involves the delegation of decision making power to the sub-national level with corresponding devolution of resources (Rao 1989:412). Rao further suggested that, with committed decentralized planning, most countries gained their independence because the bottom planning met the objectives of both the central and sub-national interest thus yielding low level public expenditure as these costs were accrued on infrastructure development at local levels.

In the case of Uganda, decentralized planning was first piloted in Bushenyi district and the results and lessons learnt later rolled out to the entire country. Erongol et al (2004: 30) conducted an evaluation report on community-based planning project in Uganda in 2004 the district and found out that decentralized planning was very effective in improving quality of services in

Bushenyi. Results of the report indicated that in 170 parishes and 29 lower local governments in Bushenyi district, three year community-led development plans were developed and funded by the district with support from CARE ranging from US\$270 to 432 in cash and kind to cater for the entire planning process. This exercise yielded improved planning process as well as quality of development plans, inclusive in nature. The results showed that between 2002 and 2004, Bushenyi district experienced an increase in the number of health centers from 61 in (2002) to 71 in (2004). The communities registered an increase in immunization coverage of 96%, safe water coverage from 70% (2002) to 71% (2004).

In Brazil, decentralized participatory budgeting by citizens led to increase in access to water and sewage services (Vazquez 2011:16) and increased efficiency in decentralized irrigation systems as opposed to inefficient centralized systems in India. Similarly, Pranab (2002:199) noted that a study conducted in 149 countries by World Bank in 1994 indicated that 121 completed rural water supply projects which showed that projects with high participation in selection and design were much more likely to have the water supply maintained in good conditions, which would never have been the case with more centralized decision making.

Pranab (2002:197) asserted that household survey on decentralized social assistance programme conducted in Albania indicated that decentralized planning yielded gains in achieving efficiency and cost-effectiveness because local authorities used some additional information in allocating programme benefits among households and that the central allocation of social assistance funds to local authorities was *ad hoc* and not strongly correlated with the levels of poverty in local communities.

The USAID Report on strengthening decentralization project (2007) confirmed that the reform widened opportunities for local people at the village level to actively engage in government programme and projects in aspects of planning, budgeting, public procurement and accountability processes which resulted into amplified central government ability to track and monitor service delivery and accountability expenditures across the country.

Decentralized policy management encourage more collective action, interaction and, ultimately, social capital as advanced by Vazquez (2011:10) who suggested that people exposed to decentralization system tend to be more outspoken adding that there is a positive effect on people's pro-voice attitudes that goes beyond the political environment. However, some researchers found no clear empirical evidence for or against the impact of decentralization on social capital.

2.5 Decentralized implementation and performance of Public sector

Decentralized implementation involves transferring implementation roles and structures to the lower level governments. The implementation approach at the decentralized level involves a mix of government-led, community-driven approaches as well as the inevitable private sector involvement.. Under decentralized implementation, the structures are agreed upon by all stakeholders including the community whose roles and responsibilities are clearly stated as well as those of lower local governments, government and non-government agencies.

A review of World Bank data for 42 developing countries found that, where road maintenance was decentralized, backlogs were lower and conditions of roads were better (Pranab 2002:199).

He further discussed data from a group of developing countries noting that the per capita cost of water in the World Bank funded water projects were 4 times higher in centralized than in fully decentralized systems. In several cases, these infrastructures indicated not only quality improvement but saved costs in project infrastructure after local communities were given some of the management responsibility.

In the Republic of Korea, Shah et al (2004) revealed that infrastructure delivered in decentralized settings offered better quality of workmanship and completion at lower costs than in centralized projects.

Decentralisation implementation was also found to be effective in service delivery in China and India, according to Pranab (2002:185) who noted the effectiveness of implementation through institutionalized decentralization in attaining faster industrial and economic growth as well as major institutional reform in China. India also followed suit in adopting decentralised policy management as a landmark constitutional reform to ensure effective and efficient public service delivery to her citizens.

In the Ugandan context, community driven projects in Bushenyi district were reported to have empowered communities to demand for good governance, transparency and accountability that resulted in communities contributing willingly and freely to the maintenance of public investments like schools, health centres as well as water sources by paying the user or utility fees and monitoring its expenditure; some communities contributed local materials like bricks,

stones, sand and aggregates at sites for construction of physical infrastructure like classroom block and protection of well springs (Erongol et al 2004:35).

2.6 Decentralized monitoring and evaluation and performance

Decentralized monitoring is defined by Falcone (2014:2) as the study of efficient and generalized decentralization monitoring as algorithms to detect satisfaction or violation of any regular specification by local monitor in a system without central observation point. In Uganda, decentralized monitoring is being implemented at regional and lower local government levels where they are empowered to regularly and systematically track implementation progress of public services to assess if the plans are in line with their objectives and performance indicators NDP (2014:53-53).

Monitoring activities in most central and decentralized structures include monthly and quarterly reporting, annual reviews, community meetings to discuss progress, mid-term reviews, joint technical and political monitoring especially the decentralized projects within communities, spot checks, inspections among others.

Uganda is one of the African countries that have encouraged decentralized monitoring as a way of increasing accountability and transparency through the Barraza forum introduced by the government of Uganda in 2009 and was initially piloted in ten (10) districts and currently rolled out in sixty eight (68) districts spearheaded by the Office of the Prime Minister.

A study on Report Human Rights Baraza conducted in Agago District by Human Right Commission generated lessons learnt; under decentralized monitoring, information about projects is easily and cheaply generated and critical intervention aspects that influence performance of projects such as values of local knowledge, progressive cultures and traditions are captured in the project reports. The evaluation results from this program indicated that decentralized monitoring empowers communities to assess government programme and share their experiences with policy makers (Office of the Prime Minister. Project reports, 2011)

In the journal on Local democracy and public accountability in Uganda, Kyohairwe (2004:102) indicated that Public accountability being closely linked to local democracy is largely influenced by the assumption of efficiency and effectiveness in service delivery. As a way of increasing community participation, decentralized local governance has been widely adopted in Uganda to increase public accountability.

2.7 Employee capacity, decentralized policy management and performance of Public sector

Makanyeza et al (2013:11 discussed that to achieve a positive relationship between employee capacity and decentralized structures, managers should continuously motivate employees to be customer-oriented and service workforce; right people with requisite qualifications must be recruited and best people retained. This enables lower level managers perform to their full potential since it initiates a sense of interdepartmental competition.. With the responsibilities being transferred to lower levels, it also gives people living in the covered communities a chance to have their say in the matter; the government's plan is to make people more responsible through participation in the politics of their town (Pellini2000). This also serves to

teach them that playing a political role is not only a preserve of their local politicians but that, as citizens, they can make their civic contribution by being alert and vigilant to point out problems and seek to come up with solutions. With decentralization, a better mechanism for cooperation can be created with other regional organizations (Pellini- 2000). Because of the autonomy enjoyed by local governments under this system, they now have the chance to seek a closer cooperation with non-governmental organizations. In other words, private organization, NGOs and other regional organizations can come together to find solutions to problems faced in areas covered within their sphere of cooperation. This can proved very crucial since local governments do not always have the capacity to solve every problem by itself. It can also be useful in introducing new programs of cooperation among different organizations.

2.8 Empirical Studies

2.8.1 Global perspective

In a study conducted by Andersen in 2004 (Andersern -2004:1272), he stated the dynamism with decentralized system where higher performance was noted in 185 manufacturing organizations operating in diverse industries spanning food processing and computer products. The study shows that both decentralized decision structure and planning activities are associated with higher performance in dynamic environments. These findings confirm how effective organizations that engage in more complex strategy formation processes complement decentralized post-bureaucratic form with formal mechanisms of rational analyses and operational integration.

Evidence from India as presented by Isaac (1997:53-58) in his study titled *Planning for Empowerment: People's Campaign for Decentralized Planning* in Kerala indicated that with

decentralised planning implemented by the Keralan community in India, the community was tasked to actively participate in planning of the Ninth Plan for Kerala in 1990 where 40% of the plan would consist of schemes formulated and implemented from below (decentralised planning) and results showed that local people initiatives with people participation and mobilisation of local resources hold key in successful project implementations. The decentralised planning, according to the same study, contributed to the adoption of voluntary labour and resources for the developmental needs of the local people.

In his study of the impact of decentralization in less developed countries, Robinson (2007:15) suggested that health and education services are better administered by deconcentrated public agencies working under the direct control of central line departments in conjunction with expansive role of private providers as well as introducing user fees, can improve quality and efficiency of resource use. While gains may be realized through efficiency, neither of these approaches is conducive for participatory local governance. Nor are productive outcomes that can guarantee equity and social justice objectives.

Successful interventions are not premised on participation and accountability alone but require attention to political factors (such as commitment, leadership and mobilization), institutional arrangements, financial resources and technical and managerial capacity. Greater emphasis should be given to measuring and monitoring service delivery outcomes under decentralized forms of provision to ensure participation in local governance produces real gains for the poor in terms of improved access and quality of services (Robinson 2007:15).

2.8.2 Regional perspective

Empirical studies on decentralised implementation study conducted by Jani (2011:814) on adult HIV-positive patients enrolled consecutively at primary healthcare clinics in Mozambique, in the trials, nurses tested on-site with POCT CD4, clinical chemistry and hemoglobin devices using finger prick blood gives a better perspective. Results of this study indicated that primary health clinic nurses generated accurate results for CD4⁺ T-cell counts, liver enzymes and hemoglobin using simple POC devices on finger prick samples at decentralized antiretroviral therapy (ART) clinics and the approach to monitor ART at primary healthcare level was technically feasible and was recommended to be utilized in efforts to decentralize HIV care and treatment.

2.8.3 National perspective

Gordon, et al (2008:1-10) in his report noted that Uganda probably had the clearest legal framework for decentralization in Africa, and noted how deeply committed the government is to decentralization. The country was praised as “one of the far reaching local government reform program in the developing world. The findings showed that the decentralization of water and sanitation service delivery in recent years has been accompanied by huge budget increases at the district level in Uganda. But what difference has this investment made and how can results be improved? Traditionally, the evaluation indicators for water and sanitation have focused on physical output and not the results. They typically report on the number of boreholes drilled and latrines built.

2.9 Synthesis and Gaps analysis

It is difficult to isolate the effects of decentralization policy management from other processes in society such as institutional changes in public sector. The econometric issue of the endogeneity issue is also a key factor. Thus, there is need to evaluate whether decentralization is the cause of certain outcomes or simply the effect of other ongoing processes such as democratization or economic growth, and statistical studies need to control the possible presence of reverse causation as advanced by Vazquez (2011:4)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the research design employed, the target study population, sample size and selection; sampling procedures, data collection instrument, data collection methods, validity and reliability; data analysis, measures of variables and ethical considerations.

3.2 Research Design

Creswell (2009,3) defined a research designs as a plan, procedure, assumptions of data management decisions that need to be undertaken to ensure that reliable and valid results of the research is attained and further elaborated. There were three types of research designs that included qualitative, quantitative and mixed approaches. Kotheri (2007, 31-32) also described a research design as a conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data and the hypothesis and its operational implications to the final analysis of data that supports the researcher in organizing his ideas in such a way that reduces flaws and inadequacies during the actual research process.

The research adopted the transformative mixed approach as discussed by Creswell (2009, 15) as transformative mixed methods whose procedures provide for the use of theoretical lens as an overarching perspective within a design that contains both quantitative and qualitative data. This provides for a framework for topics of interest, methods for data collection and outcomes or changes anticipated by the study and involves sequential or a concurrent approach.

A descriptive cross-sectional case study survey research design was adopted for the study because, according to Kothari (2007:37-39), research design must provide for protection against bias, maximize reliability, pre-planned for analysis, structure with well thought instruments and advanced decisions about operational procedures with due concern for economical completion of research study.

3.3 Study population

A population is a complete enumeration of all items in the 'population' also known as a census inquiry (Kothari, 2007:55), while the target population are the complete items to be studied. The overall population was unknown to the researcher. But the study units/categories were known as indicated. In this study, at national level, the target population of the study included Ministry of Water And Environment officials at the department of urban water and sewerage services as well as technical advisors to the ministry.

At regional level, the technical staff at the Water and Sanitation Development Facility-North, an Umbrella organisation for northern Uganda and the Technical staff Units (TSUs) were included among the target population. The GIZ Technical Advisors and CES consultants based in Lira were included among the study population. Members of the regional steering committee for WSDF-North were targeted in the study. The targeted Eight (8) districts in the Lango sub-region were: Apac, Alebtong, Amolatar, Dokolo, Lira, Kole, Oyam and Otuke. District officials, including the District water officer and Community Development officers (CDO) were interviewed. At the town council levels, the Town Clerk, Senior Administrative Secretary (SAS), LC III, Community Development officers (CDO) and Parish Chiefs took part.

At the community level, the study focused on water and sanitation boards with specific targets being representatives of domestic users, business communities, institutions and chairperson social services/technical services in towns that are managed in the respective towns under study.

3.4 Sampling Techniques

Sampling is the process of selecting sufficient numbers of elements from the study population so that a study of the sample and its characteristics would make it possible for the researcher to generalize such characteristics to the population elements (Sekaran, 2003). The researcher adopted both purposive and simple random sampling techniques.

3.4.1 Purposive sampling

Purposive sampling was used to identify the target respondents because they are known and actively engaged in the implementation of decentralised policy management of water and sanitation projects in Lango sub-region. Five (5) Districts in Lango-sub region where water supply and sanitation facilities were constructed by WSDF-North, were selected from the 8 targeted districts. Thus, 5 out of 8 districts that met the criteria were sampled i.e Apac, Amolatar, Dokolo, Lira and Oyam

3.4.2 Simple random sampling

Simple random sampling is a probability sampling where the very item of the universe has an equal chance of inclusion in the sample as described by Kotheri (2007,60). All the sampling units were given equal chances for selection into the sampling frame and simple random sampling was also generated for the targeted categories based on the number of staff within these departments to reduce bias.

3.5 Sample size determination

Kotheri (2007:56) defined sample size as the number of items to be selected from the study population to constitute a sample and urged that size of sample should neither be excessively large nor too small stating that an optimal sample is one which fulfills the requirements of efficiency, representativeness, reliability and flexibility. He went on to aver that while deciding the size of sample, a researcher must determine the desired precision and an acceptable level of confidence in the estimate.

The sample size of the study was determined using the formula where the population is unknown to the researcher, as indicated in the cited formula below from Jaykaran (2013pp):

$$n = \frac{z_{\frac{\alpha}{2}}^2 p(1-p)}{e^2}$$
$$= \frac{1.96^2 * 0.1(1-0.9)}{0.05^2}$$
$$n = 138$$

Where Z=1.96 (95% significance level), n=sample size, $\alpha= 0.05$, $e=0.05$ (margin of error), $p=0.1$ (level of precision)

After determining the actual sample size of the survey, the sample size for each category of the respondents was also determined using the Krejcie and Morgan (1970) table in the annex.

3.6 Data Collection Methods

The study used both primary and secondary data collection methods including document review and interviews. Data was collected using questionnaire surveys and employed online survey

and face to face interview methods as well as documentary review. The researcher used face-to-face interview with the Town Clerks, Ministry of Water and Environment officials, district water officers, district/town health inspectors, water user committees and boards, water users/beneficiaries and provided in-depth information regarding the decentralised policy management to provide the best method for valuable results which generated reliable and valid data that was relevant to research questions and objectives.

A pre-coded questionnaire was emailed to the respondents that are not easily accessible, especially the respondents at the national level, while the local level respondents both at the regional and district levels were interviewed using face to face self-administered interview to reduce non-response rate.

3.7 Data Collection Instruments

3.7.1 Questionnaire Method

A questionnaire is a data collection instrument used to gather data over a large sample or number of respondents (Kombo and Tromp, 2006). A structured questionnaire was developed following the recommended guidelines by various scholars that include Kothari (2005), Sekaran and Bougie (2010) and Saunders et al (2009). It addressed issues of demographic data and the study objectives. In each section, the respondents were given clear instructions on how to complete the item.

3.7.2 Interview Method

An interview guide is a set of questions that the researcher asks during the interview (McNamara, 2009). Interviewing is a very useful approach for data collection because it allows

the researcher to not only have control over the construction of data but also has the flexibility to allow issues that emerge during dialogue and discussion to be pursued (Charmaz, 2002). The researcher designed an interview guide which was used during the interview of the key respondents. In addition, the researcher posed questions with the intention of leading the respondents towards giving the kind of data that met the study objectives including probing the respondents in order to seek clarification about provided responses. A structured interview guide was used to stimulate a detailed discussion on decentralization management policies that influenced performance.

Pre-testing Validity and Reliability of Research Instruments

3.8.1 Validity

Amin (2005, 288) defines Validity as the truthfulness of findings or the extent to which the instrument is relevant in its measurement of variables. The validity of the instrument was quantitatively established using Content Validity Index (CVI). This involved the expert scoring relevance of questions in the instrument in relation to the study variables and the CVI of more than 0.7 implies the valid tool was computed using the formula below:

$$CVI = \frac{\text{No. of relevant items}}{\text{Total N. of items}} * 100$$

$$CVI = \frac{38}{45} * 100$$

$$CVI = 0.844$$

$$CVI = 84.4\%$$

Since the Content Validity Index was 84.4% > 70% then this meant that the data questionnaire was valid to measure what it was intended to.

3.8.2 Reliability test

Reliability is concerned with consistency, dependability or stability of a test (Nachmias and Nachmias, 1996). The researcher measured the reliability of the questionnaire to determine its consistency by testing what they are intended to measure. The Cronbach's Alpha Coefficient, was used to estimate the reliability of the instruments using SPSS 20.0. Upon performing the test, the values that were 0.7 and above were regarded as reliable. In the case of psychometric tests, they must fall within the range of 0.7 and above for the test to be reliable (Creswell, 2009). The formula below was applied to test the reliability of instruments:

$$\alpha = \frac{K}{K-1} \left(\frac{1 - \sum SD_i^2}{SD_t^2} \right)$$

α = Alpha coefficient

K = Number of items in the instrument

\sum = Sum

SD_i^2 = Individual item variance

SD_t^2 = Variance of total score

The validity test was carried out to test for consistency of results amongst the respondents using the Cronbach Alpha statistic. From the results of the table 2, a value of 0.887 was greater than the recommended 0.7 which implied the 88.7% of the results were reliable.

Table 3.1: Results of the Cronbach's Alpha Reliability Coefficient for Likert-type Scale test for Questionnaire

Variable	Number of items	alpha
Decentralized planning (IV1)	7	0.487
Decentralized Implementation (IV2)	9	0.637
Decentralized Monitoring (IV3)	8	0.773
Decentralized performance (DV)	11	0.856

Overall	48	0.887
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Source: Primary data (2016)

3.9 Data Collection Process

The data collection process started with the pilot survey in Kamdini town which had similar target respondents in the target districts and from this exercise, the questionnaire was revised to ensure validity.

After the researcher obtained an introduction letter from the Uganda Technology and Management University (UTAMU) and contacts were made to the target respondents, the received ones were interviewed using both self-administered and interviewer-administered method and other target respondents were sent online questionnaires to fill in. And continuous follow-ups were made to ensure reliable data was collected.

3.10 Data Analysis Procedure

The researcher carried out data coding, data cleaning, descriptive data analysis of all the research variables to include frequencies, mean, variance and standard deviations subjected to decentralized planning, implementation, monitoring, employee capacity and performance and interpretation of research results.

3.10.1 Quantitative data analysis

Data from the questionnaires was arranged, coded, edited for consistency and easiness, and later entered using Statistical Package for Social Scientists (SPSS Version 22). The entered data was later analyzed and the relationships between the determinants that influence decentralized policy

management were analyzed using the Pearson's correlation coefficients. The correlation coefficient always takes a value between -1 and 1, with 1 or -1 indicating perfect correlation. A positive correlation indicates a positive association between variables (increasing values in one variable correspond to increasing values in the other variable), while a negative correlation indicates a negative association between the variables (increasing values in one variable correspond to decreasing values in the other variable). A relationship value close to 0 indicates no association between variables.

Furthermore, regression analysis using SPSS was also used to analyze how (the extent to which) these determinants (independent variables) under investigation influenced routine health information utilization. The study adopted the hypothetical regression model that guided this study which is in the multiple regression equation form of:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n$$

Where: Y is the dependent variable (Decentralized policy management), "α" is a regression constant; β₁, β₂, β₃ and β_n are the beta coefficients; and X₁, X₂, X₃, and X_n are the independent (predicator) variables, and in this study, they are determinants and conclusions generated based on the adjusted R and R-squared to run at the relationship between the dependent and independent variables.

3.10.2 Qualitative data analysis

Regarding qualitative data, key informant interviews were conducted with the members of the water boards, project staff, district officials among whom were town clerks and district water officers, to gain an in-depth understanding of decentralized policy management systems

implemented under the Water and Sanitation Development Facility-North in the northern region of Uganda.

3.11 Measurement of Variables

The researcher adopted both the nominal and ordinal scales of measurement. The nominal scale measurement applied for the sex, age, level of education, category of respondent, among others. Numbers were assigned only for purposes of identification but not for comparison of variables; the ordinal measurement was used to categorize and rank the variables being measured.

The study adopted four-level Likert item, for example, could be: •1 = strongly disagree • 2 = Disagree • 3 = Agree • 4 = strongly Agree to measure respondents' attitudes to a particular question. The neutral option was not considered in this study so as to increase the validity and reliability on the results and eliminate errors as a result of respondents' attitude as they resort to "not sure" as an easy option to take whether or not it is a neutral option is questionable. The study used the ordinal scale generated from Likert scale and analysis of the variables was based on it.

3.12 Ethical considerations

According to Croswell (2009, 87-93) it is important for ethical practices to be taken care of in all phases of the research process, right from identification of topic, problem statement, writing style, targeted participants, research sites, potential readers, data collection methods and analysis procedures to increase the validity and reliability of results. He further explained that Ethical

questions in the current generation focused on personal disclosure, professionalism, professional codes of conduct, authenticity and credibility of the research report, the role of researchers in cross-cultural contexts, and issues of personal privacy through forms of Internet data collection. While in the literature, ethical issues arise in discussions about codes of professional conduct for researchers and in commentaries about ethical dilemmas and their potential solutions.

The researcher was granted permission of a written letter to conduct the study by Uganda Technology and Management University and consent of respondents was pursued to undertake the field data collection. The researcher explained to the respondents the research and its purpose and respondents were informed that participation in this research was voluntary and that the protection of their privacy would be strictly guaranteed by standard of anonymity.

CHAPTER FOUR PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

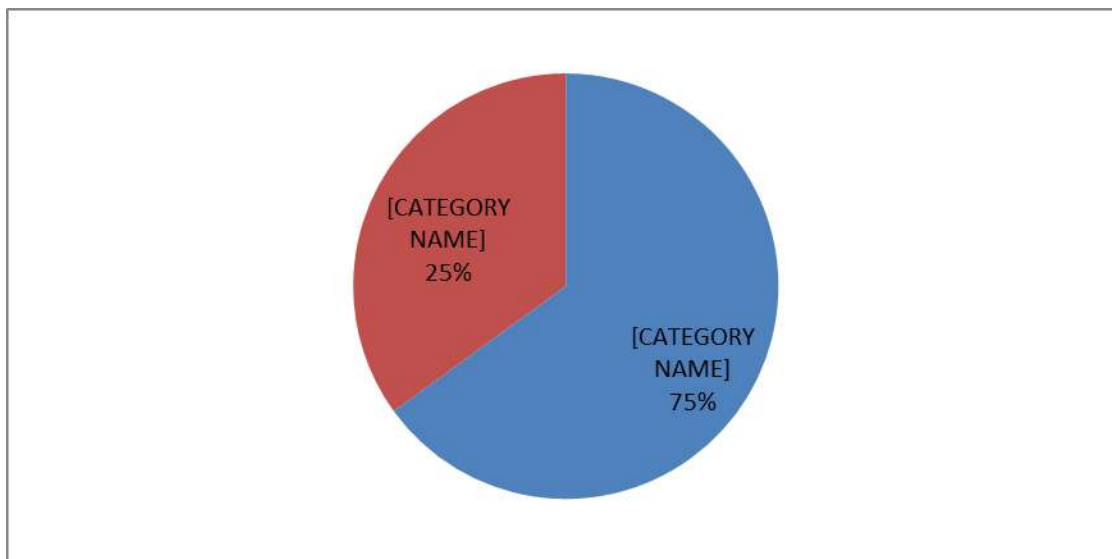
4.1 Introduction

The study examined decentralized policy management on performance of water and sanitation development facility in Lango sub-region in northern Uganda. This chapter presented, analyzed and interpreted the findings of the study. The presentations are done according to the specific objectives beginning with description of sample followed by information of respondents and then descriptive and inferential statistical results along the study objectives.

4.2 Response Rate

A total of 138 questionnaires were distributed to the targeted staff of the selected districts of Oyam, Kamdini, Kampala, Apac, Lira and Amolatar. Out of those 104 filled and returned questionnaires while 34 did not return the questionnaire thus contributing to a response rate of 75%. This is represented in the pie chart below:

Figure 4. 1 Pie chart showing the response rate of respondents from the field



Source: Field data, 2016

According to the findings presented on the pie chart in figure 4.1, Sekaran (2003:25) asserts that a high response rate of 75% is representative of the actual population and can therefore be generalized.

4.3 Demographic information of the respondents

Respondents were asked to clarify on their gender and work experience. This was done to ensure representativeness of the study findings.

4.3.1 Gender of the Respondents

A total of 104 respondents participated in the study and their gender ratio is as presented in Table 4.3.2.

Table 4.3.2 : gender of respondents

Gender of respondent	Frequency	Percentage
Female	20	19%
Male	84	81%
Grand Total	104	100%

Source: Primary data

According to the results in table 4.3 above, the majority of the respondents were males representing 81% while 19% constituted female respondents. This implies that it's mainly men who are employed in this sector.

Table 4.3.3 Showing the level of education and age of the respondents

Characteristics	Category	Frequency	Percentage
Level of Education	PhD	7	6.7%
	Masters	54	51.9%
	Bachelors	43	41.3%
	Diploma	-	-
	Certificate	-	-
	Others	-	-
Age	Less than 25 years	10	9.6
	26-35 years	33	31.7
	36-45 years	30	28.8
	46-55	16	15.3
	56 and above	15	14.4

Source: Primary Data

According to the results in Table 3, the majority 54(51.9%) of respondents were educated up to Master's degree level, 43(41.3%) were educated up to Bachelor's degree level and 7 (6.7%) were educated up to PhD level. This shows that the majority of study respondents were adequately educated. This practically implies that WSDF-N has adequately educated employees who are likely to perform better at their jobs.

The results in the table also show that an overwhelming majority 89 (85.5%) of the study respondents were below 56 years of age, while 15 were above 56 years of age. This indicates that the majority of staff at WSDF-N are in their most productive age group. Such employees are likely to perform better at their jobs.

4.3.4 Work experience

The study also sought to understand the level of experience of the respondents engaged in this research. The findings are as presented in terms of ranges in table 4.3.4 below:

Table 4. 3. 4: Years spent in the organization by sex of respondents

Years spent in the Organization	Female	% age.	Male	% age	Total	% age
1-5 years	12	60%	55	65%	67	64%
6-10 years	5	25%	20	24%	25	24%
10-15 years	3	15%	9	11%	12	12%
Grand Total	20	100%	84	100%	104	100%

Source: Primary data (2016)

The results in table 4.3.5 show that the biggest proportion of 64% of the respondents had worked for a period of 1- 5 years followed by 6-10 years with a percentage of 24%. This meant that 88% of the respondents who participated in this study had experience of not more than 10 years; only 12% had worked for more years. This implies that performance is likely to improve as staff gain experience over time. This augments the factuality of the responses from the interviewed participants.

4.4 Level of involvement in the water and sanitation activities

The target respondents were asked to rate their level of involvement in the activities of Water and Sanitation Development Facility North based on a Likert scale as presented in table 4.4 below .This was done to establish the level of awareness and knowledge of respondents on the topic of study.

Table4.3.1 : Rate of involvement in the water and sanitation activities

WSDF-North Activities	Female	% age.	Male	% age.	Total	% age.
Least Involved		0	6	7%	6	6%
Relatively Involved	4	0.2	13	15%	17	16%
Not sure	6	0.3	19	23%	25	24%
Actively Involved	6	0.3	22	26%	28	27%
More involved	4	0.2	24	29%	28	27%
Grand Total	20	1	84	100%	104	100%

Source: primary data (2016)

From the findings 6% of the respondents were least involved,16% were relatively involved,24 % were not sure,27% were actively involved and 27% were more actively involved in water and sanitation activities. This indicates that majority of the respondents were involved hence their awareness and knowledge in water and sanitation activities.

4.5 Aspects of decentralized policy management on performance of water and sanitation development facility-north.

Findings relating to the objectives of the study are presented in form of descriptive statistics, correlation and regression analysis. This section concludes with testing hypotheses in addition to empirical results from similar studies.

4.5.1The influence of decentralized planning on performance of Water and Sanitation Development Facility –North

In relation to examining the influence of Decentralized planning on performance of water and sanitation development facility, statements regarding the nature of decentralized planning were formulated alongside a five-point Likert scale of SD=Strongly Disagreed, D=Disagreed, N – Not Sure, A=Agreed and SA = Strongly Agreed as shown in Table 4. The responses are summarized in the table below;

Table 7: Shows results of the influence of decentralized planning on performance of Water and Sanitation Development Facility –North

	<i>Strongly Disagree</i>		<i>Disagree</i>		<i>Agree</i>		<i>Strongly Agree</i>	
	Freq	% age	Freq	% age.	Freq	% age.	Freq	% age.
Decentralized planning provided/empowered								
Platform for the community to demand for clean water	1	1%	0	0	51	49%	51	50%
Community Identify land for construction	0	0	1	1%	64	62%	39	38%
Land for project development is provided by the community at no cost	39	38%	10	10%	27	26%	22%	22%
Communities actively engage in identifying project boundaries	0	0	13	13%	62	60%	29	28%
Community decides on the beneficiaries of subsidized water connections	2	2%	17	16%	59	57%	26	25%
Communities participated in trainings	1	1%	3	3%	67	64%	33	32%
districts to lobby for budgetary allocations	10	10%	24	23%	44	42%	26	25%

Source: Primary data (2016)

In the decentralized management system, the communities are supportive in identifying land and other resources for the construction of water facilities. And the respondents were asked whether they fully participate in the identification process and out of the 104 respondents interviewed, 62% agreed and 38% strongly agreed, 1% disagreed. This meant that 99% of the respondents were in agreement with the mean 3.37 and a standard deviation of 0.504 that decentralized planning empowered communities in identification of land for construction of water projects. Views from the key informant's interviews indicated that at the planning stage, WSDF-N engaged with benefiting districts at the level of Resident District Commissioner (RDC), Chief Administrative Office (CAO), Chairperson LCV and District Water Officer (DWO) to come up with the priority list of STs/RGCs that was presented to members of Steering Committee, inclusive of Donors, CAOs, DWOs, other partners in the sectors, and is chaired by the Director, Directorate of Water Development (DWD) for approval.

The researcher further investigated communities supported by decentralized planning to identify beneficiaries of subsidized water connections, 57% agreed, 25% strongly agreed, 16% disagreed and 3% strongly disagreed. Majority (82%) of the respondents agreed with mean a 3.05 and SD= 0.702.

Results of the survey indicated that with the mean value of 2.77 and standard deviation of 0.906 showing that the standard deviation is far from the mean hence divergent response on the land matters. Results in Table 4.4.5 further revealed that, respondents (48%) reacted in disagreement when asked whether land was provided at a cheaper cost or cost free under decentralized planning.. Table 4.4.5 indicated that out of the 104 respondents, 97% were in agreement that the communities in northern Uganda actively participated in the trainings organized by Water and Sanitation Development facility North (WSDF-N) with a mean of 3.27 and standard deviation of 0.561. Malinvaud (1967, 170) argued that decentralized planning is important in aspects where information is scarce, numerous, complex, diverse and the cases where individual firms or highly specialized organizations that have precise knowledge of the conditions governing production in their particular field. This is supported by the argument of Renu (2014:1) that, decentralization means bringing services closer to the local people and empowering them through empowering local bodies.

Correlation results

In order to determine the influence of decentralized planning on performance of WSD-N, correlation and regression analyses were conducted. Pearson correlation coefficient (r) was used to determine the strength of the relationship between decentralized planning and performance. The significance of coefficient (p) was used to test the objective by comparing p to the critical

significance level at 0.05. This procedure was applied in testing the other objectives. The results are summarized in Tables 5 and 6.

Table 8 showing correlation analysis

		Decentralized planning	Performance of WSD-N
Decentralized planning	Pearson Correlation	1	.379*
	Sig. (2-tailed)		.000
	N	104	104
Performance of WSD-N	Pearson Correlation	.379*	1
	Sig. (2-tailed)	.000	
	N	104	104

*. Correlation is significant at the 0.05 level (2-tailed).

According to the results in Table 5, decentralized planning and performance of WSD-N were found to have a significant positive relationship ($r=0.379$, $p<0.05$). Thus, the hypothesis that stated that there is a significantly positive relationship between decentralized planning and the performance of WSD-N.

Based on Table 4.4.6, the $p\text{-value}=0.000<0.05$, the null hypothesis rejected at $\alpha=0.05$, assuming a normal distribution and at 95% level of significance and concluded that there was a significant relationship between decentralized planning on performance of Water and Sanitation Development Facility–North. This practically implies that decentralized planning is very necessary in the performance of WSD-N.

Regression analysis

In order to determine the extent to which decentralized planning influences performance of WSD-N, the regression analysis was conducted. The results are summarized in the Table 9.

Table 9 showing regression results

R square=0.077, P=0.011		
	Standardized Coefficients	Sig.
	Beta	
Decentralized planning	0. 379	0.011

Source: Primary Data

According to the results in the summarized Table 6, findings show that decentralized planning significantly affects performance ($r = 0.379$). Since the correlation does imply a causal-effect as stated in the first objective, the coefficient of determination, which is a square of the correlation coefficient ($r^2 = .077$), was computed and expressed as a percentage to determine the variance in performance of WSD-N. Thus, the findings show that decentralized planning accounted for 7.7% variance in performance of WSD-N. These findings were also subjected to a test of significance (p) and it is shown that the significance of the correlation ($p = .011$) is more than the recommended critical significance at 0.05.

4.4 The influence of Decentralized implementation on performance of WSDF-N

The second objective sought to examine the influence of Decentralized implementation on performance of WSDF-N.

Table 10 showing influence of decentralized implementation on performance of WSD-N

	<i>Strongly Disagree</i>		<i>Disagree</i>		<i>Agree</i>		<i>Strongly Agree</i>	
	Freq	% age	Freq	% age.	Freq	% age.	Freq	% age.
Demand-driven community approach was applied during the decentralized implementation	1	1%	0	0	51	49%	52	49
The private sector is involved in the construction of the water projects under the decentralized implementation	0	0	1	1%	64	62%	40	39%
The government (MWE) plays a supervisory role in the implementation of the project under decentralized implementation	39	38%	10	10%	27	26%	23%	23%
The community is actively engaged in the implementation of water projects under decentralized implementation	0	0	13	13%	62	60%	30	29
A community structure (WSSC) is always established at community level to support decentralized implementation	2	2%	17	16%	59	57%	28	25%
The WSSC has decision powers during the implementation process	1	1%	3	3%	67	64%	35	33%
Decentralized implementation provides a unique project	10	10%	24	23%	44	42%	28	27%

Source: Primary data (2016)

Results in the Table 4.5.8 revealed that out of a total of 104 respondents interviewed, 54% agreed and 40% strongly agreed that their communities were actively engaged in the implementation of water projects under decentralized implementation, with a mean of 3.34 and standard deviation of 0.587. while 51% strongly agreed and 45% also agreed to the statement that government through Ministry of water and Environment (WSDF-N) played a supervisory

role in the implementation of the project under decentralized implementation, with a mean of 3.47 and standard deviation of 0.574.

Table 4.5.8 showed that 53% and 46 % respondents agreed and strongly agreed respectively that in all the completed towns with piped water systems community structure were established by WSDF-N to support decentralized implementation, with a mean of 3.43 and a standard deviation of 0.553

Decentralized implementation provided for private sector involvement in the construction of the water projects as the results revealed that 53% agreed, 40% strongly agreed with a mean of 3.33 and standard deviation of 0.603 and the results were supported by the key informants that interventions of WSDF-N are executed through private firms; consultants and contractors, who are procured through a competitive bidding in line with Public Procurement and Disposal of Assets (PPDA) Act. Outcomes in Table 4.5.8. presented that 88% of respondents were in agreement that decentralized implementation provided a unique project decision making organ that is participatory in nature, with a mean of 3.12 and standard deviation of 0.664.

Under decentralized policy management, 53% strongly agreed, 42% agreed (i.e.95% overall) that their community contributed a user fee to support the operations and maintenance of WSDF-N water projects with a mean of 3.48 and a standard deviation of 0.593. 85% of the 102 respondents indicated that communities appointed their own scheme operator/private to manage the piped water project on their behalf, with a mean of 3.37 and a standard deviation of 0.783 as showed in Table 4.5.8.

This is supported by Pranab (2002:199) who asserts that the implementation approach at the decentralized level involves a mix of government-led, community-driven approaches as well as the inevitable private sector involvement. Under decentralized implementation, the structures are agreed upon by all stakeholders including the community taking into consideration their roles and responsibilities, lower local governments and government and non-government agencies

Correlation analysis

In order to determine the influence of decentralized implementation on performance of WSD-N, correlation and regression analysis were conducted. The significance of the coefficient (p) was used to test the objective by comparing p to the critical significance level at 0.05. The results are summarized in Tables 8 and 9.

Table 8 showing correlation results

		Decentralized implementation	Performance of WSD-N
Decentralized implementation	Pearson Correlation	1	.429*
	Sig. (2-tailed)		.011
	N	104	104
Performance of WSD-N	Pearson Correlation	.429*	1
	Sig. (2-tailed)	.011	
	N	104	104

*. Correlation is significant at the 0.05 level (2-tailed).

According to the results in Table 5, decentralized implementation and performance of WSD-N were found to have a significant positive relationship ($r=0.429$, $p<0.05$). Thus, the hypothesis that stated that there is significant, positive relationship between decentralized implementation and

performance of WSD-F-N. This practically implies that decentralized implementation is very necessary in the performance of WSD-N.

Results generated from Table 4.5.10, the $p\text{-value}=0.000<0.05$, the null hypothesis was rejected at $\alpha=0.05$, assuming normal distribution and the 95% level of significance and concluded that there was a significant relationship between decentralized implementation on performance of Water and Sanitation Development Facility -North

Regression analysis

In order to determine the extent to which decentralized implementation influences performance of WSD-N, the regression analysis was conducted. The results are summarized in the Table 6.

Table 6 showing regression results

R square=0.077, P=0.011		
	Standardized Coefficients	Sig.
	Beta	
Decentralized implementation	0.278	0.011

Source: Primary Data

According to the results in the summarized Table 6, the findings show that decentralized implementation significantly affects performance ($r = .278$). Since the correlation does imply a causal-effect as stated in the first objective, the coefficient of determination, which is a square of the correlation coefficient ($r^2 = .077$), was computed and expressed as a percentage to determine the variance in performance of WSD-N. Thus, the findings show that decentralized implementation accounted for 7.7% variance in performance of WSD-N. These findings were also subjected to a test of significance (p) and it is shown that the significance of the correlation ($p = .011$) is more than the recommended critical significance at 0.05.

Results generated from Table 4.5.10, the $p\text{-value}=0.000<0.05$, the null hypothesis was rejected at $\alpha=0.05$, assuming normal distribution and the 95% level of significance and concluded that there was a significant relationship between decentralized implementation on performance of Water and Sanitation Development Facility -North

4.5 Influence of decentralized monitoring and performance of WSDF-N

The third objective aimed at understanding the influence of decentralized monitoring on performance of WSD-N

Table 10 showing influence of decentralized monitoring on performance of WSD-N

		Freq	%age	N	MEAN
Decentralized monitoring allows for regular site meeting and inspections with all stakeholders	Disagree	2	2%	103	3.36
	Agree	62	60%		
	Strongly Agree	39	38%		
Decentralized monitoring facilitates participatory/joint data collection	Strongly			103	3.19
	Disagree	1	1%		
	Disagree	3	3%		
	Agree	74	72%		
Decentralized monitoring eases the reporting through monthly site meetings	Strongly Agree	25	24%	101	3.26
	Disagree	1	1%		
	Disagree	5	5%		
	Agree	62	61%		
Decentralized monitoring provides feedback on a monthly basis to the stakeholders	Strongly Agree	33	33%	100	3.19
	Disagree	11	11%		
	Agree	59	59%		
Decentralized monitoring increases accountability of the project resources	Strongly Agree	30	30%	103	3.2
	Disagree	12	12%		
	Agree	58	56%		
Decentralized monitoring facilitates information sharing	Strongly Agree	33	32%	99	3.28
	Disagree	5	5%		
	Agree	61	62%		
Access to project information is made easier under decentralized monitoring	Strongly Agree	33	33%	103	3.29
	Disagree	7	7%		
	Agree	59	57%		
Decentralized monitoring supports the	Strongly Agree	37	36%	103	3.2

		Freq	%age	N	MEAN
development of a local database on the project	Disagree				
	Disagree	11	11%		
	Agree	51	50%		
	Strongly Agree	38	37%		

Source: Primary data 2016

According to the table, on average (mean=3.25) respondents agreed that decentralized Monitoring influenced performance of WSD-N. The above findings clearly show that Decentralized monitoring is recommended for improved performance of the activities of WSD-N.

Monitoring activities in most central and decentralized structures include monthly and quarterly reporting, annual reviews, community meetings to discuss progress, mid-term reviews, joint technical and political monitoring especially the decentralized projects within the communities, spot checks, inspections among others. The evaluation results from programs indicated that decentralized monitoring empowers communities to assess government programme and share their experiences with policy makers (Office of the Prime Minister. Project reports. 2011)

Correlation analysis

In order to determine the influence of decentralized monitoring on performance of WSD-N, correlation and regression analysis were conducted. The significance of coefficient (p) was used to test the objective by comparing p to the critical significance level at 0.05. The results are summarized in Tables 8 and 9.

Table 8 showing correlation results

		Decentralized monitoring	Performance of WSD-N
Decentralized monitoring	Pearson Correlation	1	.262*
	Sig. (2-tailed)		.012
	N	104	104
Performance of WSD-N	Pearson Correlation	.262*	1
	Sig. (2-tailed)	.012	
	N	104	104

*. Correlation is significant at the 0.05 level (2-tailed).

According to the results in Table8, decentralized monitoring and performance of WSD-N were found to have a significant positive relationship ($r=0.262$, $p<0.05$). Thus, the hypothesis that stated that there is a significant positive relationship between decentralized monitoring and performance of WSD-N. This practically implies that decentralized monitoring is very necessary in the performance of WSD-N.

Regression analysis

In order to determine the extent to which decentralized monitoring influences performance of WSD-N, the regression analysis was conducted. The results are summarized in the Table 6.

Table 6 showing regression results

R square=0.077, P=0.011		
	Standardized Coefficients	Sig.
	Beta	
Decentralized monitoring	0.255	0.011

Source: Primary Data

According to the results in the summarized Table 6, findings show that decentralized monitoring significantly affects performance ($r = .255$). Since the correlation does imply a causal-effect as stated in the first objective, the coefficient of determination, which is a square of correlation coefficient ($r^2 = .077$), was computed and expressed as a percentage to determine the variance in performance of WSD-N. Thus, findings show that decentralized monitoring accounted for 7.7% variance in performance of WSD-N. These findings were also subjected to a test of significance (p) and it is shown that the significance of correlation ($p = .011$) is more than the recommended critical significance at 0.05.

Results generated from Table 4.5.10, the p -value= $0.000 < 0.05$, the null hypothesis was rejected at $\alpha=0.05$, assuming normal distribution and 95% level of significance and concluded that there was a significant relationship between decentralized monitoring on performance of Water and Sanitation Development Facility -North

4.6 Relationship between employee capacities on performance of WSDF-N

The study also sought to establish the relationship between employee capacities on performance of WSD. Four variables such as WSDF-N having the right staff; projects having the right number of staff to realize decentralized policy management; project teams being empowered to make spot on decisions with minimum interference; project team being readily available to handle any issues were adopted as presented in Table 4.11

Table 4.11 showing the relationship between employee capacities on performance

		Freq	%age	N	MEAN
The staff of the WSDF-North has the right staff with the required qualifications to manage the water projects	Disagree	2	2%	103	3.41
	Agree	57	55%		
	Strongly Agree	44	43%		
The project has the required number of staff to realize decentralized policy management	Disagree	16	16%	102	2.97
	Agree	73	72%		
	Strongly Agree	13	13%		
The project team is empowered to make spot-on decisions with minimal interference of the central government	Disagree	17	16%	104	2.99
	Agree	71	68%		
	Strongly Agree	16	15%		
The project team is readily available to handle project issues	Strongly Disagree			104	2.92
	Disagree	6	6%		
	Disagree	15	14%		
	Agree	64	62%		
	Strongly Agree	19	18%		

Source: Primary Data

The above findings clearly show that employee capacity is necessary for better performance of activities of WSD-N with a mean =2.89 respondents being in agreement. In the study, the researcher investigated whether or not the right staff with required qualifications was employed under WSDF-N and results in Table 4.11 noted that 98% were in agreement with 43%strongly agreed and 55% agreed, and only 2% disagreed with the statement. The results implied that 98% (mean= 3.41 and standard deviation = 0.532) of the respondents interviewed were in agreement that the staff charged with implementation of decentralized policy management system in northern Uganda were highly qualified to steer the process . In addition, 13% strongly agreed

that the projects have the required number of staff to realize decentralized policy management with a mean of 2.97 and 0.535 standard deviation.

Kolehmainen-Aitken (1998:5) in the paper titled *Decentralization and Human Resources: Implications and Impact that decentralization*, argued that demands for a reorganization of human resource issues review of job structures and job descriptions that meet the right employees to conform with new division of powers and resource allocation pattern, reporting relationships to ensure availability of the right combination of skills under decentralized policy management structure.

4.7.2 Correlations analysis of employee capacities in decentralized policy management and performance

The study investigated the influence employee capacities on the performance and decentralized policy management.

Table 4.7.4: Correlations between employee capacities and performance

	Capacity	Performance	Decentralized implementation	Decentralized planning	Decentralized monitoring
Pearson Correlation	1	-.069	-.075	-.113	.113
Sig. (2-tailed)		.506	.466	.253	.269

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Primary data (2016)

From the findings presented in Table 4.6.2, there was a negative influence on employee capacity on performance (-0.069), Decentralized implementation (-0.075), decentralized planning (-0.113) while decentralized monitoring had a positive and weak correlation coefficient of 0.113.

Hypothesis testing

Results generated from Table 4.6.2, the p-value= 0.506>0.05, 0.466>0.05, 0.253>0.05 and 0.269>0.05, accepted the null at $\alpha=0.05$, assuming the data is normally distributed, and 95% level of significance and concluded there was no significant relationship between employee capacity on decentralized implementation, planning, monitoring and performance of WSDF-N

4.7 Decentralized policy management Performance

Performance was measured as an outcome of decentralized policy management. Indicators adopted by the researcher were eleven (11) and included decentralized policy management: bringing clean water; increasing affordability of water and sanitation services; improving functionality of water systems; improving quality of water infrastructure; expediting timely payments; increasing higher chances of timely project completion; increasing competition and innovation during project implement; reducing over concentration of Ministry's work and increasing its volume of output.

Table 4.8.5: Descriptive analysis of the performance variables

	Strongly Disagree		Disagree		Agree		Strongly Agree	
	Freq	%age.	Freq	%age	Freq	%age	Freq	%age.
brings clean drinking water closer	1	1%	1	1%	34	33%	68	65%
affordability of services	0	0	6	6%	53	51%	45	43%
improves functionality of water supply	0	0	4	3%	62	60%	38	37%
quality water infrastructure constructed	1	1%	4	4%	59	58%	38	37%
expedites timely payments	1	1%	13	13%	56	54%	33	32%
higher chances of timely completion	0	0	13	13%	52	52%	35	35%

increases innovation in projects	0	0	8	8%	55	53%	40	39%
increases the volume of output of the Ministry	0	0	4	4%	46	44%	54	52%

Source: Primary data (2016)

Table 4.8.15 indicated that when asked if decentralized policy management improves functionality of the water supply systems in WSDF-N project towns, 37% of the respondents strongly agreed, 60% agreed while 3% disagreed with a mean of 3.33 and 0.548 standard deviation. The results showed that 97% of respondents interviewed indicated that decentralized policy management improves functionality of water supply systems as operations and maintenance is managed and handled by the community, or the sub-county, or the umbrella organizations that are within the vicinity of water supply system as a result of decentralized services, 65% strongly agreed, 33% agreed and 2% disagreed when asked if clean drinking water was brought closer to the communities through decentralized policy management. This implies 98% of respondents were in agreement with the statement indicating that decentralization has a role in increasing access to water supply within communities.

Similarly, Table 4.8.15: Decentralized policy management also improves quality water infrastructure constructed at the local community level as strongly agreed by 37% of respondents with a mean of 3.31 and a standard deviation of 0.597. There is also the timely payment of contractors as strongly agreed by 32% of respondents with a mean of 3.17 and a standard deviation of 0.678. This was further demonstrated by 35% of respondents who strongly agreed that there is timely completion of the projects due to decentralized policy management, with a mean of 3.22 and standard deviation of 0.660. Table 4.8.15 presented that 55% of

respondents strongly agreed that decentralized policy management reduces over concentration of Ministry works with a mean of 3.5 and a standard deviation of 0.626. In addition, 52% strongly agreed that the volume of output of the Ministry is also increased with a mean of 3.48 and a standard deviation of 0.574.

4.8 Model estimation

The study adopted the hypothetical regression model; multiple regression equation form of:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n$$

Where: Y is the dependent variable (Decentralized policy management), “ α ” is a regression constant; β_1 , β_2 , β_3 and β_n are the beta coefficients; and X_1 , X_2 , X_3 , and X_n are the independent (predicator) variables, and in this study, they are determinants and conclusions generated based on the adjusted R and R-squared to run at the relationship between the dependent and independent variables.

Interpretation of the model estimates

From the analysis of findings in table 4.8.1 and Table 4.8.2, the adjusted R Square was 0.215 representing a 21.5% decentralized policy management on performance of WSDF-north. Hence 21.5% of Decentralized Performance is explained by Decentralized Planning, Implementation and monitoring, meaning there are other factors that the survey did not capture that explain Decentralized Performance. Therefore, further research has to be done to investigate factors behind Decentralized Performance.

Table 4.8.6: **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.494 ^a	.244	.215	2.42429		
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
(Constant)	10.955	2.713		4.039	.000	
Decentralized planning	0.430	0.200	0.231	2.147	0.035**	
Decentralized mentation	0.612	0.252	0.267	2.431	0.017**	
Decentralized oring	.192	0.162	0.125	1.180	0.241	

a. Dependent Variable: performance

Source: Primary data (2016)

In Table 4.8.16, it is noted that the model considered independent variables that had a significant relationship with the dependent variable (performance) and decentralized planning had a p-value=0.03<0.05, decentralized implementation had a p-value=0.017<0.05 and these were the only factors considered. Decentralized monitoring p-value=0.241>0.05, was eliminated from the model.

Therefore the model;

$$\text{Performance} = 10.504 + 0.430 \text{decentralizedplanning} + 0.612 \text{decentralisedimplementation}.$$

The Equation above indicated that with the constant of 10.504, decentralized implementation contributes 43% in decentralized planning and implementation contributed 61.2% on performance of the decentralized structures such as Water and Sanitation Development Facility North.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

The study examined the influence of Decentralization Policy Management (DPM) on the Performance of Water and Sanitation Development Facility North (WSDF-N), in the Ministry of Water and Environment (MWE); Lango sub-region, Northern Uganda. The study specifically set out to identify the influence of decentralized planning on performance of WSDF-N, examine the influence of decentralized implementation on performance under WSDF-N, establish the relationship between decentralized monitoring and performance of WSDF-N and establish the relationship between employee capacities on performance of decentralized policy management systems. This chapter presents the summary, discussion, conclusions and recommendations arising out of findings according to the objectives.

5.2 Summary of the Findings

The research focused on the influence of decentralized policy management and performance of the deconcentrated structures in the Ministry of Water and Environment in Uganda and case study of Water and Sanitation Development Facility-North located in the northern part of Uganda and covered selected district of Lango sub-region such as Oyam, Apac, Dokolo, Lira, and Amolatar. Performance was the dependent variable and decentralized policy management was the independent variable (i.e. measures by decentralized planning, implementation, monitoring). Findings of each objective are as summarized below:

5.2.1 The influence of decentralized planning on performance of WSDF-N,

In relation to the dimensions of decentralized planning, 49% agreed to the statement that decentralized planning provided a platform for demanding for clean drinking water in the northern region of Uganda, while 50% strongly agreed to the same statement with a mean value 3.48 and standard deviation of 0.557.

60% of the respondents agreed that decentralized planning supported communities in identification of land for construction of water projects with a mean of 3.37 and a standard deviation of 0.504 and 64% of the 104 respondents agreed that the communities in northern Uganda actively participated in the trainings organized by Water and Sanitation Development facility North (WSDF-N), while 32% strongly agreed to the same with a mean of 3.27 and standard deviation of 0.561.

57% strongly agreed with the statement that decentralized planning supported communities to identify the beneficiaries of subsidized water connections, 25% strongly agreed with the same and only 16% disagreed. This implied that Decentralized planning and performance had a positive relation reflected by the correlation coefficient of 0.379**. Table 4.4.3, the p-value=0.000<0.05, the null hypothesis was rejected at 95% level of significance and concluded that there was a significant relationship between decentralized planning on performance of Water and Sanitation Development Facility –North

5.2.2 Influence of Decentralized implementation on Performance of WSDF-N

The findings revealed that 55% of the respondents agreed that WSDF-N uses a demand driven approach during the implementation of its activities and 39% strongly agreed to the same thereby adding up to a mean of 3.32 and a standard deviation of 0.616.

40% of the respondents strongly agreed that their communities are actively engaged in the implementation of water projects under decentralized implementation, with a mean of 3.34 and standard deviation of 0.587. 51% of the respondents also strongly agreed that Ministry of Water and Environment plays a supervisory role in the implementation of the project. 46% of the

respondents also strongly agreed that there is always a community structure established by WSDF-N to support decentralized implementation, with a mean of 3.43 and a standard deviation of 0.553.

A total of 25% of the respondents agreed that decentralized implementation provided a unique project decision making organ that is participatory in nature, with a mean of 3.12 and standard deviation of 0.664. 53% of the respondents strongly agreed that their community contributes a user fee to support the operations and maintenance of WSDF-N water projects with a mean of 3.48 and a standard deviation of 0.593. 53% of the respondents further strongly agreed that their own community appoints a scheme operator/private to manage the water project on their behalf, with a mean of 3.37 and a standard deviation of 0.783. This means that Decentralized implementation and performance had a correlation coefficient of 0.429** and the p-value=0.000<0.05. We then rejected the null hypothesis at 95% level of significance and concluded that there was a significant relationship between decentralized Implementation on performance of Water and Sanitation Development Facility –North.

5.2.3 Relationship between decentralized monitoring and performance of WSDF-N

In relation to decentralized monitoring, 38% of the respondents strongly agreed that decentralized monitoring allows for regular site meetings and inspections with all stakeholders involved in WSDF-N water projects with a mean of 3.36 and 0.521 standard deviation. 33% of them also strongly agreed that decentralized monitoring eased the reporting through monthly site meetings with a mean of 3.26 and a standard deviation of 0.594. While 24% of them strongly agreed that decentralized monitoring facilitates participatory/joint data collection with a mean of 3.19 and 0.525 standard deviation.

33% strongly agreed that decentralized monitoring facilitates information sharing with a mean of 3.28 and 0.554 standard deviation. 36% strongly agreed that access to that information is made easier under decentralized monitoring with a mean of 3.29 and 0.588 standard deviation. 30% strongly agreed that decentralized monitoring provides feedback on a monthly basis to the stakeholders with a mean of 3.19 and a standard deviation of 0.615. 32% strongly agreed that

decentralized monitoring increases accountability of the resources with a mean of 3.2 and a standard deviation of 0.632.

A total of 37% of the respondents strongly agreed that decentralized monitoring supports the development of a local database on WSF-N projects with a mean of 3.2 and 0.746 standard deviation. Results generated from Table 4.5.2, the $p\text{-value}=0.012<0.05$, the null hypothesis was rejected, and accepted the alternative at 95% level of significance, and concluded that there was a significant relationship between decentralized Monitoring and performance

5.6 Relationship between employee capacities on performance of decentralized policy management systems.

The findings on the relationship between employee capacities and performance of WSDF-N revealed that 43% of the respondents strongly agreed with the statement that WSDF-N had the right staff with required qualifications to manage the water projects. This added up to a mean of 3.41 and standard deviation of 0.5320.

13% strongly agreed that the projects had the required number of staff to realize decentralized policy management with a mean of 2.97 and 0.535 standard deviation. Only 15% strongly agreed with a mean of 2.99 and 0.566 standard deviation that project team were empowered to make on the spot decisions with minimal interference from the central government. 18% also strongly agreed that the project team is readily available to handle project issues as and when they arose, with a mean of 2.92 and a standard deviation of 0.746. This implies that there was a negative influence on employee capacity on performance (-0.069), Decentralized implementation (-0.075), decentralized planning (-0.113), while decentralized monitoring had a positive and weak correlation coefficient of 0.113. In other words, there was no significant relationship between employee capacity and decentralized implementation, planning, monitoring and performance of WSDF-N.

5.7 Decentralized policy management

In regard to aspects of decentralized policy management 68% strongly agreed that clean drinking water is brought closer to them; 55% of the respondents strongly agreed that decentralized policy management reduces over concentration of the Ministry works with a mean of 3.5 and a standard deviation of 0.626 and 3.63 and a standard deviation of 0.561 for the latter.

52% strongly agreed that the volume of output of the Ministry is also increased and 43% strongly agreed that they also afford these water and sanitation services with a mean of 3.38 and 0.594 standard deviation and 3.48 and a standard deviation of 0.574.

37% of the respondents with a mean of 3.31 and a standard deviation of 0.597 strongly agreed that decentralized policy management improves functionality of water supply systems. 37% of the respondents strongly agreed that decentralized policy management also improves quality water infrastructure when constructed at the local communities.

32% respondents strongly agreed with a mean of 3.17 and a standard deviation of 0.678 that decentralized policy management increased timely payment of contractors. This was backed by the assertion of 35% of the respondents who strongly agreed that there is a timely completion of projects due to decentralized policy management. 27% of the respondents strongly agreed that decentralized implementation increases competition and innovation in project implementation, with a mean of 3.16 and standard deviation of 0.598.

39% strongly agreed that innovation in project implementation is increased with a mean of 3.31 and a standard deviation of 0.611.

5.8 Interpretation of the model estimates

21.5% of Decentralized Performance is explained by Decentralized Planning, Decentralized Implementation and decentralized monitoring, meaning there are other factors that the survey did not capture that explain Decentralized Performance.

Performance= $10.504 + 0.430$ decentralized planning + 0.612 decentralised implementation...

Decentralized implementation contributed 43% and decentralized implementation contributed 61.2% on the performance of decentralized structures such as Water and Sanitation Development Facility North.

The results of the research indicated a positive but weak relationship between decentralized planning (0.379), decentralized implementation (0.429) and decentralized monitoring (0.262) on the performance of deconcentrated structures. 21.5% of Decentralized Performance is explained by decentralized Planning, decentralized Implementation and decentralized monitoring.

Decentralized planning contributed 43% in performance while decentralized implementation contributed 61.2%. Employee capacity had a negative influence on the dependent and independent variables.

5.3 Discussion of Findings

5.3.1 Influence of decentralized planning on performance of WSDF-N

Isaac (1997, 53) argued that decentralized planning provides for responsiveness to the local needs and conditions of the society, and further provides for a more integrated development process that is distinct in nature and allows for feasible mobilization of resources, greater participation of people and hence supporting a more transparent planning process which makes implementation more efficient.

The study tested the first hypothesis; *“there is a significant relationship between decentralized planning on performance of WSDF-N”* and it was accepted. This is because there was a

moderately positive relationship ($r=0.379$) between decentralized planning and performance. The respondents to the study moderately agreed that WSDF-N puts emphasis on meeting the needs of beneficiaries since results are more important than following the correct plans and procedures. Majority of the respondents were in agreement with the statements that Decentralized planning provides a platform for the community to demand for clean water and sanitation services through planning meetings at the parishes and sub-counties. This enables communities to actively participate in projects concerning their community and this is done through identification and provision of land for project development. In essence, this empowers district officials to lobby for budgetary allocations to finance their water and sanitation projects. This is attributed to flexible and adaptable work plans. Decentralized planning and performance of WSDF-N were therefore found to have a significant positive relationship.

The results of the study are in agreement with the scholar above with ($p\text{-value}=0.000<0.05$) at 95% level of significance, thus showing a significant relationship between decentralized planning and performance of Water and Sanitation Development Facility–North as a decentralized management structure. Despite the positive significant relationship between decentralized planning and performance, organizations in Uganda, among other countries, continues to over-centralize the planning process which undermines genuine planning process from below or bottom up planning.

5.3.2 Influence of decentralized implementation on performance of WSDF-N

The study found a strong significant positive relationship between decentralized implementation and performance of WSDF-N. The positive relationship could be attributed to the fact that Projects are demand-driven and that the community is actively engaged in their implementation

in form of a user fee to support in the operations and maintenance of the water project. Under the demand driven approach the government (MWE) plays a supervisory role under a community structure established at community level with decision powers to support decentralized implementation. Implementation is timely, open and participatory and gives feedback. Effective implementation is therefore needed for management to develop and sustain a competitive advantage for organizational performance and improvement (Avolio et al, 1992 and Rowe, 2001), as cited by Femi (2014). Desanctis and Fulk (1999) agreed that decentralized implementation succeeds when employees support the leader and the organization if there is a belief that employees' efforts will be rewarded. Leadership succeeds when initiating response or responding to change - leadership is inextricably linked to the credibility of those in leadership. Constituents will become willingly involved to the extent that they believe in those sponsoring the change.

5.3.3 Relationship between decentralized monitoring and performance of WSDF-N

The study tested the hypothesis: *that decentralized monitoring has a significant positive influence on performance of WSDF-N*”, and it was accepted. This was attributed to the fact that Decentralized monitoring is participatory whereby both the beneficiaries and stakeholders are involved in assessment and inspection of the projects. This is done through monthly site meetings where information relating to the project and resources is shared to facilitate accountability. This implies that decentralized monitoring positively influences the performance of WSDF-N. Therefore the relationship between decentralized monitoring and performance of WSDF-N in this study demonstrates the need to enhance motivation and a comprehensive performance appraisal if performance is to improve.

5.3.4 Relationship between employee capacities on performance of decentralized policy management systems

To promote effectiveness, the work people do must be enhanced, and the relationships in organization must be improved. Understanding employment relations (Employee relations or Industrial relations) is essential for management of people at work. Employment relationship describes the interactions that exist between the employer and the employees in the workplace. It focuses on how workplace relations are managed. Formal (e.g contracts and agreements) or informal (psychological contract, assumptions/expectations) between the employer has to offer to the employee.

5.3 Conclusions

Out of the 104 respondents interviewed in northern Uganda, Lango-sub-region, decentralized policy management had a positive relationship on performance of Water and Sanitation Development Facility North with only 21.5% performance of the water and sanitation facility explained by the decentralized implementation and decentralized planning. And Decentralized planning contributed 43% in performance, decentralized implementation contributed 61.2%. Employee capacity had a negative influence on the dependent and independent variables. Only 21.5% of decentralized performance was explained by the decentralized implementation and decentralized planning. Conclusions based on each objective are defined below:

5.4.1 Influence of decentralized planning on performance of WSDF-N

As regards to the dimensions of decentralized planning, it was concluded according to the hypothesis that it had a significant positive effect on performance. The current decentralized planning motivates employees, promotes good performance, improves employee/supervisor

relations, demonstrates fair and equal treatment and improves teamwork, efficiency and effectiveness.

5.4.2 Influence of decentralized implementation on performance of WSDF-N

It was concluded that there is a positive significant relationship between decentralized implementation and performance and this is as a result of timely communication of decisions taken by different organs at WSDF-N. This confirms that there is an open communication given that employees are able to communicate their job frustrations to their supervisors, which in turn motivates and stimulates their enthusiasm to meet the WSDF-N's goals.

5.4.3 Relationship between decentralized monitoring and performance of WSDF-N

It was also concluded that there was a significant relationship between decentralized monitoring and performance; and it was realized that the employees are part of the (WSDF-N) family and feel emotionally attached to it. The employees also feel like even if the organization went down financially, they would still be reluctant to change to another organization. However, the approach encourages commitment rather than the willingness to make a change and this affects the performance. Nevertheless, it was concluded that decentralized monitoring has a relationship with performance of WSDF-N but not significant.

5.5 Recommendations

The foregoing analysis suggests that the concept of decentralized policy management is influenced by a mix economic as well as political and social factors. Thus, in utilizing the concept of decentralization, it would be useful to fully understand its dynamics. The following recommendations are made in support of the dimensions under study:

5.5.1 Influence of decentralized planning on performance of WSDF-N

Decentralized planning should be linked to good governance which embodies the principles of transparency and accountability, respect for human rights and the rule of law. There is need for communities to be actively involved in the projects deal with matters concerning their livelihoods. This requires an appropriate legislative framework that clearly defines responsibilities and powers of stakeholders involved in community development projects. Decentralized planning conducted at the regional level should also be supported to ensure bottom-up plans are generated to boost performance.

5.5.2 Influence of decentralized implementation on performance of WSDF-N

Effective decentralized implementation needs adequate financial and staff resources. Sub-national governments must have the legal authority to raise revenue to support its expenditure requirements. Thus, the fiscal relationship between the centre and lower-levels of government must be clearly worked out on the basis of equity, fairness and justice. It is useful that both the centre and lower levels of government engage in dialogue to reduce tension and areas of conflict; more importantly, dialogue is necessary in resolving new challenges. Dialogue is crucial in ensuring co-ordination and guarantees macroeconomic stability – a necessary condition for the implementation of projects.

The Ministry of water and environment should strengthen decentralized implementation through provision of adequate deconcentrated structures to enhance performance.

5.5.3 Relationship between decentralized monitoring and performance of WSDF-N

There is need for accountability and transparency. Decentralization must be accompanied by checks and balances so that there is no abuse of power. This is one way of fighting corruption and clientelism. Corruption implies a breakdown of cooperative behaviour in which few collude to the detriment of all.

Thus, devolving functions to smaller units that are closer to the population should, in theory, increase consensus and legitimacy concerning the choice of public services. This, in turn, can be expected to foster cooperation, vigilance, as well as acceptance of and adherence to rules of public sector integrity ('rule-obedience') (Azfar, O et al, 2005). This would be effective where the financing of public services is decentralized through the assignment of tax instruments or the collection of user fees.

There is need for capacity at the lower level of government to ensure transparency and accountability. In addition, institutions that will monitor and evaluate performance should be established if decentralization is meant to improve accountability. It is also important that the citizens particularly the local populations are not only knowledgeable but are conscious of their constitutional rights.

5.5.4 Relationship between employee capacities on performance of decentralized policy management systems

Capacity must exist at the sub-national government level. Sub-national government must have sufficient professional and well-trained staff. Where shortage of qualified and experienced persons exist, the training and re-training should be conducted in order to develop professional and technical expertise that will provide efficient public services. Capacity connotes the ability, competency, efficiency of sub-national governments to plan, implement, manage and evaluate policies, strategies or programmes designed to impact on social conditions in the jurisdiction. This aspect is referred to as one of the performance factors and includes human capital, physical capital and incentive structures within the community.

5.6 Limitations of the study

The study covered only one deconcentrated structure (WSDF-N) yet there are more 3 water and sanitation facilities in the country, there are many deconcentrated structures such as Water

Management Zones, Technical Support Units and Umbrella Organizations that can be studied to understand decentralized policy management. A few districts were covered in the entire northern region due to inadequate funds and poor road networks, as well as rainy seasons. And these districts are far from one another. The target respondents were mainly policy makers and implementers at the ministry and district levels who were busy and hard to access despite numerous appointments made with them.

5.7 Contributions of the study

The research contributed to the debate of decentralization in assessing the influence of decentralized policy management system on performance of water and sanitation development facilities of the small town's urban water projects within northern Uganda. The study was to benefit and help guide future researchers while also hopefully bridging some gaps that the previous researchers could have left as far as decentralization policy on performance is concerned.

5.8 Recommendations for Further Research

From the findings of this research, it was revealed that only 21.5% of decentralized performance was explained through decentralized planning and implementation. Therefore, further research should be done to investigate other factors that could explain the contribution of decentralized policy management and performance of deconcentrated structures. Such factors may include decentralized financing, decentralized procurement, leadership style, management style among others.

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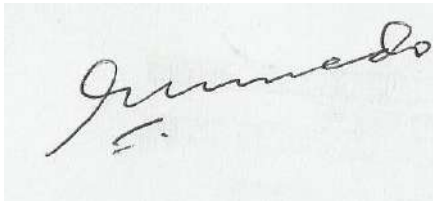
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25 September 2016

CERTIFICATE OF PROOF THAT DISSERTATION HAS BEEN EDITED

This is to certify that the Master's Degree dissertation entitled, **Decentralized Policy Management and Performance of Water and Sanitation Development Facility – North Lango Sub-region, in Northern Uganda** by **Josephine Apajo**, has been reviewed and corrected in order to ensure clarity of expression and consistency regarding key style aspects like general grammar, sentence structure to ensure logical flow and effectiveness of meaning, all-round punctuation, use of tenses and articles, consistency in citation and referencing.

A handwritten signature in black ink on a light-colored background. The signature is cursive and appears to read 'M. Rugyendo'.

Mukotani Rugyendo

Professional Editor

APPENDIX III: QUESTIONNAIRE

SECTION 1: DEMOGRAPHIC INFORMATION

1. Name (Optional).....
2. Gender of respondent 1. Male 2. Female
3. Name of organization/Institutions
4. Position held in the Organization.....
5. Year spent in organization: 1. 0-5 year 2. 5-10 years 3. 10-15 years 4. 15 years and above
6. Please rate how involved you are in Water and Sanitation Development Facility-North Activities

1 2 3 4 5

Less involved

More involved

For each of the following statements below, please indicate by ticking, whether you agree or disagree with the statement in relation to decentralized planning, implementation, monitoring in the management of water projects the small towns and rural growth centers in Northern Uganda

1- Strongly Disagree 2- Disagree 3-Agree 4-Strongly Agree

2-



SECTION 2a: DECENTRALIZED PLANNING

	Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
1	Decentralized planning provides a platform for the community to demand for clean water and sanitation services through planning meetings at the parishes and sub-counties	1	2	3	4
2	Decentralized planning supports Community in identification of land for construction of water projects	1	2	3	4
3	Under decentralized planning, land for project development is provided by the community at no cost				
4	Under decentralized planning communities actively engage in identifying project boundaries during project design.	1	2	3	4
5	Communities identify the beneficiaries of subsidized water connections under decentralized planning	1	2	3	4
6	Under decentralized planning community actively participate in trainings organized by WSDF-N	1	2	3	4
7	Decentralized planning empowers the district officials to lobby for budgetary allocations to finance their water and sanitation projects	1	2	3	4

SECTION 2b: DECENTRALIZED IMPLEMENTATION

	Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
8	Demand-driven community approach was applied during the decentralized implementation	1	2	3	4
9	The private sector is involved in the construction of the water projects under the decentralized implementation	1	2	3	4
10	The government (MWE) plays a supervisory role in the implementation of the project under decentralized implementation	1	2	3	4
11	The community is actively engaged in the implementation of water projects under decentralized implementation	1	2	3	4
12	A community structure (WSSC) is always established at community level to support decentralized implementation	1	2	3	4
13	The WSSC has decision powers during the implementation process	1	2	3	4
14	Decentralized implementation provides a unique project	1	2	3	4

	decision making organ that is participatory in nature				
15	The community contributes a user fee to support in the operations and maintenance of the water project	1	2	3	4
16	The community appoints a scheme operator/private to manage the water project on their behalf	1	2	3	4

SECTION 2c: DECENTRALIZED MONITORING

	Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
17	Decentralized monitoring allows for regular site meeting and inspections with all stakeholders	1	2	3	4
18	Decentralized monitoring facilitates participatory/joint data collection	1	2	3	4
19	Decentralized monitoring eases the reporting through monthly site meetings	1	2	3	4
20	Decentralized monitoring provides feedback on a monthly basis to the stakeholders	1	2	3	4
21	Decentralized monitoring increases accountability of the project resources	1	2	3	4
22	Decentralized monitoring facilitates information sharing	1	2	3	4
23	Access to project information is made easier under decentralized monitoring	1	2	3	4
24	Decentralized monitoring supports the development of a local database on the project	1	2	3	4

SECTION 2d: EMPLOYEE CAPACITIES

	Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
25	The staff of the WSDF-North has the right staff with the required qualifications to manage the water projects	1	2	3	4
26	The project has the required number of staff to realize decentralized policy management				
27	The project team is empowered to make spot-on decisions with minimal interference of the central government	1	2	3	4
28	The project team is readily available to handle project issues	1	2	3	4
29	WSDF-N recruits non –graduate staff to realize				

	decentralized policy management				
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SECTION 2e: DECENTRALIZED PERFORMANCE

	Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
29	Decentralization policy management brings clean drinking water closer to the people	1	2	3	4
30	Decentralization policy management increases affordability of water and sanitation services	1	2	3	4
31	Decentralized policy management improves functionality of the water supply systems	1	2	3	4
32	Decentralized policy management improves quality water infrastructure constructed at the local communities	1	2	3	4
33	Decentralized policy management expedites timely payments of contractors	1	2	3	4
34	Decentralized policy management increases higher chances of timely completion	1	2	3	4
35	Decentralized implementation increases competition and innovation in project implementation	1	2	3	4
36	Decentralized policy management increases the urge for donor identification	1	2	3	4
37	Decentralized policy management reduces over concentration of the ministry works	1	2	3	4
38	Decentralized policy management increases the volume of output of the ministry	1	2	3	4

39. From experience please describe how decentralization has influenced performance of WSDFs in Uganda (TICK)

1. Positive influence 2. Relative influence 3. No influence 4. Negative influence

Thank You for Your Cooperation

APPENDIX III: KEY INFORMATION GUIDES FOR THE DISTRICT OFFICIALS

Dear respondent,

I am Josephine Apajo, a student of Uganda Technology and Management University pursuing a Masters in Monitoring and Evaluation. I am currently conducting a study on: **The influence of Decentralized policy management on performance of WSDF-North**, Your responses are very important in the success of this study. The information provided will be only used for academic purpose and will be treated with utmost confidentiality.

GENERAL INFORMATION	
DISTRICT _____	SUB-COUNTY _____
DATE ____ / ____ / ____	
1. Position held: _____	Tel: _____
2. Gender of respondent: <input type="checkbox"/> Male <input type="checkbox"/> Female	
3. In your opinion, has the Water and Sanitation Development Facility North implemented Bottom-up decentralization approach in water service delivery? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>explain your answer</i>	
4. In your Opinion has WSDF-N decentralization strategy helped in in improving water and sanitation delivery? Explain your answer	
5. What are the key lessons learnt from the decentralized style of management?	
6. Describe the challenges encountered during the implementation of the decentralized approach	
7. Please indicate the possible solutions to the above challenges	

Thank you

Appendix IV: Krejcie & Morgan table for determining sample size

<u>N</u>	<u>S</u>	<u>N</u>	<u>S</u>	<u>N</u>	<u>S</u>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note. – *N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

APPENDIX IV: LIST OF TARGET RESPONDENTS

S/n	Target Respondents	Sample
A	Ministry of water and environment, department of urban water and sewerage services	
1	Commissioner, Department of Urban Water and Sewerage services	1
2	Assistant Commissioner, Department of Urban Water and Sanitation and Sewerage services	1
3	Component Manager, Water and Sanitation development Facilities	1
4	Technical Advisors, Water and Sanitation development Facilities	1
5	Principle Engineers	3
5	Senior Engineers	3
5	Senior Monitoring and Evaluation Officer	1
6	Sanitation and Environment Officers	2
7	Sociologists	3
8	Public Relation Officers	2
9	Economists	5
	Sub-total	23
B	WSDF-North staff	19
10	Project Engineers	4
11	Sociologists	4
12	Environmental and Sanitation Officers	4
11	Procurement Officers	4
12	Accountants	3
13	Surveyor	1
14	Engineering Assistants	2
	Sub-total	22
Steering Committee Members		
15	Chief Administrative Officer (CAO)-LIRA	1
16	Branch Manager-WSDF-North	1
17	Chairperson Umbrella organization for Northern Uganda	1
	Sub-total	3
Other regional offices working together with WSDF-N in Northern Uganda		

18	Northern Umbrella organization	4
19	Upper Nile water Management	3
20	Technical Support Unit (TSU)	2
	Sub-total	9
Consultants and Contractors		
21	ILISO Consulting services	2
22	Kaaga Consultants	2
23	Balaji casting and industrial construction services	1
24	GIZ Sanitation-Advisor	1
25	CES Consultants –technical Advisor	1
26	Wanah Consultants	1
	Sub-total	8
District officials		
27	CAO- Apac, Dokolo, Amolatar, Oyam	5
28	District Water Officers of Apac, Dokolo, Amolatar, Oyam and Lira	5
29	Town clerks- Apac, Dokolo, Amolatar, Oyam and Lira	5
30	LC III Chairpersons (Kamdini, Amolatar, Ibuje, Amach and Dokolo)	5
31	Senior Assistant Secretary (SAS) – Ibuje	1
32	Health Assistant- Kamdini, Amolatar, Ibuje, Amach and Dokolo)	5
33	Community Development Officers at Town council level	5
	Sub-total	35
Water and sanitation Boards members		
34	Chairperson Board	5
35	Representatives of Domestic water Users	5
36	Representatives of Business community	5

37	Representatives of Institutions	5
38	Chairperson Social services/Technical services	5
	Sub-total	25
	Total	122

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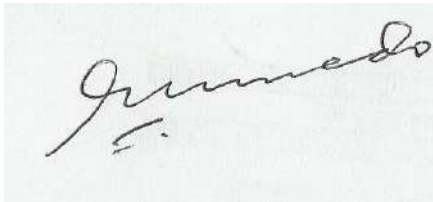
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25 September 2016

CERTIFICATE OF PROOF THAT DISSERTATION HAS BEEN EDITED

This is to certify that the Master's Degree dissertation entitled, **Decentralized Policy Management and Performance of Water and Sanitation Development Facility – North Lango Sub-region, in Northern Uganda** by **Josephine Apajo**, has been reviewed and corrected in order to ensure clarity of expression and consistency regarding key style aspects like general grammar, sentence structure to ensure logical flow and effectiveness of meaning, all-round punctuation, use of tenses and articles, consistency in citation and referencing.

A handwritten signature in black ink, appearing to read 'Mukotani Rugyendo', is written on a light-colored rectangular background.

Mukotani Rugyendo

Professional Editor

